

**MEDICAL SURVEILLANCE
PROCEDURES MANUAL
AND
MEDICAL MATRIX
(EDITION 7)**

NEHC-TM OM 6260 (February 2001)

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FORWARD

This update of the Medical Matrix is the result of work of a group of individuals dedicated to this task.

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INTRODUCTION

1.1 Medical screening examination as part of a medical surveillance program is one of several tools aimed at protecting workers who are exposed or potentially exposed to hazardous substances in the workplace.

A medical surveillance program includes establishing exam content, performing occupational medical examinations, documenting results of examinations, informing the employee of the results of examination, following up abnormalities, counseling and education, and evaluating grouped data for trends and sub-clinical effects of exposure.

Selection of personnel for medical surveillance programs is based primarily on the results of the industrial hygiene survey and is exposure driven. This is known as "hazard based" medical surveillance. In the absence of industrial hygiene data, medical personnel will make a decision on placement in medical surveillance programs based on knowledge of the workplace processes, job requirements, and occupational history.

Exam content is established in the Medical Matrix for performing hazard based medical examinations and certification examinations. This document establishes the minimum requirements for medical surveillance and certification examinations. (OPNAVINST 5100.23 series.)

Special attention in performing occupational medical examinations is given to those target organs or organ systems potentially subject to the untoward effects of hazardous substances whether by inhalation, absorption or ingestion. Elements of examination include specific history questions (personal and family medical history, and work history), physical examination, x-ray, biological monitoring (testing of body fluids or tissues for the toxic substance itself, a metabolite or a physiologic change), and other laboratory and ancillary tests such as EKG, PFT and audiogram. Conducting occupational medical examinations to detect early organ dysfunction or early disease to benefit individual workers is "screening" or "monitoring" and constitutes secondary prevention.

An integral component of the occupational medical examination is follow-up. Follow-up may include notification, additional tests or evaluation, evaluation or modification of the workplace or removal from exposure. Workers who receive occupational medical examinations should be informed of any specific health risks identified on examination. Certain OSHA programs require written notification in the form of Physician's Written Opinions. Examples are included in Appendix E.

1.2 Types of Occupational Medical Examinations: Most medical surveillance programs consist of examinations for baseline (preplacement), periodic and termination. If there is evidence of overexposure, a situational examination will be required. **Guidelines for situational examinations are not included in the Medical Matrix.**

1.2.1 Baseline Examination - (Preplacement or Pre-assignment)
This examination is performed before the employee starts work in a position with a potential for hazardous exposure and provides information necessary to determine suitability of the employee for the job. It also provides a baseline against which changes can be compared.

1.2.2 Periodic Examination - This examination is performed during the time that a worker is employed in a job with a potential for exposure to hazardous substances. The frequency and extent of periodic examinations vary, depending on the program. With certain stressors, the frequency of examinations will also depend on other variables, such as the findings from previous examinations, the history of exposure or the age of the worker.

1.2.3 Termination Examination - This examination **may be required** when the worker terminates employment or is permanently removed from a position that has a potential for exposure to a hazardous substance. Documentation of the worker's state of health at the termination of employment or exposure is essential for comparison purposes if the worker later develops medical problems that could be attributed to past occupational exposures. In some cases, this examination is not required if a periodic examination has been documented within the past twelve months. **Specific program references provide guidelines.**

1.2.4 Situational Examination - This examination is conducted in response to a specific incident for which a possible overexposure to a hazardous substance is suspected. Such an incident should prompt these examinations on all individuals with suspected overexposure, not just those already in a surveillance program. These examinations may vary significantly from routine medical surveillance protocols. **Guidelines for performing situational examinations are not provided in this manual. The purpose of this manual is to provide guidance for performing routine medical surveillance.**

References

1. Halperin W, Ratcliffe J, Frazier T, et al. Medical Screening in the workplace: proposed principles, J Occup Med. 1986;28:547-552.
2. Matte T, Fine L, Meinhardt T, et al. Guidelines for medical screening in the workplace, Occup Med.: State of the Art Reviews. 1990;5:439-456.
3. Silverstein M. Medical Screening, Surveillance, and the Prevention of Occupational Disease. J Occup Med. 1990;32:1032-1036.
4. Baker E, Honchar, P, Fine, L, et al. Surveillance in Occupational Illness and Injury: Concepts and Content, Am J. of Public Health. 1989;79:9-11.

1.3 Content of Medical Examinations:

A list of history questions, physical examination components, and laboratory tests was developed as a reference file and was used to construct the content of each program in the Medical Matrix. Each item in the reference file is called a "test". The tests are divided into similar categories such as Medical History, Cardiology, Spirometry, etc., and numbered in sequence. All tests used in construction of the Matrix are displayed in Appendix A. Below is an outline of the major categories of tests and the corresponding numbers in the reference file.

| | Test Numbers |
|------------------------|--------------|
| Medical History | |
| Personal History of: | 1100 - 1999 |
| Work History of: | 2000 - 2099 |
| Family History of: | 2500 - 2599 |
| Laboratory: | |
| Hematology | 3100 - 3199 |
| Serum Chemistry | 3500 - 3699 |
| Urinalysis | 4000 - 4299 |
| Cytology | 4500 - 4599 |
| Other Laboratory Tests | 4800 - 4899 |
| Cardiology | 5000 - 5099 |
| Audiology | 5200 - 5299 |
| Radiology | 5400 - 5499 |
| Spirometry | 5600 - 5699 |
| Optometry | 5800 - 5899 |
| Physical Exam | 6010 - 6999 |
| Qualifications | 7100 - 7199 |
| Certifications | 7500 - 7799 |
| Hearing Conservation | 8000 - 8199 |
| Special Notations | 9010 - 9099 |

1.4 Twelve Standard Questions:

There are twelve (12) standard questions included in each Medical Matrix program designed to help assess public health and safety risk factors for each worker. These questions were written for inclusion in data collection protocol when developed. The standard twelve questions are:

1. Is Your Work Exposure History Current (OPNAV 5100/15)
2. Major Illness or Injury
3. Hospitalization or Surgery
4. Cancer
5. Back Injury
6. Do you drink 6 or more drinks per week? (Beer, wine, liquor)
7. Have you ever smoked?
8. Do you currently smoke? (Packs/day)
9. Heart Disease, High Blood Pressure or Stroke
10. Current Medication Use (Prescription or OTC)
11. Allergies (Include Medications)
12. Any reproductive health concerns?

PLACEMENT OF WORKERS IN MEDICAL SURVEILLANCE PROGRAMS

2. Workers with potential exposure to hazards are usually placed in medical surveillance programs based on industrial hygiene (IH) and/or safety surveys that quantify exposures in the workplace. This has been called "hazard based" medical surveillance. Workplace hazard assessment takes into account exposure levels (frequency and duration), and routes of exposure (inhalation, skin absorption or ingestion), **and similarly exposed groups.**

The decision to include a worker in a program is normally based on the possibility of exposure at or above the action level set by U.S. Navy standards that must comply with Occupational Safety and Health Administration (OSHA) standards. If insufficient data or no data are available, medical personnel may place workers in medical surveillance based on "presumed" exposures and job title. When this happens, workers medical surveillance needs must be reassessed as IH data are obtained.

Workers whose jobs are associated with exposures to hazards at or above the medical surveillance action level for more than 30 days per year or 15 days per quarter are placed into medical surveillance programs. When there is no legal standard for medical examinations for specific agents, or when there are insufficient data to demonstrate compliance with a high degree of confidence, half of a recommended exposure limit, (i.e., Threshold Limit Value), may be used as the action level. Some programs have specific guidance for placement; asbestos, organophosphate pesticide workers, hearing conservation, sight conservation, and radiation workers.

HOW TO USE THE MEDICAL MATRIX

3.1 History of Development:

The Medical Matrix Validation Committee was formed in March 1988. Its tasking was to review an existing Medical Matrix and design a program that would define hazard based medical surveillance. The goal of the Committee was to develop standard examination protocols for medical surveillance programs that could be presented in a useable format. The original Matrix was published as a Navy Environmental Health Center (NAVENVIRHLTHCEN) Technical Manual in January 1989.

The Medical Matrix Committee continues to review existing programs, evaluate the need for, and write new programs for those stressors that have **chronic** health effects. See Appendix B for a list of those stressors reviewed and for which no evidence of chronic health effects could be found. This list will be reviewed periodically and amended as new information indicates.

Situations may arise where industrial hygiene data indicate potential overexposure to a stressor, but there is no corresponding matrix program for that stressor. An occupational medicine specialist may substitute a closely related matrix program after review of the toxicity of the stressor. Any appropriate modifications can be hand written on the forms generated. Request for review of a new program should be sent to the Matrix Committee (see Appendix D).

3.2 Explanation of Contents:

The Medical Matrix, Edition 6, contains medical surveillance and certification examinations divided into four major sections with each section preceded by a brief introduction.

Each program is organized in the same format:

- First, medical history questions; personal, work and family.
- Second, recommended laboratory or ancillary (EKG, PFT, audiogram) tests.
- Third, areas which should be targeted on physical examination; CNS, respiratory system, liver, for example.
- Last, special requirements such as qualification and certification are listed, followed by special notations such as warnings, assessment of knowledge and requirement for Physician's Written Opinion.

Each section ends with a line prompting for comments on that section, if indicated.

Following each program is a **Program Description** section that includes:

- General references are included as numbers that correspond to the reference list found in Appendix C. These general texts were used in developing each program and are additional resources. Specific references such as Navy instructions, OSHA Standards, Department of Defense, Office of Civilian Personnel Management or Civilian Personnel Instructions are listed in the program description.
- **NOTE:** References listed were current at the time of publication. However, individual users are cautioned of their responsibility to ensure use of the most current edition or version.
- Detailed guidance and interpretation may be included to further explain the program.
- Date of most recent revision.
- **Web sites when available.**

The **Provider Comments** section may contain more detailed information about the program including guidance about the examination, how to interpret test results, and what to do with test results that are outside the range of normal.

3.3 Four divisions of the matrix:

- Chemical Stressors
- Physical Stressors
- Mixed Exposures
- Special Examinations

Chemical Stressors
Introduction and Changes

All new tests are printed in **bold** letters.

Revisions:

Program 115 - Asbestos Past Worker 10+ years since first Exposure

Program 116 - Asbestos Past Worker 0 - 10 years since first Exposure

Changes were made to these two programs based on feedback from users. Because the medical examination is documented on required form NAVMED 6260/5, history, physical, and laboratory tests were removed from the Matrix and program descriptions were expanded to describe program elements. This will result in shorter printout if you use PC Matrix for these two programs. When you select this program in PC Matrix, the program name, type of examination, and special notations will print out or will be added to the list of programs you select for a worker.

Construction standard references were added to each OSHA required program.

102 2-ACETYLAMINOFLUORENE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH# | CAS# |
| 2-ACETYLAMINOFLUORENE | AB9450000 | 53-96-3 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON FAMILY HISTORY: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) SUSPECTED HUMAN MUTAGENIC/FETOTOXIC EFF. | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW? | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

This compound was being developed as a pesticide until carcinogenic activity was discovered. In recent years, it has been used only in laboratories as a model of tumorigenic activity in animals. The use of this substance would be rare and current exposure risk is low at present. References: (3); (5); (other); 29 CFR 1910.1003 and 1926.1103. (Former standard 19 CFR 1910.1014.) PROGRAM REVISED 3/2000.

103 ACRYLAMIDE

| | | |
|------------------------------|-----------|-------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ACRYLAMIDE | AS3325000 | 9-6- |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| WEIGHT LOSS | | YES | ANNUAL | YES |
| NEUR DISORDER, GAIT CHANGE, PARESTHESIA, COORD LOSS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH Criteria for a Written Standard...Occupational Exposure to Acrylamide DHEW Pub No. 77-112.
PROGRAM REVISED 10/97.

104 ACRYLONITRILE (VINYL CYANIDE)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ACRYLONITRILE | AT5250000 | 07-13-1 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1045 and 29 CFR 1926.1145

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | YES |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | YES |
| PNEUMONIA | | YES | ANNUAL | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | ANNUAL | YES |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | YES |
| PERSONALITY CHANGE | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILIRUBIN, ALK PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| ADDITIONAL LAB TESTS: | | | | |
| STOOL HEMOCCULT (OVER AGE 40) | | YES | ANNUAL | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| ABDOMEN | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| THYROID | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

* SGOT for baseline is included in baseline liver profile. Only SGOT is required as annual test.

See Appendix G for recommendations from American Cancer Society for performing the Hemocult II. REFERENCES: (1); (2); (3); (4); (OTHER); 29 CFR 1910.1045 and 25 CFR 1926.1145. PROGRAM REVISED 3/2000.

PROVIDER COMMENTS:

105 ALLYL CHLORIDE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ALLYL CHLORIDE | UC7350000 | 107-05-1 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILIRUBIN, ALK. PHOS. | | YES | ANNUAL | NO |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |

| EXAM ELEMENT | EXAM GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|-----------------|--------------|--------------|--------------|
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES (3); (4); (OTHER); NIOSH Criteria For a Recommended Standard...Occupational Exposure to Allyl Chloride DHEW Pub No. 76-204.
PROGRAM REVISED 10/97.

106 4-AMINODIPHENYL

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 4-AMINODIPHENYL | DU8925000 | 92-67-1 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY: | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | REM OVAL |
|---|--------------------|--------------|--------------|-------------|
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (OTHER); 29 CFR 1910.1003. Former standard 29 CFR 1910.1011 and 1910.1103. PROGRAM REVIEWED 3/2000

109 ANTIMONY

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------------|-----------|-----------|
| ANTIMONY | CC4025000 | 7440-36-0 |
| ANTIMONY TRIOXIDE (HANDLING & USE) | CC5650000 | 1309-64-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|---|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK? (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| EYE IRRITATION | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | YES | ANNUAL | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | YES | ANNUAL | YES |

WORK HISTORY OF:

| | | | |
|-----------------------|-----|--------|-----|
| EXP TO SKIN IRRITANTS | YES | ANNUAL | YES |
|-----------------------|-----|--------|-----|

FAMILY HISTORY OF:

| | | | |
|----------------------------|-----|--------|-----|
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |
|----------------------------|-----|--------|-----|

| | | | |
|------------------------------|-----|--------|-----|
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | YES |
|------------------------------|-----|--------|-----|

LABORATORY-

CARDIOLOGY:

| | | | |
|-------------------|-----|----|-----|
| ELECTROCARDIOGRAM | YES | NO | YES |
|-------------------|-----|----|-----|

RADIOLOGY:

| | | | |
|------------------|-----|----|-----|
| CHEST X-RAY (PA) | YES | NO | YES |
|------------------|-----|----|-----|

COMMENTS ON LABORATORY RESULTS:

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| MUCOUS MEMBRANES | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH Criteria for a
Recommended Standard...Occupational Exposure to Antimony, DHEW Pub No. 78-216.
PROGRAM REVISED 10/97

111 ARSENIC
(EMPLOYEES NOT COVERED BY PROGRAM 112)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|---|-----------|-----------|
| CALCIUM ARSENATE | CG0830000 | 7778-44-1 |
| ARSENIC ACID, LEAD (2+) SALT (2:3) | CG0990000 | 3687-31-8 |
| ARSENIC (INORGANIC & SOLUBLE COMPOUNDS) | CG0525000 | 7440-38-2 |

PROGRAM FREQUENCIES: SEMI ANNUAL

OSHA STANDARD 29 CFR 1910.1018 and 29 CFR 1926.1118

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | SEMI-A | YES |
| MAJOR ILLNESS OR INJURY | YES | SEMI-A | YES |
| HOSPITALIZATION OR SURGERY | YES | SEMI-A | YES |
| CANCER | YES | SEMI-A | YES |
| BACK INJURY | YES | SEMI-A | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | SEMI-A | YES |
| HAVE YOU EVER SMOKED | YES | SEMI-A | YES |
| DO YOU CURRENTLY SMOKE | YES | SEMI-A | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | SEMI-A | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | SEMI-A | YES |
| MEDICATION ALLERGIES | YES | SEMI-A | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | SEMI-A | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | SEMI-A | YES |
| SKIN DISEASE | YES | SEMI-A | YES |
| LUNG/RESP DISEASE (EX: COPD, BRONCHITIS, PNEUMONITIS) | YES | SEMI-A | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | SEMI-A | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | YES | SEMI-A | YES |
| SHORTNESS OF BREATH | YES | SEMI-A | YES |
| COUGH (DRY OR PRODUCTIVE) | YES | SEMI-A | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | SEMI-A | YES |

WORK HISTORY OF:

| | | | |
|---|-----|--------|-----|
| 10 OR MORE YRS SINCE FIRST EXP TO ARSENIC | YES | SEMI-A | YES |
|---|-----|--------|-----|

FAMILY HISTORY OF:

| | | | |
|----------------------------|-----|--------|-----|
| CANCERS (LEUKEMIA, TUMORS) | YES | SEMI-A | YES |
|----------------------------|-----|--------|-----|

| | | | |
|------------------------------|-----|--------|-----|
| COMMENTS ON MEDICAL HISTORY: | YES | SEMI-A | YES |
|------------------------------|-----|--------|-----|

LABORATORY-

CYTOLOGY:

| | | | |
|-----------------|-----|--------|-----|
| SPUTUM CYTOLOGY | YES | SEMI-A | YES |
|-----------------|-----|--------|-----|

RADIOLOGY-

| | | | |
|------------------|-----|--------|-----|
| CHEST X-RAY (PA) | YES | SEMI-A | YES |
|------------------|-----|--------|-----|

| | | | |
|---------------------------------|-----|--------|-----|
| COMMENTS ON LABORATORY RESULTS: | YES | SEMI-A | YES |
|---------------------------------|-----|--------|-----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | SEMI-A | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | SEMI-A | YES |
| CARDIOVASCULAR SYSTEM | | YES | SEMI-A | YES |
| LIVER | | YES | SEMI-A | YES |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | SEMI-A | YES |
| RESPIRATORY SYSTEM | | YES | SEMI-A | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | SEMI-A | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | SEMI-A | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | SEMI-A | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | SEMI-A | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | SEMI-A | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | SEMI-A | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | SEMI-A | YES |
| RECOMMENDATIONS: | | YES | SEMI-A | YES |

PROGRAM DESCRIPTION:

When a specified examination has not been provided within six months preceding termination of employment, an examination must be provided upon termination of employment. REFERENCE: (OTHER); 1. 29 CFR 1910.1018 and 1910.1118; 2. 29 CFR 1910.134, Respiratory Protection; 3. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, U.S. Department of Health and Human Services, 1988; 4. Morgan DP. Recognition and Management of Pesticide Poisonings, Fourth Edition. United States Environmental Protection Agency. 1989:54-61; (1); 5. Klaassen CD, Amdur MO, Doull J. Cassarett and Doull's Toxicology, Third Edition. New York, NY: Macmillan Publishing Co. 1986:588-591; 6. International Agency For Research On Cancer. IARC Monographs On The Evaluation Of The Carcinogenic Risk Of Chemicals To Humans. Switzerland: World Health Organization. 1980:vol 23, 39-141; 7. OSHA Standard Interpretation Letter of August 19, 1996. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Reference (1) requires International Labor Office UICC/Cincinnati (ILO U/C) rating of chest x-ray. This should be arranged through local Radiology Department.

Reference (7) provides interim guidance pending completion of rule making on this matter. It states that CSHOs encountering inspection situations where semi-annual chest x-rays and/or sputum cytology tests were not conducted in accordance with the requirements of the standard shall not issue citations for these elements provided:

1. All other elements of the required medical examinations were provided, and
2. At least annual chest x-rays were being provided to affected workers in lieu of semiannual chest x-rays.

112 ARSENIC ANY EXPOSURE
(UNDER 45 YRS WITH LESS THAN 10 YRS EXPOSURE OVER THE ACTION LEVEL)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|---|-----------|-----------|
| CALCIUM ARSENATE | CG0830000 | 7778-44-1 |
| ARSENIC ACID, LEAD (2+) SALT (2:3) | CG0990000 | 3687-31-8 |
| ARSENIC (INORGANIC & SOLUBLE COMPOUNDS) | CG0525000 | 7440-38-2 |

PROGRAM FREQUENCIES: ANNUAL

OSHA STANDARD 29 CFR 1910.1018 and 29 CFR 1926.1118

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | ANNUAL | YES |

WORK HISTORY OF:

| | | | |
|---|-----|--------|-----|
| 10 OR MORE YRS SINCE FIRST EXP TO ARSENIC | YES | ANNUAL | YES |
|---|-----|--------|-----|

FAMILY HISTORY OF:

| | | | |
|----------------------------|-----|--------|-----|
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |
|----------------------------|-----|--------|-----|

COMMENTS ON MEDICAL HISTORY:

| | | | |
|--|-----|--------|-----|
| | YES | ANNUAL | YES |
|--|-----|--------|-----|

LABORATORY-

CYTOLOGY:

| | | | |
|-----------------|-----|----|-----|
| SPUTUM CYTOLOGY | YES | NO | YES |
|-----------------|-----|----|-----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

When a specified examination has not been provided within six months preceding termination of employment, an examination must be provided upon termination of employment. REFERENCE: (OTHER); 1. 29 CFR 1910.1018 and 1910.1118; 2. 29 CFR 1910.134, Respiratory Protection 3. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, U.S. Department of Health and Human Services, 1988; 4. Morgan DP. Recognition and Management of Pesticide Poisonings, Fourth Edition. United States Environmental Protection Agency. 1989:54-61; (1); 5. Klaassen CD, Amdur MO, Doull J. Cassarett and Doull's Toxicology, Third Edition. New York, NY: Macmillan Publishing Co. 1986:588-591; 6. International Agency For Research On Cancer. IARC Monographs On The Evaluation Of The Carcinogenic Risk Of Chemicals To Humans. Switzerland: World Health Organization. 1980:vol 23, 39-141. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Reference (1) requires International Labor Office UICC/Cincinnati (ILO U/C) rating of chest x-ray. This can be arranged through the local Radiology Department.

113 ASBESTOS CURRENT WORKER

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| ASBESTOS | CI6475000 | 1332-21-4 |
| CHRYSOTILE | CI6478500 | 12001-29-5 |
| AMOSITE | CI6477000 | 12172-73-5 |
| ANTHOPHYLLITE | CA8430000 | 17068-78-9 |
| CROCIDOLITE | CI6479000 | 12001-28-4 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 1910.1001 and 1926.1101

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|-----------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ANY FINDING RELATED TO ASBESTOS EXPOSURE? | | YES | ANNUAL | YES |
| LABORATORY: | | | | |
| RADIOLOGY | | | | |
| CHEST X-RAY (ASBESTOS) USING NAVMED 6260/7 | | YES | ANNUAL | YES |
| CIRCLE CORRECT FREQUENCY: | | | | |
| YEARS SINCE | AGE OF EMPLOYEE | | | |
| <u>FIRST EXPOSURE</u> | <u>15 TO 35</u> | <u>35 TO 45</u> | <u>45+</u> | |
| 0 TO 10 | 5 YEARS | 5 YEARS | 5 YEARS | |
| 10+ | 5 YEARS | 2 YEARS | 1 YEAR | |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | YES |
| QUALIFICATIONS: | | | | |
| RESPIRATORY PROTECTION | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| COUNSELING REGARDING THE COMBINED EFFECTS OF SMOKING AND ASBESTOS EXPOSURE | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

Examination is required within 30 calendar days before or after termination of employment, if not examined within the last year. REFERENCES: (OTHER); 1. 29 CFR 1910.1001; 2. OPNAVINST 5100.23E, Chapter 17; 3. OPNAVINST 5100.19C, Chapter B1. PROGRAM REVISED 3/2000

PROVIDER COMMENTS:

Examination results are recorded on NAVMED 6260/5, REV (5/90), Periodic Health Evaluation. Workers examined for current exposure must complete DD 2493-1, Initial Examination, or DD 2493-2, Periodic Examination questionnaires.

OSHA standard requires a Physician's Written Opinion. A sample is included in Appendix E. Amendment to the Standard (55FR 3724) requires that the employee be counseled regarding the increased risk of lung cancer attributable to the combined effects of smoking and asbestos exposure and that this is part of the Physician's Written Opinion.

If Hemoccult examinations are provided at your facility, Appendix F contains recommendations from the American Cancer Society for performing the Hemoccult II.

 115 ASBESTOS PAST WORKER 10+ YEARS SINCE FIRST EXP

| STRESSOR(S) IN THIS PROGRAM: | NIOSH# | CAS# |
|------------------------------|-----------|------------|
| ASBESTOS | CI6475000 | 1332-21-4 |
| CHRYSOTILS | CI6478500 | 12001-29-5 |
| AMOSITE | CI6477000 | 12172-73-5 |
| ANTHOPHYLLITE | CA8430000 | 17068-78-9 |
| CROCIDOLITE | CI6479000 | 12001-28-4 |

PROGRAM FREQUENCY: AGE DEPENDENT

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC |
|---|--------------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | |
| PERSONAL HISTORY OF: | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | *** | |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | YES | *** | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | YES | *** | |
| RECOMMENDATIONS: | YES | *** | |

PROGRAM DESCRIPTION:

***FREQUENCY OF EXAMINATION

AGE FREQUENCY

| | |
|----------|--------------|
| 15 to 34 | PENTA-ENNIAL |
| 35 to 44 | BI-ENNIAL |
| 45+ | ANNUAL |

Military and civilian personnel who have a history of asbestos exposure during past federal employment or military service may be included in the Asbestos Medical Surveillance Program (AMSP), upon request, if any of the following criteria are met.

1. History of enrollment in the Navy AMSP.
2. A history of participation in any operation where visible airborne asbestos dust was present, including but not limited to rip-outs, for approximately 30 days or more in the past.
3. The occupational health provider, with occupational medicine physician consultation, concludes that the individual had exposure to asbestos that meets the current OSHA criteria for placement in the medical surveillance program, or its equivalent, for approximately 30 days or more in the past.

An employee who is in the AMSP based on a history of past exposure may be removed from the AMSP upon request. An entry in the medical record on the SF 600 should document the rationale for removing the individual from the AMSP. In Addition, notify NAVENVIRHLTHCEN in writing the name and SSN of any

individual incorrectly placed in the AMSP when that person is removed from the program.

While not required, a termination evaluation may be recommended in certain cases, such as those with a history of heavy exposure or when there has been a long interim since the last evaluation.

REFERENCES: (OTHER); 1. OPNAVINST 5100.23E, Chapter 17; 2. OPNAVINST 5100.19C, Chapter B1; 3. Occupational Medicine Field Operations Manual, current edition. PROGRAM REVISED 3/2000

PROVIDER COMMENTS:

If Hemocult examinations are provided at your facility, Appendix F contains recommendations from the American Cancer Society for performing the Hemocult II.

Amendment (55 FR 3724) to the OSHA Standard (29 CFR 1910.1001) requires that the employee be counseled regarding the increased risk of lung cancer attributable to the combined effects of smoking and asbestos exposure.

Spirometry (FEV₁, FVC, FEV₁/FVC%) and chest x-ray with B Reader interpretation are performed with each examination. The examination is documented on NAVMED 6260/5, Rev (5/90), Periodic Health Evaluation. A Physician's Written Opinion is not required to be given to workers for past exposure examination. The DD Form 2493-1 and DD Form 2493-2 are not required for past exposure examinations.

Although this program is used for formerly exposed workers (the OSHA standard applies to currently exposed workers), this risk communication on the multiplicative risk of continued smoking and former asbestos exposure should be discussed with the employee at each asbestos medical surveillance visit.

 116 ASBESTOS PAST WORKER - 0 TO 10 YEARS SINCE FIRST EXPOSURE

STRESSOR(S) IN THIS PROGRAM:

| | | |
|---------------|-----------|------------|
| ASBESTOS | CI6475000 | 1332-21-4 |
| CHRYSOTILS | CI6478500 | 12001-29-5 |
| AMOSITE | CI6477000 | 12172-73-5 |
| ANTHOPHYLLITE | CA8430000 | 17068-78-9 |
| CROCIDOLITE | CI6479000 | 12001-28-4 |

PROGRAM FREQUENCY: PENTA-ENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | |
|---|-----|---------|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | PENTA-E |
|---|-----|---------|

SPECIAL NOTATIONS:

| | | |
|---|-----|---------|
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | YES | PENTA-E |
| COUNSELING REGARDING THE COMBINED EFFECTS OF SMOKING AND ASBESTOS EXPOSURE | YES | PENTA-E |

| | | |
|--|-----|---------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | YES | PENTA-E |
|--|-----|---------|

| | | |
|--|-----|---------|
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | YES | PENTA-E |
|--|-----|---------|

| | | |
|------------------|-----|---------|
| RECOMMENDATIONS: | YES | PENTA-E |
|------------------|-----|---------|

PROGRAM DESCRIPTION:

Military and civilian personnel who have a history of asbestos exposure during past federal employment or military service may be included in the Asbestos Medical Surveillance Program (AMSP), upon request, if any of the following criteria are met.

1. History of enrollment in the Navy AMSP.
2. History of participation in any operation where visible airborne asbestos dust was present, including but not limited to rip-outs, for approximately 30 days or more in the past.
3. The occupational health provider, with occupational medicine physician consultation, concludes that the individual had exposure to asbestos that meets the current OSHA criteria for placement in the medical surveillance program, or its equivalent, for approximately 30 days or more in the past.

An employee who is in the AMSP based on a history of past exposure may be removed from the AMSP upon request. An entry in the medical record on the SF 600 should document the rationale for removing the individual from the AMSP. In Addition, notify NAVENVIRHLTHCEN in writing the name and SSN of any individual incorrectly placed in the AMSP when that person is removed from the program.

While not required, a termination evaluation may be recommended in certain cases, such as those with a history of heavy exposure or when there has been a long interim since the last evaluation.

REFERENCES: (OTHER); 1. OPNAVINST 5100.23E, Chapter 17; 2. OPNAVINST 5100.19C, Chapter B1; 3. Occupational Medicine Field Operations Manual, current edition. PROGRAM REVISED 3/2000

PROVIDER COMMENTS:

If Hemocult examinations are provided at your facility, Appendix F contains recommendations from the American Cancer Society for performing the Hemocult II.

Amendment (55 FR 3724) to the OSHA Standard (29 CFR 1910.1001) requires that the employee be counseled regarding the increased risk of lung cancer attributable to the combined effects of smoking and asbestos exposure.

Spirometry (FEV_1 , FVC, $FEV_1/FVC\%$) and chest x-ray with B Reader interpretation are performed with each examination. The examination is documented on NAVMED 6260/5, Rev (5/90), Periodic Health Evaluation. A Physician's Written Opinion is not required to be given to workers for past exposure examination. The DD Form 2493-1 and DD Form 2493-2 are not required for past exposure examinations.

Although this program is used for formerly exposed workers (the OSHA standard applies to currently exposed workers), this risk communication on the multiplicative risk of continued smoking and former asbestos exposure should be discussed with the employee at each asbestos medical surveillance visit.

117 BENZENE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BENZENE | CY1400000 | 71-43-2 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1028 and 29 CFR 1926.1128

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| BLEEDING ABNORMALITIES | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO BENZENE | | YES | ANNUAL | YES |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO IONIZING RADIATION | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| PLATELET COUNT | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| ABDOMEN | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCE: (OTHER); 1. 29 CFR 1910.1028 and 1926.1128; 2. Goesline, BD, Biological and ambient monitoring of benzene in the workplace, Journal of Medicine, 1986, 28 (10):1051. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Guidance on emergency examinations, mandatory referrals to a hematologist or internist by the examining physician, and mandatory removal are contained in 29 CFR 1910.1028. For all workers wearing respirators for at least 30 days a year, cardiopulmonary examination and spirometry are required on initial examination and every three years.

118 BENZIDINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BENZIDINE | DC9625000 | 92-87-5 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| CYTOLOGY: | | | | |
| URINE CYTOLOGY | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| GENITOURINARY TRACT | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCE: (1); (2); (OTHER); 29 CFR 1910.1003 and 1926.1103. Former standard 29 CFR 1910.1010. PROGRAM REVIEWED 3/2000

121 BERYLLIUM

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| BERYLLIUM | DS1750000 | 7440-41-7 |
| BERYLLIUM ALUMINUM ALLOY | DS2200000 | 12770-50-2 |
| BERYLLIUM CHLORIDE | DS2625000 | 7787-47-5 |
| BERYLLIUM FLUORIDE | DS2800000 | 7787-49-7 |
| BERYLLIUM HYDROXIDE | DS3150000 | 13321-32-7 |
| BERYLLIUM OXIDE | DS4025000 | 1304-56-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | YES |
| PNEUMONIA | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | ANNUAL | YES |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Beryllium-specific peripheral blood lymphocyte proliferation testing or other available preferred beryllium-specific tests might be considered appropriate by an occupational medicine physician. Anyone performing a beryllium-specific test should notify the Navy Environmental Health Center, Occupational Medicine Directorate.

178 BLOOD AND/OR BODY FLUIDS

PROGRAM FREQUENCY: BASELINE ONLY

OSHA STANDARD 29 CFR 1910.1030

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE |
|---|--------------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | |
| PERSONAL HISTORY OF: | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES |
| MAJOR ILLNESS OR INJURY | | YES |
| HOSPITALIZATION OR SURGERY | | YES |
| CANCER | | YES |
| BACK INJURY | | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES |
| HAVE YOU EVER SMOKED | | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES |
| MEDICATION ALLERGIES | | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES |
| HAVE YOU EVER BEEN EVALUATED FOR LATEX ALLERGY | | YES |
| WORK HISTORY OF: | | |
| EXP TO POTENTIALLY INFECTIOUS BODY FLUIDS | | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES |
| PHYSICAL EXAMINATION: | | |
| VITAL SIGNS | | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES |
| QUALIFICATIONS: | | |
| IS HEPATITIS B VACCINE SERIES COMPLETE OR PRIOR INFECTION DOCUMENTED? | | YES |
| SPECIAL NOTATIONS: | | |
| ASSESS THE EXAMINEE'S KNOWLEDGE OF UNIVERSAL BLOOD/ BODY FLUID PRECAUTIONS | | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES |
| RECOMMENDATIONS: | | YES |

PROGRAM DESCRIPTION:

This program does not have a periodic frequency. All tests are given at baseline physical exams and for any incident of exposure to potentially infectious materials. Exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact.

REFERENCES: (OTHER); 1. 29 CFR 1910.1030; 2. NIOSH Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to health care and public safety workers, 1989, DHHS (NIOSH) Publication Number 89-107; 3. Lewy R. Organization and conduct of a hospital occupational health service, 1987, Occupational Medicine: State of the Art Reviews 2(3): 617-649. 4. MMWR Vol 38/S-6, Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to health care and public-safety workers US Dept of HHS, Public Health Service, CDC, June 23 1989. 5. MMWR Vol 39/No.RR-1, Public Health Service Statement on Management of Occupational Exposure to Human Immunodeficiency Virus, Including Considerations Regarding Zidovudine Postexposure Use, US Dept of HHS, Public Health Service CDC, January 26, 1990. 6. Update: Provisional Public Health Service Recommendations for Chemoprophylaxis after Occupational Exposure to HIV. MMWR, 7 Jun 96. 7. OASD Policy. Hepatitis B Immunization Policy for Department of Defense Medical and Dental Policy. 23 Oct 96. 8. Hepatitis C Information for Health Care Workers. In: Hepatitis Surveillance, Report No. 56. Centers for Disease Control and Prevention. April 1996.

PROGRAM REVISED 3/2000

PROVIDER COMMENTS:

A sample physician's written opinion can be found in Appendix E.

Individuals entered in this program are those who have the potential for exposure to blood and/or body fluids.

Current national guidelines regarding the post-exposure management and reporting requirements for exposure incidents involving Hepatitis B or HIV are detailed in References 2 and 4. Guidelines regarding the use of zidovudine post HIV exposure are in Reference 5. Occupational Health staff managing exposure incidents involving HIV should have reference 5 and 2 or 4 on hand as well as current recommendations issued by NEHC, the nearest NEPMU or the Infectious Disease Department at Navy MTF's.

Category II exposure includes persons performing tasks that involve no exposure to blood or body fluids or tissues, but whose employment may require performing unplanned Category I tasks. This category may include firefighters, police officers, ambulance and correctional workers. Hepatitis B vaccine is not generally recommended for these workers (Reference 6). Employees occupationally exposed on an average of one or more times per month to blood or other potentially infectious materials are recommended candidates for HBV series (reference 1).

The MMWR 7 Jun 96 details the chemoprophylaxis recommended to workers after occupational exposures associated with the highest risk for HIV transmission. Health care providers in the United States are encouraged to enroll workers who receive post-exposure prophylaxis (PEP) in the new HIV Postexposure Prophylaxis Registry, telephone (888) 737-4448 (888-737-4HIV). The data gathered will help shape future recommendations for managing occupational HIV exposures.

122 BORON TRIFLUORIDE

| | | |
|------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BORON TRIFLUORIDE | ED2275000 | 7637-07-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY: | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (5). PROGRAM REVISED 10/97

217 1,3-BUTADIENE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 1,3-BUTADIENE | EI9150000 | 106-99-0 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1051

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO BENZENE | | YES | ANNUAL | YES |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO IONIZING RADIATION | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| PLATELET COUNT | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | TRI-ENN | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| ABDOMEN | | YES | TRI-ENN | YES |
| LIVER | | YES | TRI-ENN | YES |
| SPLEEN | | YES | TRI-ENN | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | TRI-ENN | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | TRI-ENN | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | TRI-ENN | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | TRI-ENN | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCE: (OTHER); 1. 29 CFR 1910.1051. PROGRAM reviewed 3/2000

PROVIDER COMMENTS:

The following are the criteria for placement in this program:

1. Employees with exposure to butadiene at concentrations at or above the action level on 30 or more days;
2. Employees who have or may have exposure to butadiene at or above the PELs on 10 or more days a year;
3. Medical surveillance shall be continued for employees even after transfer to a job without butadiene exposure, whose work histories suggest exposure to butadiene:
 - At or above the PELs on 30 or more days a year for 10 or more years.
 - At or above the action level on 60 or more days a year for 10 or more years.
 - Above 10 ppm on 30 or more days in any past year. **See 29 CFR 1910.1051, Appendix C, for health effect information and questionnaire sample.**

Medical surveillance shall be instituted for employees exposed to butadiene following an emergency situation (defined as any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant

release of butadiene). Guidance on emergency examinations and referrals is contained in 29 CFR 1910.1051.

See Appendix E for sample Physician's Written Opinion.

124 CADMIUM (CURRENT EXPOSURE)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| CADMIUM (DUST AND SALTS) | EU9800000 | 7440-43-9 |
| CADMIUM OXIDE | EV1925000 | 1306-19-0 |
| CADMIUM SULFIDE | EV3150000 | 1306-23-6 |
| CADMIUM SULFATE (1:) | EV2700000 | 10124-36-4 |
| CADMIUM NITRATE | EV1750000 | 10325-94-7 |
| CADMIUM FLUOBORATE | EV0525000 | 14486-19-2 |
| CADMIUM CHLORIDE | EV0175000 | 10108-64-2 |
| CARBONIC ACID, CADMIUM SALT | FF9320000 | 513-78-0 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1027 and 29 CFR 1926.1127

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | *** | @@@ | ### |
| MAJOR ILLNESS OR INJURY | | *** | @@@ | ### |
| HOSPITALIZATION OR SURGERY | | *** | @@@ | ### |
| CANCER | | *** | @@@ | ### |
| BACK INJURY | | *** | @@@ | ### |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | *** | @@@ | ### |
| HAVE YOU EVER SMOKED | | *** | @@@ | ### |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | *** | @@@ | ### |
| HOW MANY YEARS HAVE OR DID YOU SMOKE? NONE _____ NUMBER OF YEARS _____ | | | | |
| GREATEST NUMBER OF PACKS PER DAY SMOKED. _____ | | | | |
| FORMER SMOKERS - TIME SINCE QUITTING: _____ YEARS | | | | |
| AVERAGE PACKS PER DAY SMOKED _____ | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | *** | @@@ | ### |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | *** | @@@ | ### |
| MEDICATION ALLERGIES | | *** | @@@ | ### |
| ANY REPRODUCTIVE HEALTH CONCERNS | | *** | @@@ | ### |
| BLOOD DISEASES (ANEMIA) | | *** | @@@ | ### |
| LUNG/RESP DISEASE (EX: COPD, BRONCHITIS, PNEUMONITIS) | | *** | @@@ | ### |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | *** | @@@ | ### |
| CHEST PAIN, ANGINA, HEART ATTACK | | | | |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | *** | @@@ | ### |
| COUGHING UP BLOOD (HEMOPTYSIS) | | *** | @@@ | ### |
| SHORTNESS OF BREATH | | | | |
| COUGH (DRY OR PRODUCTIVE) | | *** | @@@ | ### |
| LIVER DISEASE | | *** | @@@ | ### |
| KIDNEY DISEASE | | *** | @@@ | ### |
| KIDNEY STONES | | *** | @@@ | ### |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PROBLEMS WITH URINATION/BLOOD IN URINE | | *** | @@@ | ### |
| PROTEIN IN URINE | | *** | @@@ | ### |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | *** | @@@ | ### |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | *** | @@@ | ### |
| BONE PROBLEMS (BROKEN BONES) | | *** | @@@ | ### |
| WORK HISTORY OF: | | | | |
| EXPOSURE TO CADMIUM | | *** | @@@ | ### |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | *** | @@@ | ### |
| COMMENTS ON MEDICAL HISTORY: | | *** | @@@ | ### |
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | *** | @@@ | ### |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | *** | @@@ | ### |
| CADMIUM IN BLOOD (CdB) | | *** | +++ | ### |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITHOUT MICROSCOPIC | | *** | @@@ | ### |
| URINE CHEMISTRY: | | | | |
| CADMIUM IN URINE (CdU) | | *** | +++ | ### |
| BETA-2-MICROGLOBULIN (β_2 -M) IN URINE | | *** | +++ | ### |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | *** | !!! | ### |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | *** | @@@ | ### |
| OTHER TESTS DEEMED APPROPRIATE BY THE PHYSICIAN | | *** | @@@ | ### |
| COMMENTS ON LABORATORY RESULTS: | | *** | @@@ | ### |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | *** | @@@ | ### |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| KIDNEY | | | | |
| RESPIRATORY SYSTEM | | *** | @@@ | ### |
| PROSTATE PALPATION OR OTHER AT-LEAST-AS-EFFECTIVE | | *** | @@@ | ### |
| DIAGNOSTIC TEST(S) FOR MALES OVER 40 YEARS OLD | | | | |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | *** | @@@ | ### |
| COMMENTS ON PHYSICAL EXAMINATION: | | *** | @@@ | ### |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | *** | @@@ | ### |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | *** | @@@ | ### |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | *** | @@@ | ### |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | *** | @@@ | ### |
| RECOMMENDATIONS: | | *** | @@@ | ### |

PROGRAM DESCRIPTION: REFERENCES: (OTHER); 1. 29 CFR 1910.1027; 2. 29 CFR 1926.63; 3. NAVENVIRHLTHCEN letter 6260 Ser 3213/6538 of 4 Jan 1993.

Currently exposed - all personnel who are or may be exposed to cadmium at or above the action level for 30 or more days per year.

Prior to assignment to a job requiring respirator use, a medical examination to determine fitness for respirator use shall be provided to any employee who does not have a medical examination within the preceding 12 months that satisfies the requirements outlined in 29 CFR 1910.1027. Place individuals on Program #716, Respirator User Certification Exam. PROGRAM REVIEWED 3/2000

29 CFR 1910.1027 describes the medical removal program.

PROVIDER COMMENTS:

The medical surveillance program consists of medical examinations and biological monitoring. The Physician's Written Opinion is required by the OSHA Standard. A sample is included in Appendix E.

***Initial (preplacement) examinations shall be provided for all personnel who meet the criteria for inclusion in the cadmium medical surveillance program within 30 days after initial assignment to the job with cadmium exposure.

An initial examination is NOT required if records show that the employee has been examined in accordance with the standard within the past 12 months. In that case, the records shall be maintained as part of the employee's medical record, and the prior examination treated as if it were the initial examination.

+++Biological monitoring tests are provided either as part of a periodic medical examination or separately and are required to be performed at least annually.

@@@After the initial exam and the subsequent exam one year later, the frequency of periodic medical examinations is to be at least biannually. It also may be triggered by the results of biological monitoring. Guidance on actions triggered by biological monitoring is detailed in 29 CFR 1910.1027 or NAVENVIRHLTHCEN letter referenced above.

!!!The frequency of chest x-rays is determined by the examining physician.

###At termination of employment, a medical examination shall be provided that includes the elements of the medical examination listed, including a chest x-ray. However, if the last examination was less than six months prior to the termination date and satisfied these requirements, further examination is not needed unless the results of biological monitoring require further testing.

BLANK

206 CADMIUM (PAST EXPOSURE)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| CADMIUM (DUST AND SALTS) | EU9800000 | 7440-43-9 |
| CADMIUM OXIDE (FUME) | EV1930000 | 1306-19-0 |
| CADMIUM OXIDE (PRODUCTION) | EV1925000 | 1306-19-0 |
| CADMIUM SULFIDE | EV3150000 | 1306-23-6 |
| CADMIUM SULFATE | EV2700000 | 10124-36-4 |
| CADMIUM NITRATE | EV1750000 | 10325-94-7 |
| CADMIUM FLUOBORATE | EV0525000 | 14486-19-2 |
| CADMIUM CHLORIDE | EV0175000 | 10108-64-2 |
| CADMIUM CARBONATE | FF9320000 | 513-78-0 |

PROGRAM FREQUENCY: SEE PROGRAM DESCRIPTION

OSHA STANDARD 29 CFR 1910.1027 and 29 CFR 1926.1127

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | *** | *** | *** |
| MAJOR ILLNESS OR INJURY | | *** | *** | *** |
| HOSPITALIZATION OR SURGERY | | *** | *** | *** |
| CANCER | | *** | *** | *** |
| BACK INJURY | | *** | *** | *** |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | *** | *** | *** |
| HAVE YOU EVER SMOKED | | *** | *** | *** |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | *** | *** | *** |
| HOW MANY YEARS HAVE OR DID YOU SMOKE? NONE _____ NUMBER OF YEARS _____ | | | | |
| GREATEST NUMBER OF PACKS PER DAY SMOKED. _____ | | | | |
| FORMER SMOKERS - TIME SINCE QUITTING: _____ YEARS | | | | |
| AVERAGE PACKS PER DAY SMOKED _____ | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | *** | *** | *** |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | *** | *** | *** |
| MEDICATION ALLERGIES | | *** | *** | *** |
| ANY REPRODUCTIVE HEALTH CONCERNS | | *** | *** | *** |
| BLOOD DISEASES (ANEMIA) | | *** | *** | *** |
| LUNG/RESP DISEASE (EX: COPD, BRONCHITIS, PNEUMONITIS) | | *** | *** | *** |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | *** | *** | *** |
| CHEST PAIN, ANGINA, HEART ATTACK | | *** | *** | *** |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF COUGHING UP BLOOD (HEMOPTYSIS) | | *** | *** | *** |
| SHORTNESS OF BREATH | | | | |
| COUGH (DRY OR PRODUCTIVE) | | *** | *** | *** |
| LIVER DISEASE | | *** | *** | *** |
| KIDNEY DISEASE | | *** | *** | *** |
| KIDNEY STONES | | *** | *** | *** |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | *** | *** | *** |

PROTEIN IN URINE

*** *** ***

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| CURRENT PREGNANCY (SELF OR SPOUSE) | | *** | *** | *** |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | *** | *** | *** |
| BONE PROBLEMS (BROKEN BONES) | | *** | *** | *** |
| WORK HISTORY OF: | | | | |
| EXPOSURE TO CADMIUM | | *** | *** | *** |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | *** | *** | *** |
| COMMENTS ON MEDICAL HISTORY: | | *** | *** | *** |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | *** | *** | *** |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | *** | *** | *** |
| CADMIUM IN BLOOD (CdB) | | *** | *** | *** |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITHOUT MICROSCOPIC | | *** | *** | *** |
| CADMIUM IN URINE (CdU) | | *** | *** | *** |
| BETA-2-MICROGLOBULIN (β_2 -M) IN URINE | | *** | *** | *** |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | *** | *** | *** |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | *** | *** | *** |
| OTHER TESTS DEEMED APPROPRIATE BY THE PHYSICIAN | | *** | *** | *** |
| COMMENTS ON LABORATORY RESULTS: | | *** | *** | *** |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | *** | *** | *** |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| RESPIRATORY SYSTEM | | *** | *** | *** |
| PROSTATE PALPATION OR OTHER AT-LEAST-AS-EFFECTIVE DIAGNOSTIC TEST(S) FOR MALES OVER 40 YEARS OLD | | *** | *** | *** |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | *** | *** | *** |
| COMMENTS ON PHYSICAL EXAMINATION: | | *** | *** | *** |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | *** | *** | *** |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | *** | *** | *** |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | *** | *** | *** |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | *** | *** | *** |
| RECOMMENDATIONS: | | *** | *** | *** |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. 29 CFR 1910.1027; 2. 29 CFR 1926.63;
3. NAVENVIRHLTHCEN letter 6260 Ser 3213/6538 of 4 Jan 1993.

Previously exposed - includes all personnel who, during active duty or civilian employment in the Department of Defense, might previously have been exposed to cadmium at or above the action level:

(1) Personnel whose worksite taskings meet the definition of construction work in 29 CFR 1926.63 with previous exposure to cadmium at or above the action level for an aggregate total of more than 12 months; or

(2) Personnel whose worksite taskings meet the definition of general industry work in 29 CFR 1910.1027 with previous exposure to cadmium at or above the action level for an aggregate total of more than 60 months.

Reference (3) above, strongly recommends that personnel be considered as meeting the definition of construction work unless there is adequate documentation that the general industry (non-construction work) definition is met.

Currently exposed - all personnel who are or may be exposed to cadmium at or above the action level for 30 or more days per year. See Program #124.
PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS: ***

1. OSHA requires a Physician's Written Opinion. A sample is included in Appendix E.

2. Initial tests show CdU at or below 3 µg/g Cr, CdB at or below 5 µg/lwb, and β₂-M at or below 300 µg/g Cr:

A. Follow-up biological monitoring must be done within one year after the initial biological monitoring.

B. If the follow-up tests confirm previous results, all periodic medical surveillance may be discontinued.

3. Initial tests show CdU exceeds 3 µg/g Cr, CdB exceeds 5 µg/lwb, or β₂-M exceeds 300 µg/g Cr:

A. Full medical examination within 90 days. The elements of the medical examination are listed in the Medical Matrix.

B. The frequency of chest x-rays is determined by the examining physician.

C. If biological monitoring results done during the medical examination show that the CdU no longer exceeds 3 $\mu\text{g/g}$ Cr, CdB no longer exceed 5 $\mu\text{g/lwb}$ or $\beta_2\text{-M}$ no longer exceeds 300 $\mu\text{g/g}$ Cr, biological monitoring will be repeated after one year. If repeat tests confirm the previous results, periodic medical surveillance may be discontinued.

D. If any follow-up test shows that CdU exceed 3 $\mu\text{g/g}$ Cr, CdB exceeds 5 $\mu\text{g/lwb}$, or $\beta_2\text{-M}$ exceeds 300 $\mu\text{g/g}$ Cr, annual medical examinations are required until:

1) the results of biological monitoring are consistently below these levels; or

2) the examining physician determines that further medical surveillance is not required to protect the employee's health.

4. Termination of employment examination is not required if previous biological monitoring results have returned to normal levels and periodic medical surveillance has been discontinued.

125 CARBON BLACK

| | | |
|------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CARBON BLACK | FF5800000 | 1333-86-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO CARCINOGENS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (2); (3); (4); (OTHER); NIOSH Criteria For A Recommended Standard...Occupational Exposure to Carbon Black, DHEW (NIOSH) Publication No. 78-204, Sept 1978. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Carbon black itself is not considered carcinogenic. However, solvent extracts of carbon black may contain carcinogens.

126 CARBON DISULFIDE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CARBON DISULFIDE | FF6650000 | 75-15-0 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| TREMORS | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| GLAUCOMA | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| PERSONALITY CHANGE | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| CHOLESTEROL | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | ANNUAL | NO |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| OPTOMETRY- | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | ANNUAL | NO |
| VISUAL FIELDS | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | | | |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (5). PROGRAM REVIEWED 10/97

127 CARBON MONOXIDE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CARBON MONOXIDE | FG3500000 | 630-08-0 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | ANNUAL | NO |
| DEPRESSION, DIFFICULTY CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | NO | NO |
| SERUM CHEMISTRY: | | | | |
| CHOLESTEROL | | YES | NO | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97.

128 CARBON TETRACHLORIDE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CARBON TETRACHLORIDE | FG4900000 | 56-23-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| USE OF BARBITURATES | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| NAUSEA OR VOMITING | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | | | |
| | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

* SGOT for baseline is included in baseline liver profile. Only a SGOT is required on annual test. REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97.

130 CHLOROFORM

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CHLOROFORM | FS9100000 | 67-66-3 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|---------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CYTOTOXIC (DRUGS) | | YES | ANNUAL | YES |
| USE OF BARBITURATES | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| NAUSEA OR VOMITING | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| MIGRAINE HEADACHE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | ANNUAL | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | NO | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| ABDOMEN | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3). PROGRAM REVISED 10/97.

131 BIS-CHLOROMETHYL ETHER

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BIS-CHLOROMETHYL ETHER | KN1575000 | 542-88-1 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM OVAL |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY): | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |
| PROGRAM DESCRIPTION: | | | | |
| REFERENCE: (OTHER) 29 CFR 1910.1003. Former standard 29 CFR 1910.1008. | | | | |
| PROGRAM REVIEWED 3/2000 | | | | |

132 BETA-CHLOROPRENE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BETA-CHLOROPRENE | EI9625000 | 126-99-8 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| MIGRAINE HEADACHE | | YES | ANNUAL | YES |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| BUN AND CREATININE | | * | ANNUAL | YES |
| SGOT (AST) | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| CARDIOLOGY: | | | | |
| ELECTROCARDIOGRAM | | YES | NO | YES |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) SUSPECTED HUMAN MUTAGENIC/FETOTOXIC EFF. | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97

133 CHROMIC ACID/CHROMIUM (VI)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|--|-----------|------------|
| CHROMIC ACID | GB2450000 | 7738-94- |
| CHROMIC ACID, ZINC SALT | GB3290000 | 13530-65-9 |
| DICHROMIC ACID, DISODIUM SALT | HX7700000 | 10588-01-9 |
| CHROMIUM (VI) WATER SOLUBLE | GB4200000 | 7440-47-3 |
| CHROMIUM (VI) WATER INSOLUBLE | GB4200000 | 7440-47-3 |
| CHROMIC ACID, LEAD (+2) SALT (1:1) | GB2975000 | 7758-97-6 |
| CHROMIC ACID, DI-T-BUTYLESTER | GB2900000 | 1189-85-1 |
| CHROMIC ACID, DISODIUM SALT | GB2955000 | 7775-11-3 |
| CHROMIC ACID, DISPOTASSIUM SALT | GB2940000 | 7789-00-6 |
| CHROMIUM PHOSPHATE | GB6840000 | 7789-04- |
| CHROMIUM CARBONYL | GB5075000 | 13007-92-6 |
| CHROMIC ACID, ZINC HYDROXIDE HYDRATE (1:2, 2:1) | GB3260000 | 15930-94-6 |
| CHROMIUM (VI) OXIDE (1:3) | GB6650000 | 1333-82-0 |
| CHROMIC ACID, STRONTIUM SALT (1:1) | GB3240000 | 7789-06-2 |
| CHROMIC ACID, CALCIUM SALT (1:1) | GB2750000 | 13765-19-0 |
| BARIUM CHROMATE (VI) | CQ8760000 | 10294-40-3 |
| CHROMATE (1-) HYDROXYOCTAOXODIZINICATED, POTASSIUM | GA9170000 | 1103-86-9 |
| C.I. PIGMENT YELLOW | GB3300000 | 37300-23-5 |
| CHROMIUM CHROMATE | GB2850000 | 24613-89-6 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1094(d) (9) (OSHA Ventilation Standard)

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| PERFORATION OF NASAL SEPTUM | | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |

COUGH (DRY OR PRODUCTIVE)
KIDNEY DISEASE

YES ANNUAL YES
YES ANNUAL YES

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| WORK HISTORY OF: | | | | |
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | | YES | ANNUAL | YES |
| EXP TO CHROMIUM OR CHROMIC ACID | | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| SGOT (AST) | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| MUCOUS MEMBRANES | | YES | ANNUAL | YES |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: OSHA Standard 29 CFR 1910.1094 (d) (9) (OSHA Ventilation Standard); (1); (2); (3); (4).

http://www.osha-slc.gov/OshStd-data/1910_0094.html

PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Beginning at the tenth year of exposure the chest x-ray may be indicated annually depending on the individual's work exposure, smoking status and work habits.

134 COAL TAR PITCH VOL./POLYCYCLIC AROMATIC HYDROCARBONS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|--|-----------|------------|
| COAL TAR (COAL TAR) | GF8600000 | 8007-45-2 |
| COAL TAR EXTRACTS AND HIGH TEMPERATURE TAR | GF8600100 | 65996-89-6 |
| COAL TAR PITCH VOLATILES | GF8655000 | 65996-93-2 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1002, 1910.1029 and 29 CFR 1926.1102, 1926.1129

EXAM ELEMENT

| ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | |
| PERSONAL HISTORY OF: | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER(CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | YES | ANNUAL | YES |
| PNEUMONIA | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | |
| EXP TO SKIN IRRITANTS | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | |
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | YES |
| LABORATORY- | | | |
| URINALYSIS: | | | |
| ROUTINE | | | |
| URINALYSIS WITH MICROSCOPIC | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|---------------|--------------|
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | | | |
| | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| WEIGHT | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| MUCOUS MEMBRANES | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC.) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | | | |
| | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | | | |
| | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | | | |
| | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | | | |
| | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER); 1. 29 CFR 1910.1002; 2. 29 CFR 1910.1029; 3. Polycyclic Aromatic Hydrocarbons, Fifth Annual Report on Carcinogens, Summary 1989, U.S. Department of Health and Human Services Public Health Service, Rockville, MD, Technical Resources, Inc. 1989:242-246. 4. Journal of Occupational Medicine 1990 (32): Entire Issue. PROGRAM REVIEWED 3/2000

NOTE: 29 CFR 1910.1029 applies to workers exposed to coke oven emissions and has specific requirements which must be followed in addition to those listed above. These include sputum and urine cytology and spirometry. To the extent that a worker's exposure to PAH's resembles that of coke oven emissions, these additional elements must be considered. While sputum cytology is not of proven benefit, urine cytology has been shown in certain high risk groups to identify asymptomatic cancers. Reference (4) provides more elaborate discussion of the issues.

208 COBALT

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|--|-----------|-----------|
| COBALT (METAL FUME AND DUST) | GF8750000 | 7440-48-4 |
| COBALT (II) OXIDE | GG2800000 | 1307-96-6 |
| COBALT (II) SULFIDE | GG3325000 | 1317-42-6 |
| COBALT (II) CHLORIDE | GG9800000 | 7646-39-9 |
| CEMENTED TUNGSTEN CARBIDE (SEE #200 FOR STRESSORS) | | |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXPOSURE TO SKIN IRRITANTS | | | | |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY | | | | |
| CHEST X-RAY (PA) | | YES | PENTA-E | NO |
| SPIROMETRY | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC.) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY): | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2). PROGRAM REVISED 10/97.

135 CRESOL

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|-------------------------------------|-----------|-----------|
| CRESOL (O, M, P-MIXTURE) | GO5950000 | 1319-77-3 |
| M-CRESOL | GO6125000 | 108-39-4 |
| O-CRESOL | GO6300000 | 95-48-7 |
| P-CRESOL | GO6475000 | 106-44-5 |
| 2,6-DITERT-BUTYL-P-CRESOL | GO7875000 | 128-37-0 |
| 4,4'-THIOBIS(6-TERT-BUTYL-M-CRESOL) | GP3150000 | 96-69-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | YES | ANNUAL | NO | |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | NO |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (5). PROGRAM REVISED 10/97

137 1,2-DIBROMO-3-CHLOROPROPANE (DBCP)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 1,2-DIBROMO-3-CHLOROPROPANE | TX8750000 | 96-12-8 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1044 and 29 CFR 1926.1144

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| SKIN DISEASES | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY | | | | |
| SERUM CHEMISTRY: | | | | |
| SERUM TOTAL ESTROGEN (FEMALE) | | YES | ANNUAL | YES |
| SERUM FOLLICLE STIMULATING HORMONE (FSH) | | YES | ANNUAL | YES |
| SERUM LUTEINIZING HORMONE (LH) | | YES | ANNUAL | YES |
| ADDITIONAL LAB TESTS: | | | | |
| SPERM COUNT (MALE) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| GU (INCLUDING TESTICLE SIZE) | | YES | ANNUAL | YES |
| BODY HABITUS | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------------|---|--------------|--------------|--------------|
| SPECIAL NOTATIONS: | | | | |
| | SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | YES | ANNUAL | YES |
| | PHYSICIAN'S WRITTEN OPINION REQUIRED | YES | ANNUAL | YES |
| | IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | YES | ANNUAL | YES |
| | ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | YES | ANNUAL | YES |
| | RECOMMENDATIONS: | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER); 1. 29 CFR 1910.1044; 2. Journal of Occupational Medicine 32(10) 979-984,1990. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Use of 1,2-DIBROMO-3-CHLOROPROPANE (DBCP) as a fumigant in the U.S. has been banned by the EPA. Limited manufacturing may still be occurring.

Medical surveillance is to be made available in regulated areas and to workers exposed to DBCP in emergency situations. The OSHA standard on DBCP does not apply to: 1) exposure to DBCP which results solely from the application and use of DBCP as a pesticide; or 2) the storage, transportation, distribution, or sale of DBCP in intact containers sealed in such a manner as to prevent exposure to DBCP vapors or liquids.

138 3,3'-DICHLOROBENZIDINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 3,3'-DICHLOROBENZIDINE | DD0525000 | 91-94-1 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 AND 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| GENITOURINARY TRACT | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | YES |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCE: (OTHER); 29 CFR 1910.1003. Former standard 29 CFR 1910.1007. PROGRAM REVIEWED 3/2000

139 4-DIMETHYLAMINOAZOBENZENE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 4-DIMETHYLAMINOAZOBENZENE | BX7350000 | 60-11-7 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1)(3); (OTHER); 29 CFR 1910.1003. Former standard 29 CFR 1910.1015. PROGRAM REVIEWED 3/2000.

140 DINITRO-ORTHO-CRESOL

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| DINITRO-O-CRESOL | GO9625000 | 534-52-1 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | NO |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | YES | ANNUAL | NO |
| WEIGHT LOSS | YES | ANNUAL | NO |
| GLAUCOMA | YES | ANNUAL | NO |
| LIVER DISEASE | YES | ANNUAL | NO |
| KIDNEY DISEASE | YES | ANNUAL | NO |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | YES | ANNUAL | NO |
| DEPRESSION, DIFFICULTY CONCENTRATING, EXCESSIVE ANXIETY | YES | ANNUAL | NO |

WORK HISTORY OF:

| | | | |
|--|-----|--------|----|
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | NO |

LABORATORY-

URINALYSIS:

ROUTINE:

| | | | |
|---------------------------------|-----|--------|----|
| URINALYSIS WITH MICROSCOPIC | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| ABDOMEN | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| THYROID | | YES | ANNUAL | NO |
| METABOLIC DISTURBANCE (FEVER, TACHYCARDIA) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (3); (OTHER); 1. NIOSH criteria for a recommended standard... Occupational Safety and Health Guideline for Dinitro-ortho-cresol, NIOSH Pub. No. 89-104, Supplement II-CHG; 2. Hayes WJ, Pesticides Studied in Man, Baltimore: Williams and Wilkins; 1982:466-470. PROGRAM REVISED 10/97.

141 DIOXANE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| DIOXANE | JG8225000 | 123-91-1 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | NO |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (3); (4); (OTHER); NIOSH criteria for a recommended standard...occupational exposure to dioxane, DHEW Pub. No. 77-226. PROGRAM REVIEWED 3/2000.

142 EPICHLOROHYDRIN

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| EPICHLOROHYDRIN | TX4900000 | 106-89-8 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | YES |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard... occupational exposure to Epichlorohydrin, DHEW Pub. No. 76-206. PROGRAM REVIEWED 10/97.

143 ETHOXY AND METHOXY ETHANOL

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|----------|
| 2-ETHOXYETHANOL | K8050000 | 110-80-5 |
| 2-METHOXYETHANOL | KL5775000 | 109-86-4 |

PROGRAM FREQUENCIES: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| GENITOURINARY TRACT | | YES | ANNUAL | NO |
| TESTES (MALE) | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN MUTAGENIC OR FETOTOXIC EFFECTS | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (4); (OTHER); The Glycol Ethers, with Particular Reference to 2-Methoxyethanol and 2-Ethoxyethanol: Evidence of Adverse Reproductive Effects, NIOSH Current Intelligence Bulletin 39, DHEW (NIOSH) Pub. No. 83-112. PROGRAM REVIEWED 10/97.

145 ETHYLENE DIBROMIDE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ETHYLENE DIBROMIDE | KH9275000 | 106-93-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) KNOWN MUTAGENIC OR FETOTOXIC EFFECTS | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH Criteria for a recommended standard... occupational exposure to Ethylene Dibromide, NIOSH Pub. No. 77-221. PROGRAM REVIEWED 10/97.

146 ETHYLENE DICHLORIDE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ETHYLENE DICHLORIDE | KI0525000 | 107-06-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| WEIGHT LOSS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| SGOT (AST) | | * | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard...occupational exposure to Ethylene Dichloride, NIOSH Pub. No. 76-139. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Ethylene dichloride is a central nervous system depressant and causes injury to the liver and kidneys. Animal studies indicate that it has little ability to adversely affect the reproductive or developmental processes except at maternally toxic levels.(3)

148 ETHYLENE OXIDE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ETHYLENE OXIDE | KX2450000 | 75-21-8 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1047 and 29 CFR 1926.1147

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| PROBLEMS WITH BALANCE, NUMBNESS, AND TINGLING IN HANDS OR FEET | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO ANESTHETIC GASES | | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| GENITOURINARY TRACT | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) SUSPECTED HUMAN MUTAGENIC/FETOTOXIC EFFECTS | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER); 1. 29 CFR 1919.1047. 2. NIOSH Current Intelligence Bulletin #35, Ethylene Oxide; PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Refer to 29 CFR 1910.1047 for exams required following acute exposure or for exams with positive findings.

OSHA Standard requires a Physician's Written Opinion (PWO). A sample PWO can be found in Appendix E of the Medical Matrix and 29 CFR 1910.1047, CFR Appendix E. (http://www.osha-slc.gov/OshStd-data/1910_1047.html)

The examining physician if requested by the employee and deemed appropriate by the physician may order pregnancy tests or laboratory evaluation of fertility. Similar evaluation may be indicated if there are positive responses to medical history questions pertaining to the reproductive system. Refer to 29 CFR 1910.1047, Appendix C (http://www.osha-slc.gov/OshStd-data/1910_1047_App_C.html)

149 ETHYLENIMINE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ETHYLENEIMINE | KX5075000 | 151-56-4 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | REM OVAL |
|--|--------------------|--------------|--------------|-------------|
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (OTHER); 1. NIOSH OSH Guidelines to Chemical Hazards Supplement #2, U.S. Dept. of HHS, Public Health Service, CDC, NIOSH, division of Standards Development, Cincinnati, OH 1988; 2. OSHA STANDARD 29 CFR 1910.1003. Former standard 29 CFR 1910.1012. PROGRAM REVIEWED 3/2000

150 FLUORIDES (INORGANIC)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| FLUORIDES | LM6290000 | 16984-48-8 |
| CALCIUM FLUORIDE | EW1760000 | 7789-75-5 |
| CARBONYL FLUORIDE | FG6125000 | 353-50-4 |
| PERCHLORYL FLUORIDE | SD1925000 | 7616-94-6 |
| SULFURYL FLUORIDE | WT5075000 | 2699-79-8 |
| FLUORINE | LM6475000 | 7782-41-4 |
| HYDROFLUORIC ACID | MW7875000 | 7664-39-3 |

PROGRAM FREQUENCIES: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | NO |
| EYE IRRITATION | YES | ANNUAL | NO |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | YES | ANNUAL | NO |
| KIDNEY DISEASE | YES | ANNUAL | NO |
| MUSCLE OR JOINT PROBLEMS | YES | ANNUAL | NO |

WORK HISTORY OF:

| | | | |
|---|-----|--------|----|
| EXP TO HYDROGEN FLUORIDE OR INORGANIC FLUORIDES | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | NO |

LABORATORY-

URINALYSIS:

ROUTINE:

| | | | |
|-----------------------------|-----|-----|----|
| URINE FLUORIDE - POST SHIFT | YES | *** | NO |
|-----------------------------|-----|-----|----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| TEETH (ACID EROSION) | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Inorganic Fluorides DHEW Pub. No. 76-103. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

A preplacement spot urine fluoride is obtained for a baseline as an indicator of body burden. (Reference DHEW Pub. No. 76-103)

***At the time of the periodic examination, evaluate the need to perform a urine fluoride test. Postshift examination of the urine fluoride reflects recent exposure (in the preceding hours) and is not useful for biological monitoring if the employee has not been exposed to fluoride. The best time to obtain the urine specimen is at the end of a work week after the employee has been involved in tasks with fluoride exposure during that week. Because of the episodic exposure of most employees, the laboratory work obtained for the annual medical surveillance may not coincide with an exposure period. Ideally, the biological monitoring should be collected at the same time the Industrial Hygienist collects environmental samples.

151 FORMALDEHYDE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| FORMALDEHYDE | LP8925000 | 50-00-0 |

PROGRAM FREQUENCY: ANNUAL (SEE PROVIDER COMMENTS)

OSHA STANDARD 29 CFR 1910.1048 and 29 CFR 1226.1148

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| RECURRENT SKIN RASH | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| CONTACT LENS USE | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| COUGHING UP BLOOD (HEMOPTYSIS) | | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | YES |
| MUCOUS MEMBRANES | | YES | ANNUAL | YES |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | | | |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (5); (OTHER); 29 CFR 1910.1048; NIOSH criteria for a recommended standard...Occupational Exposure to Formaldehyde DHEW Pub. No. 77-186. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

The OSHA standard requires an annual medical examination for all workers whose exposure requires use of respirators for protection. For those workers whose exposure does not require a respirator, the examiner shall review the medical and work history and determine whether an examination is required. The OSHA standard requires annual spirometry for all exposed workers who wear respirators.

Examinations are required for employees exposed to formaldehyde in an emergency. The employer shall promptly notify an employee of the right to seek a second medical opinion after each occasion that an initial physician conducts a medical examination or consultation for the purpose of medical removal or restriction. Refer to 29 CFR 1910.1048, Appendix C. (http://www.osha-slc.gov/OshStd_data/1910_1048-App_C.html).

A Physician's Written Opinion is required by OSHA Standard. A sample Physician's Written Opinion can be found in Appendix E of the Medical Matrix.

152 GLYCIDYL ETHERS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|----------------------------------|-----------|-----------|
| RESORCINOL DIGLYCIDYL ETHER | VH1050000 | 101-90-6 |
| OXIRANE, ((2-PROPENYLOXY)METHYL) | RR0875000 | 106-92-3 |
| PROPANE, 1,2-EPOXY-3-ISOPROPYL | TZ3500000 | 4016-14-2 |
| ETHER, BIS (2,3-EPOXY PROPYL) | KN2350000 | 2238-07-5 |
| PROPANE, 1,2-EPOXY-3-PHENOXY | TZ3675000 | 122-60-1 |
| PROPANE, 1-BUTOXY-2,3-EPOXY | TX4200000 | 2426-08-6 |
| 1-PROPANOL, 2,3-EPOXY | UB4375000 | 556-52-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SPIROMETRY: | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (4); (5). PROGRAM REVISED 10/97.

155 HYDRAZINES

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|----------|
| 1,1-DIMETHYLHYDRAZINE | MV2450000 | 57-14-7 |
| HYDRAZINE | MV7175000 | 302-01-2 |
| PHENYLHYDRAZINE | MV8925000 | 100-63-0 |
| METHYL HYDRAZINE | MV5600000 | 60-34-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | YES | ANNUAL | YES |
| EYE IRRITATION | YES | ANNUAL | YES |
| KIDNEY DISEASE | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | ANNUAL | YES |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | YES | ANNUAL | YES |

WORK HISTORY OF:

| | | | |
|---|-----|--------|-----|
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | YES |

FAMILY HISTORY OF:

| | | | |
|----------------------------|-----|--------|-----|
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |
|----------------------------|-----|--------|-----|

COMMENTS ON MEDICAL HISTORY:

| | | |
|-----|--------|-----|
| YES | ANNUAL | YES |
|-----|--------|-----|

LABORATORY-

HEMATOLOGY:

| | | | |
|--|-----|--------|-----|
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | YES | ANNUAL | YES |
|--|-----|--------|-----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| THYROID | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annyal basis. REFERENCES: (1); (3); (5); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Hydrazines, DHEW Pub. No. 78-172. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

The potential for worker exposure is primarily through inhalation and skin absorption. Liquid in the eyes or on the skin causes severe burns. Hydrazine as the vapor or liquid is a severe skin and mucous membrane irritant, a convulsant, a hepatotoxin, and a carcinogen in animals.(1)

EMERGENCY NOTE: "Exposure to high quantities of this agent can result in severe illness or death with some effects taking hours or days to materialize. In acute over-exposure situations, evaluation should take place in a setting where staff are able to assess and respond rapidly to life-threatening organ failure.

156 HYDROGEN CYANIDE/CYANIDE SALTS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------------|-----------|----------|
| HYDROGEN CYANIDE AND CYANIDE SALTS | MW6825000 | 74-90-8 |
| CYANIDES | GS7175000 | 57-12-5 |
| CYANAMIDE | GS5950000 | 420-04-2 |
| CYANOGEN | GT1925000 | 460-19-5 |
| CYANOGEN CHLORIDE | GT2275000 | 506-77-4 |
| CALCIUM CYANAMIDE | GS6000000 | 156-62-7 |
| METHYLACRYLONITRILE | UD1400000 | 126-98-7 |
| METHYL 2-CYANOACRYLATE | AS7000000 | 137-05-3 |
| SILVER CYANIDE | VW3850000 | 506-64-9 |
| CALCIUM CYANIDE | EW0700000 | 592-01-8 |
| POTASSIUM CYANIDE | TS8750000 | 151-50-8 |
| SODIUM CYANIDE | VZ7525000 | 143-33-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

| MEDICAL HISTORY: HAVE YOU EVER HAD? | PERSONAL HISTORY OF: | | | |
|---|----------------------|--------|----|--|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO | |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO | |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO | |
| CANCER | YES | ANNUAL | NO | |
| BACK INJURY | YES | ANNUAL | NO | |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK? (BEER, WINE, LIQUOR) | YES | ANNUAL | NO | |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO | |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO | |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO | |
| MEDICATION ALLERGIES | YES | ANNUAL | NO | |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO | |
| SKIN DISEASE | YES | ANNUAL | NO | |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | NO | |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | YES | ANNUAL | NO | |
| NAUSEA OR VOMITING | YES | ANNUAL | NO | |
| TREMORS | YES | ANNUAL | NO | |
| CHEST PAIN, ANGINA, HEART ATTACK | YES | ANNUAL | NO | |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | YES | ANNUAL | NO | |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | YES | ANNUAL | NO | |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN FEET OR HANDS | YES | ANNUAL | NO | |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | YES | ANNUAL | NO | |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC.) | | YES | ANNUAL | NO |
| THYROID | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (5); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Hydrogen Cyanide Salts, DHEW Pub. No. 77-108. PROGRAM REVISED 10/97.

158 HYDROGEN SULFIDE

| | | |
|------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| HYDROGEN SULFIDE | MX1225000 | 7783-06-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| WEIGHT LOSS | | YES | ANNUAL | NO |
| TREMORS | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| PERSONALITY CHANGE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| EYES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (4); (5); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Hydrogen Sulfide, DHEW Pub. No. 77-158. PROGRAM REVISED 10/97.

159 HYDROQUINONE (DIHYDROXY BENZENE)

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| HYDROQUINONE | MX3500000 | 123-31-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| EYE IRRITATION | YES | ANNUAL | NO |

WORK HISTORY OF:

| | | | |
|------------------------------|-----|--------|----|
| EXP TO SKIN IRRITANTS | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | NO |

COMMENTS ON MEDICAL HISTORY: YES ANNUAL NO

LABORATORY-

OPTOMETRY-

| | | | |
|-------------------------------|-----|--------|----|
| VISION SCREEN (VISUAL ACUITY) | YES | ANNUAL | NO |
| SLIT LAMP EXAM | YES | ANNUAL | NO |

COMMENTS ON LABORATORY RESULTS: YES ANNUAL NO

PHYSICAL EXAMINATION:

| | | | |
|-------------|-----|--------|----|
| VITAL SIGNS | YES | ANNUAL | NO |
|-------------|-----|--------|----|

SPECIAL ATTENTION IN EXAMINATION TO:

| | | | |
|---|-----|--------|----|
| EYES (CONJUNCTIVA, SCLERA, LENS, RETINA) | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | YES | ANNUAL | NO |

OTHER APPROPRIATE EXAMINATION (SPECIFY) YES ANNUAL NO

COMMENTS ON PHYSICAL EXAMINATION: YES ANNUAL NO

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Hydroquinone, DHEW Pub. No. 78-155; ACGIH Documentation on TLV's, 1987. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Hydroquinone primarily affects the eyes. Chronic exposure produces changes characterized as: brownish discoloration of the conjunctiva and cornea confined to the interpalpebral tissue; small opacities of the cornea; and structural changes in the cornea that result in loss of visual acuity (3). Slit lamp exam is recommended to evaluate corneal changes and opacities.

196 ISOCYANATES

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|--|-----------|-----------|
| BENZENE, 2,4-DIISOCYANATO-1-METHYL | CZ6300000 | 584-84-9 |
| HEXAME, 1,6-DIISOCYANATE | MO1740000 | 822-06-0 |
| ISOCYANIC ACID, METHYLENEDL-P-PHENELENE ESTER | NQ9350000 | 101-68-8 |
| ISOCYANIC ACID, 1,5-NAPHTHYLENE ESTER | NQ9600000 | 3173-72-6 |
| s-TRIAZINE-2,4,6-TRIOL | XZ1800000 | 108-80-5 |
| ISOCYANIC ACID, METHYLENE(3,5,5-TRIMETHYL-3 CYCLOHEXYLENE) ESTER | NQ9370000 | 4098-71-9 |
| ISOCYANIC ACID, METHYLENEDI-4,1-CYCLOHEXYLENE-ESTER | NQ9250000 | 5124-30-1 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|-----------|-----------|-----------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO ISOCYANATE FOAM OR PAINT | | YES | ANNUAL | NO |
| SENSITIZATION TO ISOCYANATES (TDI, MDI) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES (2); (3); (4); (5); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Toluene Diisocyanates, DHEW Pub. No. 73-11022; 2. Musk, AW, Peters JM, Wegman DH, Isocyanates and Respiratory Disease: Current Status, American Journal of Industrial Medicine, 1988;13:331-349. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Pulmonary function changes to isocyanate exposure tend to occur at the end of the work-shift of work-week of exposure. The PFT, therefore, is of most use when performed at such end of work-shift times.

161 LEAD (INORGANIC)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|-----------------------------------|-----------|-----------|
| LEAD (INORGANIC) | OF7525000 | 7439-92-1 |
| CHROMIC ACID, LEAD (2+) SALT (1:) | GB2975000 | 7758-97-6 |
| LEAD PHOSPHATE (3:2) | OG3675000 | 7446-27-7 |

PROGRAM FREQUENCY: SEMI-ANNUAL FOR BIOLOGIC MONITORING

OSHA STANDARD 29 CFR 1910.1025 and 29 CFR 1926.1125

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | SEMI-A | YES |
| MAJOR ILLNESS OR INJURY | | YES | *** | YES |
| HOSPITALIZATION OR SURGERY | | YES | *** | YES |
| CANCER | | YES | *** | YES |
| BACK INJURY | | YES | *** | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | *** | YES |
| HAVE YOU EVER SMOKED | | YES | *** | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | *** | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | *** | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | *** | YES |
| MEDICATION ALLERGIES | | YES | *** | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | *** | YES |
| BLOOD DISEASES (ANEMIA) | | YES | *** | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | *** | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | *** | YES |
| KIDNEY DISEASE | | YES | *** | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | *** | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | *** | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | *** | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | *** | YES |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | *** | YES |
| PERSONALITY CHANGE | | YES | *** | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | *** | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | *** | YES |
| RBC MORPHOLOGY | | YES | *** | YES |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | YES | *** | YES |
| BLOOD LEAD AND ZINC PROTOPORPHYRIN (ZPP) | | YES | SEMI-A | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | *** | YES |
| COMMENTS ON LABORATORY RESULTS | | YES | SEMI-A | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | *** | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | *** | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | *** | YES |
| CARDIOVASCULAR SYSTEM | | YES | *** | YES |
| GUMS (E.G. LEAD LINES?) | | YES | *** | YES |
| ABDOMEN | | YES | *** | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | *** | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | *** | YES |
| SPECIAL NOTATIONS: | | | | |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | *** | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | SEMI-A | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | *** | YES |
| RECOMMENDATIONS: | | YES | *** | YES |

PROGRAM DESCRIPTION:

A baseline examination is required prior to assignment to a position involving potential exposures to lead that equal or exceed the action level.

***A medical examination identical in scope to the baseline will be conducted annually for each person found to have a blood lead concentration at or above 30 ug/100gm at any time during the prior year.

A termination examination identical in scope to the baseline, will be conducted just prior to the reassignment or termination of a person from a job requiring medical surveillance, unless a medical evaluation was done within the past twelve (12) months.

Guidelines for medical removal and follow-up, including written notification, are very specific. See 29 CFR 1910.1025, Appendix C, (http://www.osha-slc.gov/OshStd_data/1910_1025_APPP_C.html) and NAVOSH manuals for guidance. (<http://www.norva.navy.mil/navosh/instruct.htm>). REFERENCES: (5); (OTHER); 1. 29 CFR 1910.1025; 2. OPNAVINST 5100.23E, Chapter 21; 3. OPNAVINST 5100.19C, Chapter B10. 4. Industrial Hygiene Sampling Guide, consolidated Industrial Hygiene Laboratories, Current Edition. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

A Physician's Written Opinion is required by OSHA Standard. A sample Physician's Written Opinion can be found in Appendix E, E-7.

This program consists of; preplacement medical examination, semiannual blood lead monitoring, and follow-up medical evaluations and blood lead analysis based on the results of blood lead analysis and physician opinion. Personnel are included in this program when industrial hygiene surveillance indicates that they perform work or are likely to be in the vicinity of an operation which generates airborne lead concentrations at or above the Action Level 30 days per year. Inclusion in this program is based on measured

airborne concentrations without regard to respirator use, and therefore does not indicate that an individual is overexposed to lead.

210 MANGANESE OXIDE FUMES

| | | |
|------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH# | CAS# |
| MANGANESE (AND COMPOUNDS) | 009275000 | 7439-96-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| TREMORS | | YES | ANNUAL | NO |
| COUGH | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| PERSONALITY CHANGE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3). PROGRAM REVISED 10/97.

163 MERCURY

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|--|-----------|-----------|
| MERCURY (ARYL AND INORGANIC COMPOUNDS) | OV4550000 | 7439-97-6 |
| MERCURY (ALKYL COMPOUNDS) | OV4550000 | 7439-97-6 |
| CHLOROETHYL MERCURY | OV9800000 | 107-27-7 |
| MERCURY (VAPOR) | OV4550000 | 7439-97-6 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| WEIGHT LOSS | | YES | ANNUAL | YES |
| TREMORS | | YES | ANNUAL | YES |
| TOOTH OR GUM DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS, IN HANDS OR FEET | | YES | ANNUAL | YES |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | YES |
| PERSONALITY CHANGE | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| URINE CHEMISTRY: | | | | |
| URINE MERCURY | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (5); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Inorganic Mercury, DHEW Pub. No. 73-11024. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Urine mercury levels can be performed on spot urine collections, but should be corrected to creatinine level.

Acute exposure to high concentrations of mercury vapor causes severe respiratory damage, whereas chronic exposure to lower levels is primarily associated with central nervous system damage.(3) Acute mercury poisoning can occur from inhalation of high concentrations of mercury vapor or dust. If the concentration of mercury vapor is high enough, the exposure will result in tightness and pain in the chest, difficulty in breathing, coughing, and shortly thereafter, a metallic taste, nausea, abdominal pain, vomiting diarrhea, headache, and occasionally albuminuria.

With chronic exposure to mercury vapor, early signs are nonspecific and include weakness, fatigue, anorexia, loss of weight and disturbances of gastrointestinal function. At higher exposure levels, a characteristic mercurial tremor appears. Personality changes are the most common findings in chronic mercurial poisoning. Symptoms may first occur after a very few weeks of exposure, or they may not become apparent for several years.(1) It has been estimated that the probability of manifesting typical mercurialism with tremor and behavioral changes will increase with exposures to concentrations of 0.1mg/m³ or higher. There is no evidence of effects at concentrations below 0.01 mg/m³.(3)

215 METHYL BROMIDE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| METHYL BROMIDE | PA4900000 | 74-83-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|---|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | YES | ANNUAL | NO |
| TREMORS | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | YES | ANNUAL | NO |
| EYE IRRITATION | YES | ANNUAL | NO |
| EPILEPSY (SEIZURE DISORDER) | YES | ANNUAL | NO |
| NEUROLOGIC DISORDER, GAIT CHANGE, PARESTHESIA, COORDINATION LOSS | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | YES | ANNUAL | NO |
| PERSONALITY CHANGE | YES | ANNUAL | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | ANNUAL | NO |

COMMENTS ON MEDICAL HISTORY: YES ANNUAL NO

LABORATORY-

RADIOLOGY:

CHEST X-RAY (PA) YES NO NO

SPIROMETRY:

SPIROMETRY (FVC, FEV1, FEV1/FVC) YES NO NO

OPTOMETRY:

VISION SCREEN (VISUAL ACUITY) YES YES NO

COMMENTS ON LABORATORY RESULTS:

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY): | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (5); (OTHER); 1. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, U.S. Department Of Health And Human Services, Sept.1978; 2. Gunther FA, Gunther JD. Residue Reviews. New York, NY:Springer-Verlag; 1983: vol.88:102-150; 3. Cralley LJ, Cralley LV. Patty,s Industrial Hygiene And Toxicology 3rd Ed. New York, NY:John Wiley & Sons, Inc. 1981: vol.2B:3442-3444, 3472-3478; 4. Morgan DP. Recognition and Management of Pesticide Poisonings, Fourth Edition. United States Environmental Protection Agency. 1989:132-133. PROGRAM REVISED 10/97.

166 METHYL CHLOROMETHYL ETHER

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| CHLOROMETHYL METHYL ETHER | KN6650000 | 107-30-2 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| DECREASED IMMUNITY | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | YES | ANNUAL | YES |

FAMILY HISTORY OF:

| | | | |
|--------------------------------------|-----|--------|-----|
| GENETIC DISEASE (INCLUDING CHILDREN) | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |

COMMENTS ON MEDICAL HISTORY: YES ANNUAL YES

LABORATORY:

| | | | |
|----------------------------------|-----|--------|-----|
| SPIROMETRY: | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | YES | ANNUAL | YES |

PHYSICAL EXAMINATION:

| | | | |
|--------------------------------------|-----|--------|-----|
| VITAL SIGNS | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCE: (3); (OTHER); 29 CFR 1910.1003. Former standard 29 CFR 1910.1006. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Commercial grade CMME is contaminated with bis-Chloromethylether. Commercial grade CMME is a known human carcinogen. REFERENCE: IARC Monograph on the Evaluation of Carcinogenic Risks to Humans: Overall Evaluation of Carcinogenicity: An updating of IARC Monographs, Vol 1-42, Supp 7, pp 131-132. Lyon International Agency for Research on Cancer, 1987.

167 4,4'-METHYLENE BIS (2-CHLOROANILINE) (MOCA)

| | | |
|-------------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 4,4'-METHYLENE BIS(2-CHLOROANILINE) | CY1050000 | 101-14-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/150 | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (ast), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97.

168 METHYLENE CHLORIDE (DICHLOROMETHANE)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| METHYLENE CHLORIDE | PA8050000 | 75-09-2 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1052 and 29 CFR 1926.1152

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| EYE IRRITATION | | YES | ANNUAL | YES |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | YES |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| EXP TO METHYLENE CHLORIDE, DICHLOROMETHANE, METHYLENE DICHLORIDE | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| HEMATOCRIT (HCT) | | YES | NO | NO |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOTAL BILIRUBIN, ALK. PHOS | | YES | NO | YES |
| CHOLESTEROL | | YES | NO | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | *** | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | *** | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | *** | YES |
| CARDIOVASCULAR SYSTEM | | YES | *** | YES |
| EYES | | YES | *** | YES |
| LIVER | | YES | *** | YES |
| RESPIRATORY SYSTEM | | YES | *** | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | *** | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | *** | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | *** | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | *** | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | *** | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | *** | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | *** | YES |
| RECOMMENDATIONS: | | YES | *** | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. Termination examination shall be done when an employee is terminated, or on reassignment to an area where exposure is consistently at or below the action level (AL) and short term exposure limit (STEL), **if six months or more have elapsed since the last medical evaluation.**

See Appendix B of OSHA Standard for guidance on labs. (http://www.osha-slc.gov/OshStd_data/1910_1052_APP_B.html).

A sample Physician's Written Opinion can be found in Appendix E.

REFERENCES: (1); (2); (3); (4); (5); (OTHER); 1. 29 CFR Parts 1910.1052, 1915 and 1926, Occupational Exposure to Methylene Chloride.

PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Multiple Health Care Professional review Mechanism. If the employer selects the initial physician or licensed health care professional (PLHCP) to conduct any medical examination or consultation to an employee under this paragraph (j)(11), the employer shall notify the employee of the right to seek

a second opinion each time the employer provides the employee with a copy of the written opinion of that PLHCP. (http://www.osha-slc.gov/OshStd_data/1910_1052.html).

PROVIDER COMMENTS:

Affected employees: Employees who are, or may be exposed to methylene chloride as follows:

- (1) At or above the AL on 30 or more days a year, or above the 8-hour PEL or STEL on 10 or more days per year;
- (2) Above the 8hr-TWA, PEL or STEL for any time period where an employee has been identified by a physician or other licensed health care professional as being at risk from cardiac disease or from some other serious methylene chloride-related health condition, and such employee requests inclusion in the medical surveillance program;
- (3) During an emergency. (NOTE: When the employee has been exposed to methylene chloride in emergency situations, the content of emergency medical surveillance is discussed in 29 CFR 1910.)

End of shift carboxyhemoglobin may be determined periodically, and any level above 3% for non-smokers and above 10% for smokers should prompt an investigation of the worker and his/her workplace.

***The employer shall update the medical and work history for each affected employee annually. The employer shall provide periodic physical examinations, including appropriate laboratory surveillance, as follows:

*****FREQUENCY OF EXAMINATION**

| AGE | FREQUENCY |
|--------------|------------|
| < 45 yrs | Tri-ennial |
| 45 yrs and > | Annual |

BLANK FOR PRINTER

213 4,4'-METHYLENEDIANILINE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 4,4'-DIAMINODIPHENYLMETHANE | BY5425000 | 101-77-9 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1050 and 29 CFR 1926.1150

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| USE OF BARBITURATES | | YES | ANNUAL | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| BUN AND CREATININE URINALYSIS: ROUTINE: | | YES | ANNUAL | YES |
| URINALYSIS WITHOUT MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | YES |
| ABDOMEN | | YES | ANNUAL | YES |
| GENITOURINARY TRACT | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (5); (OTHER); 1. 29 CFR 1910.1050; 2. Aitio, Antero, M.D., Ph.D., Biologic Monitoring, p 178-179; 3. Cocker, J., Assessment of occupational exposure to 4,4'-diaminodiphenylmethane (methylenedianiline) by gas chromatography-mass spectrometry analysis of urine, British Journal of Industrial Medicine, 1986;43:620-625; 4. Hathaway, Gloria J. Ph.D., and J.P. Hughes, M.D., Supplements to Chemical Hazards of the Workplace, 2nd ed., Volume 1, Number 5. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Examinations are required for employees exposed to methylenedianiline in an emergency. Refer to 29 CFR 1910.1050, Appendix C. (http://www.osha-slc.gov/OshStd_data/1910_1050_APP_C.html).

The employer shall promptly notify an employee of the right to seek a second medical opinion after each occasion that an initial physician conducts a medical examination or consultation for the purpose of medical removal or restriction. (http://www.osha-slc.gov/OshStd_data/1910_1050.html).

A Physician's Written Opinion can be found in Appendix E of this manual.
Program revised 3/2000

170 ALPHA-NAPHTHYLAMINE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| ALPHA-NAPHTHYLAMINE | QM1400000 | 134-32-7 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDING CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS- | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (5); (OTHER) 1. 29 CFR 1910.1003; 2. Occupational Safety and Health Guidelines for Chemical Hazards, DHHS (NIOSH) Pub. No. 89-104, Supplement II-OHG 1988; 3. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Supplement 7, 1987. Former standard 29 CFR 1910.1004. PROGRAM REVIEWED 3/2000

171 BETA-NAPHTHYLAMINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BETA-NAPHTHYLAMINE | QM2100000 | 91-59-8 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1910.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| DECREASED IMMUNITY | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDING CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

LABORATORY-

URINALYSIS:

ROUTINE:

| | | | |
|---------------------------------|-----|--------|-----|
| URINALYSIS WITH MICROSCOPIC | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER) 29 CFR 1910.1003. Former standard
29 CFR 1910.1009. PROGRAM REVIEWED 3/2000

172 NICKEL (INORGANIC)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| NICKEL (METAL) | QR5950000 | 7440-02-0 |
| NICKEL (SOLUBLE COMPOUNDS) | QR5950000 | 7440-02-0 |
| NICKEL CARBONATE | QR6240000 | 65485-96-1 |
| NICKEL II HYDROXIDE | QR7040000 | 12054-48-7 |
| NICKEL II OXIDE | QR8400000 | 1913-99-1 |
| NICKEL SUBSULFIDE | OR9800000 | 12035-72-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS) | YES | ANNUAL | YES |

WORK HISTORY OF:

| | | | |
|------------------------------|-----|--------|-----|
| EXP TO SKIN IRRITANTS | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | YES |

FAMILY HISTORY OF:

| | | | |
|----------------------------|-----|--------|-----|
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |
|----------------------------|-----|--------|-----|

| | | | |
|------------------------------|-----|--------|-----|
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | YES |
|------------------------------|-----|--------|-----|

LABORATORY-

RADIOLOGY-

| | | | |
|------------------|-----|----|-----|
| CHEST X-RAY (PA) | YES | NO | YES |
|------------------|-----|----|-----|

| | | | |
|---------------------------------|-----|----|-----|
| COMMENTS ON LABORATORY RESULTS: | YES | NO | YES |
|---------------------------------|-----|----|-----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (5); (OTHER); 1. NIOSH-OSHA, Occupational Guidelines for Nickel Metal and Soluble Nickel Compounds, Washington, DC. DHHS/DOL: 1978: 1-7; 2. National Research Council, Nickel: Medical and Biologic Effects of Environmental Pollutants, Washington, DC: National Academy of Sciences: 1975; 97-128. PROGRAM REVISED 10/97.

173 NICKEL CARBONYL

| | | |
|------------------------------|-----------|------------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| NICKEL CARBONYL | QR6300000 | 13463-39-3 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| NASAL MUCOSA (SEPTAL PERFORATION) | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|----------------------------|--------------|--------------|--------------|
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) | SUSPECTED HUMAN CARCINOGEN | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (5); (OTHER); 1. NIOSH-OSHA, Occupational Guideline for Nickel Carbonyl, Washington, DC: DHHS/DOL; 1978: 1-5; 2. National Research Council, Nickel: Medical and Biologic Effects of Environmental Pollutants, Washington, DC: National Academy of Sciences: 1975; 97-128. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Periodic urine nickel measurement has not been correlated with chronic health outcomes; however, urine nickel evaluation may assist the provider in determining if a worker with mild symptoms of nickel carbonyl toxicity would benefit from chelation therapy. Chelation therapy for workers with moderate or severe symptoms of nickel carbonyl toxicity is based on history and should not be delayed awaiting laboratory determination of urine nickel levels.

174 NITROGEN OXIDES

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| NITROGEN DIOXIDE | QW9800000 | 10102-44-0 |
| NITRIC OXIDE | QX0525000 | 10102-43-9 |

ALSO SEE NITROUS OXIDE PROGRAM #108

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| TEETH (ACID EROSION) | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (4); (5); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Nitric Acid, DHEW Pub. No. 76-141. PROGRAM REVISED 10/97.

175 4-NITROBIPHENYL

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 4-NITROBIPHENYL | DV5600000 | 92-93-3 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1929.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE) | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER); 29 CFR 1910.1003 and 29 CFR 1910.1103. (http://www.osha-slc.gov/OshStd_data/1910_1003.html)
PROGRAM REVIEWED 3/2000

176 NITROGLYCERINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| NITROGLYCERIN | QX2100000 | 55-63-0 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| MIGRAINE HEADACHE | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| HEMOGLOBIN (HGB) | | YES | ANNUAL | NO |
| HEMATOCRIT (HCT) | | YES | ANNUAL | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | ANNUAL | NO |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4). PROGRAM REVISED 10/97.

211 2-NITROPROPANE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 2-NITROPROPANE | T25250000 | 79-46-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY: | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (3). PROGRAM REVISED 10/97.

177 N-NITROSODIMETHYLAMINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| N-NITROSODIMETHYLAMINE | IQ0525000 | 62-75-9 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1910.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|-----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | YES |
| CANCER | YES | ANNUAL | YES |
| BACK INJURY | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | YES |
| SKIN DISEASE | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | YES | ANNUAL | YES |
| LIVER DISEASE | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | YES | ANNUAL | YES |

FAMILY HISTORY OF:

| | | | |
|--------------------------------------|-----|--------|-----|
| GENETIC DISEASE (INCLUDING CHILDREN) | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | YES | ANNUAL | YES |

COMMENTS ON MEDICAL HISTORY:

YES ANNUAL YES

LABORATORY-

SERUM CHEMISTRY:

LIVER PROFILE TO INCLUDE:

| | | | |
|------------------------------------|-----|--------|-----|
| SGOT (AST), TOT. BILI., ALK. PHOS. | YES | NO | YES |
| SGOT (AST) | * | ANNUAL | YES |

URINALYSIS:

ROUTINE:

| | | | |
|-----------------------------|-----|--------|-----|
| URINALYSIS WITH MICROSCOPIC | YES | ANNUAL | YES |
|-----------------------------|-----|--------|-----|

COMMENTS ON LABORATORY RESULTS:

YES ANNUAL YES

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (OTHER) 29 CFR 1910.1003 and 29 CFR 1910.1103. PROGRAM REVIEWED 3/2000

180 ORGANOTIN COMPOUNDS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|-----------|
| TIN (ORGANIC COMPOUNDS) | | |
| TRIBUTYLTIN OXIDE | JN8750000 | 56-35-9 |
| METHYL TIN MERCAPTIDE | | |
| TRIBUTYLTIN BENZOATE | WH6710000 | 4342-36-3 |
| DIBUTYLTIN DILAURATE | WH7000000 | 77-58-7 |
| TRIBUTYLTIN FLUORIDE | WH8275000 | 1983-10-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | YES | ANNUAL | NO |
| EYE IRRITATION | YES | ANNUAL | NO |
| LIVER DISEASE | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | ANNUAL | NO |

WORK HISTORY OF:

| | | | |
|------------------------------|-----|--------|----|
| EXP TO SKIN IRRITANTS | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | YES | ANNUAL | NO |

COMMENTS ON MEDICAL HISTORY: YES ANNUAL NO

LABORATORY-

SERUM CHEMISTRY:

LIVER PROFILE TO INCLUDE:

| | | | |
|------------------------------------|-----|--------|----|
| SGOT (AST), TOT. BILI., ALK. PHOS. | YES | NO | NO |
| SGOT (AST) | * | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| SPIROMETRY: | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | NO |
| OPTOMETRY- | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER) NIOSH criteria for a recommended standard...Occupational Exposure to Organotin Compounds, DHEW Pub. No. 77-115. PROGRAM REVISED 10/97.

186 OTTO FUEL II/ OTHER ALKYL NITRATE PROPELLANTS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| PROPYLENE GLYCOL DINITRATE | TY6300000 | 6423-43-4 |
| ETHYLENE GLYCOL DINITRATE | KW5600000 | 628-96-6 |
| ETHYLHEXYL NITRATE | | 27247-96-7 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| USE OF NITRATE MEDICATION (NITROGLYCERINE) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| MIGRAINE HEADACHE | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | ANNUAL | NO |
| OPTOMETRY- | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCE: (OTHER); 1. NAVMEDCOMINST 6270.1, 19 MAR 85, HEALTH HAZARDS OF OTTO FUEL II; 2. CHIEF BUMED ltr 5100, Ser 242/4U763715 of 2 Feb 94; 3. Jones RA., Strickland, JA., Siegel J. Toxicity of propylene 1,2-dinitrate in experimental animals, Toxicology and Applied Pharmacology, 1972;22:128-137; 4. NAVENVIRHLTHCEN ltr 6260 Ser 3213mt/04449 of 27 Apr 90. PROGRAM REVISED 10/97.

184 POLYCHLORINATED BIPHENYLS (PCB)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|-------------------------------|-----------|------------|
| CHLORODIPHENYL (42% CHLORINE) | TQ1356000 | 53469-21-9 |
| CHLORODIPHENYL (54% CHLORINE) | DV2063000 | 27323-8-8 |
| AROCLOR 1260 | TQ1362000 | 11906-82-5 |
| AROCLOR 1254 | TQ1360000 | 11097-69-1 |
| KANECHLOR 500 | DY8100000 | 25429-29-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | YES | ANNUAL | NO |
| LIVER DISEASE | YES | ANNUAL | NO |

WORK HISTORY OF:

| | | | |
|-----------------------|-----|--------|----|
| EXP TO SKIN IRRITANTS | YES | ANNUAL | NO |
|-----------------------|-----|--------|----|

| | | | |
|------------------------------|-----|--------|----|
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | NO |
|------------------------------|-----|--------|----|

LABORATORY-

SERUM CHEMISTRY:

LIVER PROFILE TO INCLUDE:

| | | | |
|-----------------------------------|-----|----|----|
| SGOT (AST), TOT.BILI., ALK. PHOS. | YES | NO | NO |
|-----------------------------------|-----|----|----|

| | | | |
|------------|-----|--------|----|
| SGOT (AST) | YES | ANNUAL | NO |
|------------|-----|--------|----|

| | | | |
|---------------|---|--------|----|
| TRIGLYCERIDES | * | ANNUAL | NO |
|---------------|---|--------|----|

| | | | |
|---------------------------------|-----|--------|----|
| COMMENTS ON LABORATORY RESULTS: | YES | ANNUAL | NO |
|---------------------------------|-----|--------|----|

PHYSICAL EXAMINATION:

| | | | |
|-------------|-----|--------|----|
| VITAL SIGNS | YES | ANNUAL | NO |
|-------------|-----|--------|----|

SPECIAL ATTENTION IN EXAMINATION TO:

| | | | |
|-------|-----|--------|----|
| LIVER | YES | ANNUAL | NO |
|-------|-----|--------|----|

| | | | |
|---|-----|--------|----|
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | YES | ANNUAL | NO |
|---|-----|--------|----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. Placement on medical surveillance program is for personnel exposed to PCB's above the medical surveillance action level. These levels are based on airborne concentrations of PCB's. There is no current required medical surveillance based on skin contact alone but those workers with reasonable possibility of regular skin contact should also be considered for medical surveillance. REFERENCES: (1); (2); (3); (4); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Polychlorinated Biphenyls, DHEW Pub. No. 77-225; 2. NIOSH Current Intelligence Bulletin 45, Feb 24, 1986; 3. NAVENVIRHLTHCEN letter 6263.1 Ser 09nd/11643m 30 Nov 89, ADVISORY ON POLYCHLORINATED BIPHENYLS (PCBs). PROGRAM REVISED 10/97.

185 BETA-PROPIOLACTONE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| BETA-PROPIOLACTONE | RQ7350000 | 57-57-8 |

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.1003 and 29 CFR 1926.1103

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCER (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|---|--------------|--------------|--------------|
| SPECIAL NOTATIONS: | | | | |
| | SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | YES | ANNUAL | YES |
| | PHYSICIAN'S WRITTEN OPINION REQUIRED | YES | ANNUAL | YES |
| | IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | YES | ANNUAL | YES |
| | ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | YES | ANNUAL | YES |
| | RECOMMENDATIONS: | YES | ANNUAL | YES |
| <hr/> | | | | |
| PROGRAM DESCRIPTION: | | | | |
| REFERENCES: (1); (2); (3); (OTHER); 29 CFR 1910.1003. Former standard 29 CFR 1910.1013. PROGRAM REVIEWED 3/2000 | | | | |

187 SILICA (CRYSTALLINE)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|---------------------------------|-----------|------------|
| SILICA CRYSTALLINE CRISTOBALITE | VV7325000 | 14464-46-1 |
| SILICA CRYSTALLINE QUARTZ | VV7330000 | 14808-60-7 |
| SILICA CRYSTALLINE TRIDYMITTE | VV7335000 | 15468-32-3 |
| SILICA CRYSTALLINE TRIPOLI | VV7336000 | 1317-95-9 |
| SILICA AMORPHOUS FUSED | VV7320000 | 60676-86-0 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| TUBERCULOSIS | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | | YES | ANNUAL | NO |
| EXP TO ASBESTOS | | YES | ANNUAL | NO |
| EXP TO SILICA OR SAND | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| ADDITIONAL LAB TESTS: | | | | |
| TUBERCULOSIS SCREEN | | YES | ANNUAL | NO |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | PENTA-E | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Crystalline Silica, DHEW Pub. No. 75-120. PROGRAM REVISED 10/97.

189 STYRENE

PROGRAM FREQUENCY: ANNUAL

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH# | CAS# |
| STYRENE | WL3675000 | 100-42-5 |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| PERSONALITY CHANGE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SPIROMETRY- | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Styrene, DHEW Pub. No. 83-119.
PROGRAM REVISED 10/97.

190 SULFUR DIOXIDE

| | | |
|------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| SULFUR DIOXIDE | WS4550000 | 7446-09-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| TOOTH OR GUM DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| TEETH (ACID EROSION) | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (4); (OTHER) NIOSH, criteria for a recommended standard...Occupational Exposure to Sulfur Dioxide. PROGRAM REVISED 10/97.

191 1,1,2,2-TETRACHLOROETHANE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| 1,1,2,2-TETRACHLOROETHANE | KI8575000 | 79-34-5 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| WEIGHT LOSS | | YES | ANNUAL | NO |
| TREMORS | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| DEPRESSION, DIFFICULTY CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT.BILI., ALK. PHOS. | | YES | NO | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC.) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to 1,1,2,2-Tetrachloroethane, DHEW Pub. No. 77-121. PROGRAM REVISED 10/97.

192 TETRACHLOROETHYLENE (PERCHLOROETHYLENE)

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| PERCHLOROETHYLENE | KX3850000 | 127-18-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| TREMORS | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| DEPRESSION, DIFFICULTY CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT.BILI., ALK. PHOS. | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| BUN AND CREATININE | | YES | ANNUAL | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER); NIOSH criteria for a recommended standard...Occupational Exposure to Tetrachloroethylene, DHEW Pub. No. 76-185; Brown DP, Kaplan SD, Retrospective Cohort Mortality Study of Dry Cleaner Workers Using Perchloroethylene, Journal of Occupational Medicine 29:53551, 1987; Federal Register FR54:2686-91 29 CFR Part 1910 Air Contaminants, Final rule 19 JAN 89; Key MM et al. (ed.) Occupational Diseases, A Guide to their Recognition, NIOSH 1977, 213-4,448. PROGRAM REVISED 10/97.

209 TETRYL

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| TETRYL | BY6300000 | 479-45-8 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | NO |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (3). PROGRAM REVISED 10/97.

214 ORTHO-TOLIDINE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| O-TOLIDINE | DD1225000 | 119-93-7 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|----------------------------|--------------|--------------|--------------|
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) | SUSPECTED HUMAN CARCINOGEN | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (OTHER); 1. NIOSH, Criteria for a recommended standard....Occupational exposure to o-Tolidine, DHEW (NIOSH) Pub. No. 78-179;
2. ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices, Fifth Edition, Cincinnati: ACGIH, Inc. 1986. 577. PROGRAM REVISED 10/97.

195 TOLUENE

| | | |
|------------------------------|-----------|----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| TOLUENE | XS5250000 | 108-88-3 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MIGRAINE HEADACHE | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (3); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Toluene, DHEW Pub. No. (HSM) 7311023; 2. Federal Register FR54:2431-32 19 JAN 89. PROGRAM REVISED 10/97.

194 ORTHO-TOLUIDINE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| O-TOLUIDINE | XU2975000 | 95-53-4 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOTAL BILIRUBIN, ALK. PHOS. | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| LIVER | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (OTHER); 1. FEDERAL REGISTER FR54:12 29 CFR PART 1910 Air Contaminates, Final Rule 2689-90, 19 Jan 89; 2. Occupational Health Guidelines for O-toluidine, DHHS (NIOSH) Publication 81-123. PROGRAM REVISED 10/97.

197 1,1,1-TRICHLOROETHANE (METHYL CHLOROFORM)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| METHYLCHLOROFORM | KJ2975000 | 71-55-6 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH BALANCE, COORDINATION, NUMBNESS, TINGLING, WEAKNESS | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT.BILI., ALK. PHOS. | | YES | NO | NO |
| SGOT (AST) | | * | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| URINALYSIS | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | NO | NO |
| CARDIOLOGY: | | | | |
| ELECTROCARDIOGRAM | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (3); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to 1,1,1-Trichloroethane (Methyl Chloroform) DHEW Pub. No. 76-184; 2. Federal Register FR54:2427 29 CFR Part 1910 Air Contaminants, Final Rule 19 JAN 89; 3. Clayton GD and Clayton FE (ed) Patty's Industrial Hygiene and Toxicology, 3rd Revised Ed. New York: John Wiley & Sons, Inc. 1981, 3502-3510; 4. Key MM et al. (ed) Occupational Diseases, A Guide to their Recognition NIOSH, 1977, 215-216. PROGRAM REVISED 10/97.

198 TRICHLOROETHYLENE

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| TRICHLOROETHYLENE | KX4550000 | 79-01-6 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| NAUSEA OR VOMITING | | YES | ANNUAL | YES |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | YES |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | YES |
| SGOT (AST) | | * | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |
| CARDIOLOGY: | | | | |
| ELECTROCARDIOGRAM | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Trichloroethylene DHEW Pub. No. 73-11025; 2. NIOSH Current Intelligence Bulletin 20; 3. Federal Register R54:2432-34 29CFR Part 1910 Air Contaminants, Final Rule 19 JAN 89. PROGRAM REVISED 10/97.

203 VINYL CHLORIDE 10+ YEARS EXPOSURE (CHLOROETHENE)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| VINYL CHLORIDE | KU9625000 | 75-01-4 |

PROGRAM FREQUENCIES: SEMI-ANNUAL

OSHA STANDARD 29 CFR 1910.1017 and 29 CFR 1910.1117

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | SEMI-A | YES |
| MAJOR ILLNESS OR INJURY | | YES | SEMI-A | YES |
| HOSPITALIZATION OR SURGERY | | YES | SEMI-A | YES |
| CANCER | | YES | SEMI-A | YES |
| BACK INJURY | | YES | SEMI-A | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | SEMI-A | YES |
| HAVE YOU EVER SMOKED | | YES | SEMI-A | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | SEMI-A | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | SEMI-A | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | SEMI-A | YES |
| MEDICATION ALLERGIES | | YES | SEMI-A | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | SEMI-A | YES |
| BLOOD TRANSFUSIONS | | YES | SEMI-A | YES |
| SKIN DISEASE | | YES | SEMI-A | YES |
| PERIPHERAL VASCULAR DISEASE | | YES | SEMI-A | YES |
| HEPATITIS OR JAUNDICE | | YES | SEMI-A | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | SEMI-A | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | SEMI-A | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | SEMI-A | YES |
| WEIGHT LOSS | | YES | SEMI-A | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | SEMI-A | YES |
| LIVER DISEASE | | YES | SEMI-A | YES |
| KIDNEY DISEASE | | YES | SEMI-A | YES |
| WORK HISTORY OF: | | | | |
| 10 OR MORE YEARS SINCE FIRST EXPOSURE TO VINYL CHLORIDE | | YES | SEMI-A | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | SEMI-A | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | SEMI-A | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | SEMI-A | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| BUN AND CREATININE | | YES | SEMI-A | YES |
| GGT | | YES | SEMI-A | YES |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | SEMI-A | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | SEMI-A | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | SEMI-A | YES |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | SEMI-A | YES |
| ABDOMEN | | YES | SEMI-A | YES |
| LIVER | | YES | SEMI-A | YES |
| SPLEEN | | YES | SEMI-A | YES |
| RESPIRATORY SYSTEM | | YES | SEMI-A | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | SEMI-A | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | SEMI-A | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | SEMI-A | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | SEMI-A | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | SEMI-A | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | SEMI-A | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | SEMI-A | YES |
| RECOMMENDATIONS: | | YES | SEMI-A | YES |

PROGRAM DESCRIPTION:

This program is for anyone employed in vinyl chloride or polyvinyl chloride manufacturing. Abnormal laboratory test results should be repeated as soon as practicable, preferably within 3-4 weeks. If tests remain abnormal, consideration should be given to removal of the employee from contact with vinyl chloride, while a more comprehensive examination is made.

REFERENCES; (1); (OTHER); 1. 29 CFR 1910.1017 and 29 CFR 1910.1117; 2. Vinyl Chloride Toxicity, In: Case Studies in Environmental Medicine, Agency for Toxic Substances and Disease Registry, Scandinavian Journal Work Environmental Health 1988;14:61-78. 13. PROGRAM REVIEWED 3/2000

204 VINYL CHLORIDE ANY EXPOSURE (CHLOROETHENE)

| | | |
|------------------------------|-----------|---------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| VINYL CHLORIDE | KU9625000 | 75-01-4 |

PROGRAM FREQUENCIES: ANNUAL

OSHA STANDARD 29 CFR 1910.1017 and 29 CFR 1910.1117

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| BLOOD TRANSFUSIONS | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| PERIPHERAL VASCULAR DISEASE | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| WEIGHT LOSS | | YES | ANNUAL | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| 10 OR MORE YEARS SINCE FIRST EXPOSURE TO VINYL CHLORIDE | | YES | ANNUAL | YES |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | ANNUAL | YES |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| GGT | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | ANNUAL | YES |
| ABDOMEN | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| SPLEEN | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

This program is for anyone employed in vinyl chloride or polyvinyl chloride manufacturing. Abnormal laboratory test results should be repeated as soon as practicable, preferably within 3-4 weeks. If tests remain abnormal, consideration should be given to removal of the employee from contact with vinyl chloride, while a more comprehensive examination is made.

REFERENCES; (1); (OTHER); 1. 29 CFR 1910.1017 and 29 CFR 1910.1117; 2. Vinyl Chloride Toxicity, In: Case Studies in Environmental Medicine, Agency for Toxic Substances and Disease Registry, Scandinavian Journal Work Environmental Health 1988;14:61-78. 13. PROGRAM REVIEWED 3/2000

205 XYLENE

| | | |
|-------------------------------|-----------|-----------|
| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
| XYLENE (O-,M- AND P- ISOMERS) | ZE2100000 | 1330-20-7 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MIGRAINE HEADACHE | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SGOT (AST) | | * | ANNUAL | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. REFERENCES: (1); (2); (3); (4); (OTHER); 1. NIOSH criteria for a recommended standard...Occupational Exposure to Xylene DHEW Pub. No. 75-168; 2. Key MM et al., (ed.) Occupational Diseases, A guide to Their Recognition, NIOSH, 1977, 243; 3. Federal Register FR 54:2477 29CFR 1910 Air Contaminants, Final Rule 19 JAN 89. PROGRAM REVISED 10/97.

Physical Stressors Introduction and Changes

Programs in this section which are based on Navy instructions have those references listed in the program description section. Instructions were current at the time this manual was prepared. However, it is incumbent on the individual user to ensure that current instructions are verified and used.

Individuals are placed on these programs based on recommendations from Industrial Hygiene and Safety or requirements by management.

Where there are stringent requirements for documentation using standard forms, those exams are not duplicated in this document.

All new tests are in **bold** letters.

The requirement for routine, periodic examinations for the sight conservation was removed from OPNAVINST 5100.23E and the program is removed from the Medical Matrix. The program still exists in PC Matrix for you to use on occasion when you do sight screening examinations.

Physical Stressors

Cold
Heat
Noise
Noise Follow-up
Radiation - Ionizing
Radiation - Laser (Class III and IV)
Hand Arm Vibration
Whole Body Vibration

501 COLD

PROGRAM FREQUENCY: BIENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BI-ENN | NO |
| MAJOR ILLNESS OR INJURY | | YES | BI-ENN | NO |
| HOSPITALIZATION OR SURGERY | | YES | BI-ENN | NO |
| CANCER | | YES | BI-ENN | NO |
| BACK INJURY | | YES | BI-ENN | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BI-ENN | NO |
| HAVE YOU EVER SMOKED | | YES | BI-ENN | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BI-ENN | NO |
| DO YOU USE SMOKELESS TOBACCO | | YES | BI-ENN | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BI-ENN | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BI-ENN | NO |
| MEDICATION ALLERGIES | | YES | BI-ENN | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BI-ENN | NO |
| BLOOD DISEASES (ANEMIA) | | YES | BI-ENN | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | BI-ENN | NO |
| SKIN DISEASE | | YES | BI-ENN | NO |
| PERIPHERAL VASCULAR DISEASE | | YES | BI-ENN | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | BI-ENN | NO |
| COLD INJURY (FROSTBITE, CHILL, TRENCH FT, HYPOTHERMIA) | | YES | BI-ENN | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BI-ENN | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BI-ENN | NO |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | BI-ENN | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | BI-ENN | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BI-ENN | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | BI-ENN | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | *** | *** | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BI-ENN | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BI-ENN | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | BI-ENN | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | BI-ENN | NO |
| RESPIRATORY SYSTEM | | YES | BI-ENN | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | BI-ENN | NO |
| THYROID | | YES | BI-ENN | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BI-ENN | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BI-ENN | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BI-ENN | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BI-ENN | NO |
| RECOMMENDATIONS: | | YES | BI-ENN | NO |

PROGRAM DESCRIPTION:

REFERENCES: (3); (OTHER); 1. Weiner, SC, Barrett JB, Trauma Management for Civilian and Military Physicians, WB Saunders, Phila., 1986; 2. NAVMED P-5052-29 "COLD INJURY"; 3. Threshold Limit Values and Biological Exposure Limits, Cincinnati, OH: American Conference of Government Industrial Hygienists; 1997. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

A worker should be entered on this program if exposed to temperatures below (-)1 degree Centigrade for ten or more days in a quarter or for more than 30 days a year.

The general nutrition status of the individual should be evaluated.

Use of the following medications should be included in the screening; nitrate medications, barbiturates, tranquilizers, vasoactive drugs, and diuretics.

***An EKG may be indicated in workers when there are cardiovascular risk factors or other indications present.

The ACGIH handbook of Threshold Limit Values states: Employees should be excluded from work in cold at (-)1°C (30.2°F) or below if they are suffering from diseases or taking medication which interferes with normal body temperature regulation or reduces tolerance to work in cold environments. Workers who are routinely exposed to temperatures below (-)24°C (-11.2°F) with wind speeds less than five miles per hour, or air temperatures below (-)18°C (0°F) with wind speeds above five miles per hour, should be medically certified as suitable for such exposures.

Trauma sustained in freezing or subzero conditions requires special attention because an injured worker is predisposed to secondary cold injury. Special provision must be made to prevent hypothermia and secondary freezing of damaged tissues in addition to providing for first aid treatment.

502 HEAT

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEAT INJURY (CRAMPS, EXHAUSTION, STROKE) | | YES | ANNUAL | NO |
| EXPOSURE (ACCLIMATIZATION) TO HEAT | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| CURRENT PREGNANCY (FEMALES ONLY) | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | ANNUAL | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITHOUT MICROSCOPIC | | YES | ANNUAL | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | *** | *** | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| REQUIRED WHEN POSITIVE HISTORY QUESTIONS ARE OBTAINED | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| SKIN, WITH REGARD TO MALIGNANT & PRE-MALIGNANT COND | | YES | ANNUAL | NO |
| THYROID | | YES | ANNUAL | NO |
| OBESITY | | YES | ANNUAL | NO |
| OVERALL PHYSICAL FITNESS | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (OTHER); 1. NIOSH Criteria for a Recommended Standard: Occupational Exposure to Hot Environments, Revised Criteria, 1986, DHHS (NIOSH) Pub. No. 86-113; 2. OSHA Instruction TED 1.15, September 22, 1995, Section II: Chapter 4 Heat Stress; 3. Threshold Limit Values and Biological Exposure Limits, Cincinnati, OH: American Conference of Government Industrial Hygienists; 1997. Web sites:
Working in Hot Environments - NIOSH publication
<http://www.cdc.gov/niosh/hotenvt.html>
Protecting Workers in Hot Environments
http://www.osha-slc.gov/OshDoc/Fact_data?FSNO95-16.html
Heat stress - OSHA Technical Manual, Section II - Chapter 4
http://www.osha-slc.gov/TechMan_data/11_4.html

PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

***EKG may be indicated in workers when there are cardiovascular risk factors or other indications present.

In addition to use of anticholinergic drugs, individuals should be screened for use of other medications including; nitrate medications, tricyclic antidepressants, MAO inhibitors, amphetamines, diuretics and antihistamines.

503 NOISE

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.95

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| RINGING IN THE EAR (TINNITUS) | | YES | ANNUAL | YES |
| RUPTURED EAR DRUM | | YES | ANNUAL | YES |
| LOSS OR CHANGE IN HEARING | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXPOSURE TO EXCESSIVE NOISE | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| AUDIOLOGY- | | | | |
| AUDIOGRAM | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| HEARING CONSERVATION: | | | | |
| HAS BASELINE BEEN REESTABLISHED DUE TO PTS? | | YES | ANNUAL | YES |
| HIGH FREQUENCY AVERAGE EXCEEDS 45 dB BILATERALLY? | | YES | ANNUAL | YES |
| EAR PLUGS FITTED AND ISSUED? | | YES | ANNUAL | YES |
| REFER TO AUDIOLOGIST OR PHYSICIAN? | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

Individuals are entered on this program based on the results of industrial hygiene surveys. In the absence of IH data, individuals exposed to sound levels greater than 84 dB(A) or 140 dB peak sound pressure level for impact or impulse noise shall be considered at risk and included in the hearing conservation program. Hearing tests are recorded on DD Form 2215 and DD Form 2216. REFERENCES: (OTHER); 1. OPNAV 5100.23D, Chapter 18; 2. OPNAV 5100.19C, Chapter B4; 3. 29 CFR 1910.95; 5. DODINST 6055.12, DoD Hearing Conservation Program, April 22, 1996. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Tympanogram may be useful in identifying individuals with conductive rather than sensorineural hearing loss.

Individuals with a high-frequency average loss greater than 45 dB bilaterally may have problems with speech discrimination.

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512 NOISE - FOLLOW UP

PROGRAM FREQUENCY: BASED ON RESULTS OF ANNUAL MONITORING

OSHA STANDARD 29 CFR 1910.95

| EXAM ELEMENT | ELEMENT GIVEN FOR: | PERI ODIC |
|---|--------------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | |
| PERSONAL HISTORY OF: | | |
| RINGING IN THE EAR (TINNITUS) | | *** |
| RUPTURED EAR DRUM | | *** |
| LOSS OR CHANGE IN HEARING | | *** |
| COMMENTS ON MEDICAL HISTORY: | | *** |
| LABORATORY- | | |
| AUDIOLOGY- | | |
| AUDIOGRAM - FOLLOW-UP | | *** |
| COMMENTS ON LABORATORY RESULTS: | | *** |
| PHYSICAL EXAMINATION: | | |
| EARS (TYMPANIC MEMBRANES) | | *** |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | *** |
| COMMENTS ON PHYSICAL EXAMINATION: | | *** |
| HEARING CONSERVATION: | | |
| HAS BASELINE BEEN REESTABLISHED DUE TO PTS? | | *** |
| HIGH FREQUENCY AVERAGE EXCEEDS 45 dB BILATERALLY? | | *** |
| EAR PLUGS FITTED AND ISSUED? | | *** |
| REFER TO AUDIOLOGIST OR PHYSICIAN? | | *** |
| SPECIAL NOTATIONS: | | |
| WRITTEN NOTIFICATION OF PERMANENT THRESHOLD SHIFT REQUIRED | | *** |
| RECOMMENDATIONS: | | *** |

PROGRAM DESCRIPTION:

***This program is designed for follow up when a significant threshold shift (STS), occurs at the monitoring audiogram. REFERENCES: (OTHER);

1. OPNAV 5100.23B, Chapter 18;
2. OPNAV 5100.19B, Chapter B4;
3. 29 CFR 1910.95;
4. DODINST 6055.12, DoD Hearing Conservation Program, April 22, 1996;
5. NEHC-TM 6260.99-1 (May 1999) Navy Medical Department Hearing Conservation Program Procedures. Hearing test results are documented on DD Form 2215 and DD Form 2216. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Screening tympanometry can be used to determine if the STS has resulted from middle ear pathology.

Individuals with a high-frequency average loss greater than 45 dB bilaterally may have problems with speech discrimination.

Guidelines for follow-up and referral are contained in the NAVOSH Program Manuals listed in the program description.

A sample format for written notification of permanent threshold shift is in Appendix E.

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505 RADIATION - IONIZING

PROGRAM FREQUENCY:

<25: NONE AFTER PE
25-49: EVERY FIVE YEARS
50-59: EVERY TWO YEARS
>59: ANNUALLY

PROGRAM DESCRIPTION:

This program is designated solely to provide guidance on scheduling frequency and references. Tests and forms required are promulgated in:
(1) Radiation Health Protection Manual, NAVMED P-5055. PROGRAM REVISED 10/97.

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506 RADIATION - LASER (CLASS 3b & 4)

PROGRAM FREQUENCY: TRIENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | TERM EXAM |
|--|--------------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | |
| PERSONAL HISTORY OF: | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | YES |
| MAJOR ILLNESS OR INJURY | | YES | YES |
| HOSPITALIZATION OR SURGERY | | YES | YES |
| CANCER | | YES | YES |
| BACK INJURY | | YES | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | YES |
| HAVE YOU EVER SMOKED | | YES | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | YES |
| MEDICATION ALLERGIES | | YES | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | YES |
| SKIN DISEASE | | YES | YES |
| CHANGE OR LOSS OF VISION | | YES | YES |
| CONTACT LENS USE | | YES | YES |
| LENS SURGERY | | YES | YES |
| PHOTOSENSITIZING MEDICATIONS | | YES | YES |
| UNUSUAL SENSITIVITY TO SUNLIGHT | | YES | YES |
| CATARACTS | | YES | YES |
| EYE IRRITATION | | YES | YES |
| EYE INJURY | | YES | YES |
| GLAUCOMA | | YES | YES |
| WORK HISTORY OF: | | | |
| EXP TO NON-IONIZING RADIATION (LASER, IR, MW, UV) | | YES | YES |
| EYE INJURY | | YES | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | YES |
| LABORATORY- | | | |
| OPTOMETRY- | | | |
| DATE OF MOST RECENT REFRACTION - WHEN APPLICABLE | | YES | YES |
| CURRENT REFRACTION PRESCRIPTION - WHEN APPLICABLE | | YES | YES |
| VISION SCREEN (VISUAL ACUITY) | | YES | YES |
| EXTERNAL OCULAR AND FUNDUS EXAMINATION | | YES | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | TERM EXAM |
|--|--------------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | |
| VITAL SIGNS | | YES | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | |
| EYES | | YES | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | YES |
| RECOMMENDATIONS: | | YES | YES |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. **BUMEDINST 6470.23, Medical Management of Non-ionizing Radiation Casualties.** 2. ANSI Z136.1 of 1993; 3. OPNAVINST 5100.23E. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Enrollment in this program is limited to those personnel who are clearly at risk from exposure to laser radiations.

The preplacement examination must be performed before assignment involving risk of exposure to class 3b or 4 lasers and establishes a baseline for comparison and measurement following an accidental exposure or ocular damage. Examinations for other purposes that include the required information satisfy the requirements of reference 1. When constrained by ship operations or deployment, perform the examination at the earliest opportunity. Complete the termination examination as soon as practical subsequent to termination of duties involving lasers.

Incidental personnel must have documented in their medical record a visual acuity examination. Incidental personnel are described as those personnel whose work makes it possible, but unlikely, that they will be exposed to sufficient laser energy to damage their eyes.

Preplacement and termination laser examinations may include the following tests as deemed necessary by the medical examiner.

1. Amsler grid or other tests of macular function for distortions or scotomas.
2. Dilated, direct view ophthalmoscopic examinations of the retina and slit lamp examinations of the cornea and lens to describe any pathology or deviation from the normal. Refer any retinal lesions to an ophthalmologist or optometrist for evaluation and photographic documentaion.
3. Skin examination if the worker has a history of photosensitivity or works with UV lasers.

508 VIBRATION, HAND-ARM

STRESSOR(S) IN THIS PROGRAM: NIOSH # CAS #
 HAND-ARM (SEGMENTAL) VIBRATION

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| DO YOU USE SMOKELESS TOBACCO | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR DISEASE | | YES | ANNUAL | NO |
| COLD INJURY (FROSTBITE, CHILL, TRENCH FT, HYPOTHERMIA) | | YES | ANNUAL | NO |
| NEUR DISORDER, GAIT CHANGE, PARESTHESIA, COORD LOSS | | YES | ANNUAL | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | ANNUAL | NO |
| VIBRATION WHITE FINGER DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO VIBRATION (SEGMENTAL OR WHOLE BODY) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (OTHER); 1. Criteria for a recommended standard...Occupational Exposure to Hand-Arm Vibration, NIOSH Sept 1989; 2. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. ACGIH, current edition. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Smoking plays a significant role in the development of hand-arm vibration syndrome. Individuals who smoke should be counseled in smoking cessation.

Symptoms of peripheral vascular and neurological disease can be documented using a standard staging system so as to provide a quantitative description of the involvement of the vascular/neurological system. Workers in stage 2 HAVS or above on the Stockholm Workshop classification scale should be considered for removal from exposure until signs and symptoms no longer meet the criteria for stage 1. If HAVS is permitted to progress beyond Stage 2 by the continued use of vibrating tools, the effects can become irreversible. (NIOSH p. 85)

The Stockholm Workshop classification scale for cold-induced peripheral vascular symptoms in the hand-arm vibration syndrome.*,+

| Stage | Description |
|-------|--|
| 0 | No attacks |
| 1 | Occasional attacks that affect only the tips of one or more fingers |
| 2 | Occasional attacks that affect the distal and middle (rarely also proximal) phalanges of one or more fingers |
| 3 | Frequent attacks affecting all phalanges of most fingers |
| 4 | As in stage 3, with trophic skin changes in the finger tips |

The Stockholm Workshop classification scale for sensorineural stages of the hand-arm vibration syndrome.*,+

| Stage | Description |
|-------|---|
| OSN | Exposed to vibration but no symptoms |
| 1SN | Intermittent numbness with or without tingling |
| 2SN | Intermittent or persistent numbness, reduced sensory perception |
| 3SN | Intermittent or persistent numbness, reduced tactile discrimination and/or manipulative dexterity |

*Adapted from Brammer et al. (1987)

+The stage is determined separately for each hand.

Source: Criteria for a Recommended Standard...Occupational Exposure to Hand-Arm Vibration, National Institute for Occupational Safety and Health, Sept 1989.

511 WHOLE BODY VIBRATION

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR DISEASE | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH URINATION/BLOOD IN URINE | | YES | ANNUAL | NO |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | NO |
| VIBRATION WHITE FINGER DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO VIBRATION (SEGMENTAL OR WHOLE BODY) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY: | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | ANNUAL | NO |
| VARICOSE VEINS OF LOWER EXTREMITIES | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| ABDOMEN | | YES | ANNUAL | NO |
| GENITOURINARY TRACT | | YES | ANNUAL | NO |
| HEMORRHOIDS | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (OTHER); Seidel H., Heide R., Long-term effects of whole-body vibration; a critical survey of the literature, International Archives of Occupational Environmental Health, 1986:58:1-12. PROGRAM REVISED 10/97.

Mixed Exposures Introduction and Changes

Mixed exposures were included in a separate section to give guidance for screening individuals who may be exposed to a category of chemicals or whose specific exposure may not be known. For a mixed chemical exposure such as mixed solvents, the worker is generally placed into this program when quantitative data on specific exposures are unknown. In some cases, it may be appropriate to use this program if there are quantitative data showing overexposure to a specific solvent and there is no corresponding matrix program for that solvent.

For example, a spray painter may be exposed to multiple solvents. IH data could demonstrate overexposure to one solvent out of the mixture for which there is no corresponding matrix program. In this case, the toxicity of the specific solvent should be reviewed by an occupational medicine specialist to see if the mixed solvent program needs to be modified. When IH data are available and there is a corresponding matrix program available for that chemical, then workers should be entered in the appropriate program for the specific stressor. Occupational health staff should forward a request for review of a new program to the Matrix Committee (see Appendix D) for any stressor where IH data has indicated an overexposure requiring medical surveillance and no matrix program exists for that stressor.

A new program, Wood Dust was added. Periodicity for cholinesterase screening was revised in program 179, Organophosphate/Carbamate Compounds.

All new tests are printed in **bold** letters.

Mixed Exposures

Acid/Alkali (pH <4.0 or >11.0)
Anesthetic Gases
Animal Associated Diseases
Hazardous Drugs
Herbicides
Manmade Mineral Fibers
Metal Fumes
Metalworking Fluids
Mixed Solvents
Organophosphate/Carbamate Compounds
Wood Dust

601 ACID/ALKALI (PH<4.0/PH>11.0)

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|-----------|
| SULFURIC ACID | WS5600000 | 7664-93-9 |
| HYDROCHLORIC ACID | MW4025000 | 7647-01-0 |
| NITRIC ACID | QU5775000 | 7697-37-2 |
| PHOSPHORIC ACID | TB6300000 | 7664-38-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| PERIPHERAL VASCULAR DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| CONTACT LENS USE | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| TOOTH OR GUM DISEASE | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO HYDROGEN FLUORIDE OR INORGANIC FLUORIDES | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| EYES | | YES | ANNUAL | NO |
| GUMS (E.G. LEAD LINES?) | | YES | ANNUAL | NO |
| TEETH (ACID EROSION) | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (3); (4). PROGRAM REVISED 10/97.

108 ANESTHETIC GASES

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| HALOTHANE | KH6550000 | 151-67-7 |
| NITROUS OXIDE | QX1350000 | 10024-97-2 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| KIDNEY DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| IMPOTENCE OR SEXUAL DYSFUNCTION | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| EPILEPSY (SEIZURE DISORDER) | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS, IN HANDS OR FEET | | YES | ANNUAL | YES |
| MIGRAINE HEADACHE | | YES | ANNUAL | YES |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | YES |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | YES |
| PERSONALITY CHANGE | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO ANESTHETIC GASES | | YES | ANNUAL | YES |
| EXP TO ETHYLENE OXIDE | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| FAMILY HISTORY OF: | | | | |
| BLOOD DISEASES (ANEMIA) | | YES | ANNUAL | YES |
| GENETIC DISEASE (INCL CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| REQUIRED WHEN POSITIVE HISTORY QUESTIONS ARE OBTAINED: | | | | |
| VITAL SIGNS | | YES | *** | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | *** | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | *** | YES |
| GENITOURINARY TRACT | | YES | *** | YES |
| TESTES (MALE) | | YES | *** | YES |
| LIVER | | YES | *** | YES |
| MUCOUS MEMBRANES | | YES | *** | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | *** | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | *** | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) SUSPECTED HUMAN MUTAGENIC/FETOTOXIC EFFECTS | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

***Physical exam elements are given when positive answers on annual history questions are obtained. REFERENCES: (1); (2); (OTHER); 1. NIOSH Criteria For a Recommended Standard...Occupational Exposure to Waste Anesthetic Gases and Vapors. DHEW Publication No. 77-140; 2. Williams, Louise A., REPRODUCTIVE HEALTH HAZARDS IN THE WORKPLACE, J.B. Lippincott Company, Philadelphia, 1988; 3. Greenberg MI, Hamilton RW, Phillips, SD; Occupational, Industrial and Environmental Toxicology, Mosby St. Louis, 1997; 4. Suruda, A, Health Effects of Anesthetic Gases, Occupational Medicine State of the Art Reviews, Vol. 12/No. 4, Oct-Dec 1997, Hanley & Belfus, Inc., Philadelphia. PROGRAM REVISED 10/97.

207 ANIMAL ASSOCIATED DISEASE

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | *** | NO |
| MAJOR ILLNESS OR INJURY | | YES | *** | NO |
| HOSPITALIZATION OR SURGERY | | YES | *** | NO |
| CANCER | | YES | *** | NO |
| BACK INJURY | | YES | *** | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | *** | NO |
| HAVE YOU EVER SMOKED | | YES | *** | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | *** | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | *** | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | *** | NO |
| MEDICATION ALLERGIES | | YES | *** | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | *** | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | *** | NO |
| SKIN DISEASE | | YES | *** | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | *** | NO |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | *** | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | *** | NO |
| LABORATORY- | | | | |
| ADDITIONAL LAB TESTS: | | | | |
| TUBERCULOSIS SCREEN | | YES | *** | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | *** | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | *** | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | *** | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | *** | NO |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | *** | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | *** | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | *** | NO |
| RECOMMENDATIONS: | | YES | *** | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (2); (OTHER); 1. Garibaldi R, Janis B, Occupational Infections in Rom, William N, Environmental and Occupational Medicine, 2nd ed, Little Brown, 1992. 2. Rival JC, Bayer RA, Johnson DK, The NIH animal handlers medical surveillance program. J Occup Med 26(2):115-117, 1984 (Manual revised 1/96). 3. MMWR, 42 (RR-11), July 30, 1993. 4. MMWR, 43 (RR-13) October 28, 1994. PROGRAM REVISED 3/97.

PROVIDER COMMENTS:

This surveillance category includes workers in a wide variety of settings with potential exposure to animals which may cause disease. Exposure may involve the direct care of or contact with animals (live or sacrificed) or their living quarters, viable tissues, body fluids or wastes. Exposures include laboratory animals, animal pests, and livestock. Illnesses fall largely into one of two groups: sensitization and infectious. Infectious agents of concern can include anthrax, brucellosis, leptospirosis, ornithosis, Q-fever, toxoplasmosis, rabies, and hantavirus. Because of the variety of potential exposures and the specific nature of their effects, pre-placement and annual medical surveillance elements must be individualized. Placement in this surveillance program should not be driven by job title but by identified exposures, or potential exposures, to specific animal associated disease.

General Guidelines:

- a. In addition to exposure-appropriate history, physical examination, and laboratory testing, the worker should be evaluated regarding his/her understanding of the exposures, their potential health effects, and symptoms which should prompt medical attention.
- b. The issue of obtaining and freezing serum from each worker at the time of preplacement examination and periodically thereafter is controversial. The decision to maintain stored serum should be individualized based on exposure, clinical necessity, and published guidance. The recommended protocol for workers exposed to hantavirus, for instance, includes a stored frozen sample.

Examples of individual requirements follow. Local considerations may warrant more comprehensive measures.

| | |
|-----------------|-----------------------------------|
| Risk Category 1 | rodents, rabbits and aquatics |
| Risk Category 2 | cats, dogs, livestock and ferrets |
| Risk Category 3 | nonhuman primates |

(For pathology personnel, the highest category of animal examined.)

| Test | Category 1 | Category 2 | Category 3 |
|-------------------------|------------|------------|------------|
| Tb Screening | B | B | B, Q6mo |
| Tetanus | B,P | B,P | B, P |
| Toxoplasmosis Titer (1) | | B | |
| Rabies Prophylaxis (2) | | B,P | |
| Q Fever Titer (3) | | B | |
| Rubeola (4) | | | B |

B=baseline examination

P=periodic examination

(1) Women of child-bearing age who are occupationally exposed to cats and/or their waste should be screened for toxoplasmosis and receive appropriate health education regarding the risk of this disease during pregnancy. Effort should be made to arrange temporary job reassignment while a susceptible employee is pregnant.

(2) Individuals who should receive pre-exposure prophylaxis with human diploid cell rabies vaccine (HDCV) include those who:

- a. work directly with rabies virus
- b. have direct contact with animals in quarantine
- c. have exposure to potentially infected animal body organs or perform post-mortem examinations on animals with a history of poorly defined neurological disorders
- d. have the responsibility for capturing or destroying wild animals
- e. have large animal (category 2) contact where a potential for exposure exists.

(3) Employees at risk of exposure to Q fever include those with direct contact with *Coxiella burnetii* and those who handle or use products of parturition (placenta, amniotic fluid, blood or soiled bedding) from infected sheep, goats, or cattle. At the time of the preplacement exam, individual should be assessed for the likelihood of developing chronic sequelae of Q fever should they acquire it, (immunosuppressed individuals and those with valvular or congenital heart valve problems).

(4) Rubeola immunization or documented evidence of immunity or vaccination.

For guidelines on preplacement requirements and periodic medical surveillance for specific animal exposures, contact the Navy Environmental Health Center or Navy Environmental and Preventive Medicine Unit nearest you.

BLANK FOR PRINTER

110 HAZARDOUS DRUGS

STRESSOR(S) IN THIS PROGRAM:

ANTINEOPLASTIC DRUGS (VINCRIStINE, DACARBAZINE, MITOMYCIN, CYTOSINE
ARABINOSIDE, FLUOROURACIL)

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| TREATMENT WITH STEROIDS OR CANCER (CYTOTOXIC) DRUGS | | YES | ANNUAL | YES |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | YES |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | YES |
| LIVER DISEASE | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | ANNUAL | YES |
| EXP TO IONIZING RADIATION | | YES | ANNUAL | YES |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| FAMILY HISTORY OF: | | | | |
| GENETIC DISEASE (INCLUDE CHILDREN) | | YES | ANNUAL | YES |
| CANCERS (LEUKEMIA, TUMORS) | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |
| DIFFERENTIAL WHITE BLOOD CELL COUNT | | YES | ANNUAL | YES |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | YES |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| ADDITIONAL LAB TESTS: | | | | |
| PREGNANCY TESTING OR LABORATORY TESTING OF FERTILITY IF REQUESTED BY EMPLOYEE AND DEEMED APPROPRIATE BY THE PHYSICIAN | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| LIVER | | YES | ANNUAL | YES |
| MUCOUS MEMBRANES | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| SKIN-WITH REGARD TO MALIGNANT & PRE-MALIGNANT COND | | YES | ANNUAL | YES |
| IMMUNOCOMPETENCE (LYMPHATIC SYSTEM) | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) KNOWN HUMAN CARCINOGEN | | YES | ANNUAL | YES |
| SUBSTANCE(S) KNOWN MUTAGENIC OR FETOTOXIC EFFECTS | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. OSHA Instruction TED 1-0.15A, January 20, 1999, Office of Science and Technology Assessment; 2. NAVMEDCOMINST 6570.1, 29 May 86, ANTINEOPLASTIC DRUG GUIDELINES. PROGRAM REVIEWED 3/2000

216 HERBICIDES

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|-----------|
| PARAQUAT | DW1960000 | 4685-14-7 |
| DIQUAT | JM5690000 | 85-00-7 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--------------|--------------------|--------------|--------------|--------------|
|--------------|--------------------|--------------|--------------|--------------|

MEDICAL HISTORY: HAVE YOU EVER HAD?

PERSONAL HISTORY OF:

| | | | |
|--|-----|--------|----|
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | YES | ANNUAL | NO |
| CANCER | YES | ANNUAL | NO |
| BACK INJURY | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | YES | ANNUAL | NO |
| SKIN DISEASE | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | YES | ANNUAL | NO |

LABORATORY-

RADIOLOGY:

| | | | |
|------------------|-----|----|----|
| CHEST X-RAY (PA) | YES | NO | NO |
|------------------|-----|----|----|

SPIROMETRY:

| | | | |
|----------------------------------|-----|--------|----|
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | YES | ANNUAL | NO |
|----------------------------------|-----|--------|----|

COMMENTS ON LABORATORY RESULTS

| | | |
|-----|--------|----|
| YES | ANNUAL | NO |
|-----|--------|----|

PHYSICAL EXAMINATION:

| | | | |
|-------------|-----|--------|----|
| VITAL SIGNS | YES | ANNUAL | NO |
|-------------|-----|--------|----|

SPECIAL ATTENTION IN EXAMINATION TO:

| | | | |
|------|-----|--------|----|
| EYES | YES | ANNUAL | NO |
|------|-----|--------|----|

| | | | |
|--------------------|-----|--------|----|
| RESPIRATORY SYSTEM | YES | ANNUAL | NO |
|--------------------|-----|--------|----|

| | | | |
|---|-----|--------|----|
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | YES | ANNUAL | NO |
|---|-----|--------|----|

| | | | |
|--|-----|--------|----|
| OTHER APPROPRIATE EXAMINATION (SPECIFY): | YES | ANNUAL | NO |
|--|-----|--------|----|

COMMENTS ON PHYSICAL EXAMINATION:

| | | |
|-----|--------|----|
| YES | ANNUAL | NO |
|-----|--------|----|

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

References: (1); (3); (5); (OTHER); 1. NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards, U.S. Department Of Health And Human Services, Sept.1978; 2. Morgan DP. Recognition and Management of Pesticide Poisonings, Fourth Edition. United States Environmental Protection Agency. 1989:76-82; 3. Klaassen CD, Amdur MO, Doull J. Cassarett And Doull's Toxicology, Third Edition. New York, NY: Macmillan Publishing Co. 1986:556-557; 4. Keifer, MC, Human Health Effects of Pesticides, Occupational Medicine state of the Art Reviews, Volume 12/Number 2, Apr-Jun 1997, Hanley & Belfus, Inc. PROGRAM REVISED 10/97.

212 MANMADE MINERAL FIBERS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|---|-----------|-----------|
| GLASSWOOL | | |
| GLASS FILAMENT | | |
| ROCKWOOL | PY8070000 | |
| SLAGWOOL | | |
| CERAMIC FIBER:FIBERFRAX; FIBERMAX; FIRELINE | BD1450000 | 1302-76-7 |
| CERAMIC; FYBEX; MAN; NEXTEL; PKT; SAFFIL | | |

PROGRAM FREQUENCIES: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/ DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | | | |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO DUSTS (COAL, BLAST. GRIT, SAND, NUISANCE) | | YES | ANNUAL | NO |
| EXP TO ASBESTOS | | YES | ANNUAL | NO |
| EXP TO SILICA OR SAND | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | PENTA-E | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| SPECIAL NOTATIONS: | | | | |
| SUBSTANCE(S) SUSPECTED HUMAN CARCINOGEN | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW LISTED ON OPNAV 5100/15? | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (5); (OTHER); 1. NAVENVIRHLTHCEN Technical Manual NEHC-TM91-1 Oct 1990; 2. Marsh, et al. Mortality among a cohort of US manmade mineral fiber workers: 1985 Follow-up. J Occ Med, Jul 90. Vol.32, 594-604. PROGRAM REVISED 10/97.

602 METAL FUMES

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | NO |
| CATARACTS | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| PERFORATION OF NASAL SEPTUM | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EXP TO LEAD | | YES | ANNUAL | NO |
| EXP TO CHROMIUM OR CHROMIC ACID | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| SGOT (AST) | | YES | ANNUAL | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITHOUT MICROSCOPIC | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. NIOSH Criteria for a Recommended Standard...Welding, Brazing, and Thermal Cutting. Washington, D.C. U.S. Department of Health and Human Services; 1988. DHHS (NIOSH) Pub. No. 88-110. 2. Pierce JO. Metal Fume Fever. In: Parmeggiani L, ed. Encyclopedia of Occupational Health and Safety, volume 2. Third Edition, Geneva: International Labor Office, 1983:1339-1340. 3. NOTE: References for specific metals are listed in the appropriate programs. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

This program is focused toward nonspecific dust, fumes and other irritants as well as potential UV effects experienced by welders. Specific programs in addition to this one will depend on individual exposures and may include; lead, cadmium, chromium, nickel, manganese and others.

162 METALWORKING FLUIDS

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| PNEUMONIA | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EYE INJURY | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | ANNUAL | NO |
| RADIOLOGY- | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| EYES | | YES | ANNUAL | NO |
| MUCOUS MEMBRANES | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (1); (3); (4). PROGRAM REVISED 10/97.

603 MIXED SOLVENTS

| | NIOSH# | CAS# |
|---|-----------|----------|
| CYCLOHEXANONE | GW1050000 | 108-94-1 |
| GLYCOL ETHERS (OTHER THAN ETHOXY AND METHOXY) | | |
| HEXONE (METHYL ISOBUTYL KETONE) | SA9275000 | 108-10-1 |
| METHYL N-AMYL KETONE | MJ5075000 | 110-43-0 |
| 2-PENTANONE (METHYL PROPYL KETONE) | SA7875000 | 107-87-9 |

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| CONTACT LENS USE | | YES | ANNUAL | NO |
| EYE IRRITATION | | YES | ANNUAL | NO |
| EYE INJURY | | YES | ANNUAL | NO |
| LIVER DISEASE | | YES | ANNUAL | NO |
| KIDNEY DISEASE | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| PERSONALITY CHANGE | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| EYE INJURY | | YES | ANNUAL | NO |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO SOLVENTS (MEK, PERC, TCE, TOLUENE...) | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | NO |
| BUN AND CREATININE | | YES | ANNUAL | NO |
| SGOT (AST) | | * | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| EYES | | YES | ANNUAL | NO |
| LIVER | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. When industrial hygiene data document exposure to specific stressors, i.e., lead or chromium, individuals should be entered on the appropriate programs for specific stressors. REFERENCES: (1); (2); (OTHER); 1. NIOSH Current Intelligence Bulletin 48: Organic Solvent Neurotoxicity. U.S. Department of Health and Human Services; 1987. DHHS (NIOSH) Publication No. 87-104. 2. NOTE: References for specific solvents are listed in the appropriate programs. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

If IH data show exposure to a specific solvent that does not have a corresponding matrix program, placement into program 603 may be done after a review of the toxicity of the solvent. (See Introduction, Mixed Exposures section.)

179 ORGANOPHOSPHATE/CARBAMATE COMPOUNDS

| STRESSOR(S) IN THIS PROGRAM: | NIOSH # | CAS # |
|------------------------------|-----------|------------|
| CARBARYL | FC5950000 | 63-25-2 |
| MALATHION | WM8400000 | 121-75-5 |
| METHYL PARATHION | TG0175000 | 298-00-0 |
| PARATHION | TF4550000 | 56-38-2 |
| FERBAM | NO8750000 | 14484-64-1 |
| PROPOXUR | FC3150000 | 114-26-1 |

PROGRAM FREQUENCY: SEE PROGRAM DESCRIPTION

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|-------------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG OR RESP DISEASE (COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| USE OF ANTICHOLINERGIC DRUGS (DONNATAL) | | YES | ANNUAL | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | NO |
| NAUSEA OR VOMITING | | YES | ANNUAL | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | NO |
| MIGRAINE HEADACHE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| DO YOU HANDLE ORGANOPHOSPHATE OR CARBAMATE PESTICIDES | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| RBC CHOLINESTERASE | | YES | *QUARTERLY | NO |
| PLASMA (OR SERUM) CHOLINESTERASE | | YES | *QUARTERLY | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | *QUARTERLY | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

*At locations where organophosphate pesticides are used year-round, the worker should receive at least quarterly cholinesterase determinations. Routine physical examination during the pesticide use season may be limited to medical and occupational history, and cholinesterase. Physical examinations for signs of mild exposure are not recommended.

REFERENCES: (1); (2); (3); (4); (OTHER); 1. Occupational Medical Surveillance Manual, DOD 6055.5-M, May 1998; 2. OPNAVINST 6250.4B, PEST MANAGEMENT PROGRAMS (due in July 1998); 3. Keifer MC, Human Health Effects of Pesticides, Occupational Medicine State of the Art Reviews, Volume 12/Number 2, Apr-Jun 1997, Hanley & Belfus, Inc.; 4. NEHC Field Operations Manual, 1998 Edition (in press). PROGRAM REVISED 6/98.

PROVIDER COMMENTS:

Personnel should be entered into medical surveillance if they are: exposed to airborne concentrations above the action level for 30 or more days per year; at significant risk of absorption from dermal exposure or ingestion; or performing an operation in an area where a worker has experienced toxicity related to pesticide exposure and exposure controls have not been in place long enough to assess their effectiveness.

Serum (or plasma) and red blood cell (RBC) cholinesterase baseline levels should be done at preplacement or before exposure. This baseline value should be the average of two or more tests taken at least 72 hours, but not more than 14 days apart, and analyzed at the same laboratory. If two tests are done and the difference between them exceeds 15%, a third baseline test should be performed. The average of the two closest values should be considered the true baseline value. All baseline tests should be taken when the worker has had no exposure to cholinesterase inhibitors for at least 30 days. Guidance on interpretation is contained in references (1) and (4).

604 WOOD DUST

STRESSOR(S) IN THIS PROGRAM: NIOSH # CAS #
 SOFTWOOD DUSTS
 HARDWOOD DUSTS

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | NO |
| RHINITIS | | YES | ANNUAL | NO |
| NOSE BLEEDS | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | ANNUAL | NO |
| WORK HISTORY OF: | | | | |
| PRIOR RESPIRATOR USE | | YES | ANNUAL | NO |
| EXPSOURE TO DUSTS (COAL, BLAST, GRIT, SAND, NUISANCE) | | YES | ANNUAL | NO |
| EXPOSURE TO SKIN IRRITANTS | | YES | ANNUAL | NO |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| SPIROMETRY- | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| NASAL MUCOSA | | YES | ANNUAL | NO |
| RESPIRATORY SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES OTHER: 1. Blot WJ, Chow WH, McLaughlin JK: Wood dust and nasal cancer risk: A review of the evidence from North America. J Occup Environ Med 1997 Feb;39(2):148-56; 2. Demers PA, Teschke K, Kennedy SM: What to do about softwood? A review of respiratory effects and recommendations regarding exposure limits. Am J Ind Med 1997 Apr;31(4):385-398.
NEW PROGRAM 3/98.

PROVIDER COMMENTS:

Wood dust has been associated with sinonasal cancer in cohorts of hardwood dust workers. Several wood dusts have been associated with asthma and allergic skin responses.

Specialty Examinations
Introduction and Changes

Requirements for performing specialty examinations are included in instructions, Civilian Personnel Instructions and federal and state laws. Instructions, technical manuals and publications used for this edition were current at the time of revision. Users of this manual must ensure that they have most current issue of the appropriate reference.

Every effort was made in preparing this section of the manual to include the minimum examination requirements. Medical personnel will then be able to add tests needed to meet the requirements of local and state law or activity imposed requirements. References or written protocols should be used when adding tests routinely to examinations.

Where there were no specific requirements prohibiting standardization, EKG's and lipid panels were standardized to a baseline and EKG and lipid panel at least once past age 40. **After a baseline is established, the EKG and lipid panel are done only once past age 40 unless the provider requests otherwise.**

Where strict instructions mandate program documentation, programs are maintained in this manual only for guidance on scheduling and to provide appropriate references. These programs are Aviation, Diver/Hyperbaric Worker, and Submarine Duty.

All new tests are printed in **bold** letters. A new screening program was added for Barber and Beauty Shop Employees, meeting the requirements in NAVMED P-5010, Manual of Naval Preventive Medicine. This program is generally managed by Preventive Medicine Technicians.

Construction, Railroad and Weight Handling Equipment Operators program was renamed, Weight Handling Equipment (Management of).

Specialty Examinations

| | |
|--|---|
| Aviation | Hazardous Waste Workers and Emergency Responders |
| Barber and Beauty Shop Employees | Health Care Workers (HCWs) |
| Childcare Worker | Military DOT, Explosive Handler/Operators (Interim Examination) |
| Department of Transportation (DOT) Vehicle Operators (Civilians) | Motor Vehicle Operator (Other than DOT) |
| Diver/Hyperbaric Worker | Naval Criminal Investigative Service |
| Explosives Handlers and Explosive Vehicle Operators (Civilians) | Police/Guard Security |
| Firefighter (Annual Screen) | Respiratory User Certification Exam |
| Firefighter (Preplacement and Periodic) | Submarine Duty |
| Foodservice Personnel | Wastewater/Sewage Worker |
| Forklift Operator | Weight Handling Equipment (Management of) |

| | |
|---------------|--|
| Freon Workers | |
|---------------|--|

701 AVIATION

PROGRAM FREQUENCY: BY AGE

All aviation personnel (officer and enlisted) will undergo a complete aviation medical examination (SF-88 and SF-93 or NAVMED 6120/2 as appropriate) within 30 days of their birthday at ages 21, 24, 27, 30, 33, 36, 39 and annually thereafter.

PROGRAM DESCRIPTION:

This program is designed solely to provide guidance in scheduling frequency and references. Medical examination is recorded on SF-88 and SF-93 or NAVMED 6130/2 (as appropriate). Detailed guidance is contained in Manual of the Medical Department, NAVMED P-117, Chapter 15, Article 15-65.

PROGRAM REVISED 10/97. References: 1. **BUMEDNOTE 5410 of 14 Oct 99.**

PROVIDER COMMENTS:

This exam can only be performed by flight surgeons and BUMED-23 approved medical officers via special credentialing.

Physical exams and standards for aviation physicals are updated annually and available on the Internet **at the NOMI home page:**

<http://www.nomi.navy.mil/code04/arwg97.htm>

This document contains guidance for Class I, Class II, and Class III and enlisted aviation personnel. It also contains height and weight policies and clearance for non-military personnel to fly in USN/USMC Aircraft.

723 BARBER AND BEAUTY SHOP EMPLOYEES

PROGRAM FREQUENCY: PREPLACEMENT

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE |
|--|--------------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | |
| PERSONAL HISTORY OF: | | |
| MAJOR ILLNESS OR INJURY | | YES |
| HOSPITALIZATION OR SURGERY | | YES |
| CANCER | | YES |
| BACK INJURY | | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES |
| HAVE YOU EVER SMOKED | | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES |
| MEDICATION ALLERGIES | | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES |
| SKIN DISEASE | | YES |
| HEPATITIS OR JAUNDICE | | YES |
| TUBERCULOSIS | | YES |
| INFECTIOUS DISEASE | | YES |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES |
| LABORATORY- | | |
| ADDITIONAL LAB TESTS: | | |
| APPROPRIATE BY THE PHYSICIAN | | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES |
| PHYSICAL EXAMINATION: | | |
| VITAL SIGNS | | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES |
| CERTIFICATIONS PERFORMED IAW: | | |
| NAVMED P-5010 | | YES |
| ASSESSMENT: | | YES |
| RECOMMENDATIONS: | | YES |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. Manual of Naval Preventive Medicine NAVMED P-5010, Chapter 2. NEW PROGRAM 6/98.

PROVIDER COMMENTS:

All barber shop and beauty shop employees, including personnel employed by a civilian contract, must be medically screened and determined to be free

of communicable disease prior to their initial assignment. Unless necessary for local reasons, there is no requirement for periodic examinations. This screening examination may be performed by non-physician personnel.

703 CHILD CARE WORKER

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| HEPATITIS OR JAUNDICE | | YES | ANNUAL | NO |
| TUBERCULOSIS | | YES | ANNUAL | NO |
| INFECTIOUS DISEASE | | YES | ANNUAL | NO |
| HISTORY OF CHICKEN POX | | YES | ANNUAL | NO |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | ANNUAL | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | NO |
| DEPRESSION, DIFFICULTY CONCENTRATING, EXCESSIVE ANXIETY | | YES | ANNUAL | NO |
| TREATMENT FOR DRUG OR ALCOHOL USE | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| LABORATORY- | | | | |
| ADDITIONAL LAB TESTS: | | | | |
| TUBERCULOSIS SCREEN | | YES | ANNUAL | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | ANNUAL | NO |
| MEASLES/MUMPS/RUBELLA IMMUNE STATUS | | YES | ANNUAL | NO |
| VARICELLA IMMUNE STATUS | | YES | ANNUAL | NO |
| ASSESSMENT: | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. Personnel health requirements are defined in OPNAVINST 1700.9D, Child Development Programs. 2. Current recommendations for immunizations are contained in BUMEDINST 6230.15, Immunizations and Chemoprophylaxis, Nov 95; 3. BUMEDNOTE 6230, Immunization Requirements and Recommendations, Apr 98; 4. NAVMEDCOMINST 6224.8, Tuberculosis Control Program, outlines management of tuberculosis testing programs. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

The immunization requirements promulgated by the various references can be summarized as follows:

- A. Immunizations against polio, tetanus and diphtheria must be current.
- B. Immunity to measles, mumps and rubella is required. This requirement can be met by documentation of physician-diagnosed illness (except rubella), serologic evidence of immunity, or documented immunization (for measles, 2 doses one month apart after 1 year of age on individuals born on or after 1957 is required).
- C. Specific requirements are outlined in the instructions listed in the program description.
- D. Unusual circumstances such as an outbreak, may necessitate additional requirements.
- E. Annual influenza immunization is **strongly encouraged**.

The purpose of the exam is to identify potentially communicable conditions. Scope of the exam would depend on results of the history, local public health requirements and communicable disease risk specific to the area.

For those child care worker applicants without a written record of polio immunization status, attendance at public school in the U.S. is adequate for presumption of prior oral polio vaccine administration.

706 DEPARTMENT OF TRANSPORTATION (DOT) VEHICLE OPERATORS (CIVILIANS)

OCCUPATIONS IN THIS PROGRAM: DOT VEHICLE OPERATORS (CIVILIAN)

PROGRAM FREQUENCY: BI-ENNIAL

U. S. Department of Transportation, 49 CFR 391.41-49

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BI-ENN | NO |
| MAJOR ILLNESS OR INJURY | | YES | BI-ENN | NO |
| HOSPITALIZATION OR SURGERY | | YES | BI-ENN | NO |
| CANCER | | YES | BI-ENN | NO |
| BACK INJURY | | YES | BI-ENN | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BI-ENN | NO |
| HAVE YOU EVER SMOKED | | YES | BI-ENN | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BI-ENN | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BI-ENN | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BI-ENN | NO |
| MEDICATION ALLERGIES | | YES | BI-ENN | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BI-ENN | NO |
| USE OF SEAT BELTS (ALWAYS, MOSTLY, SOME, NONE) | | YES | BI-ENN | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | BI-ENN | NO |
| SYPHILIS OR GONORRHEA | | YES | BI-ENN | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | BI-ENN | NO |
| NERVOUS STOMACH OR ULCER | | YES | BI-ENN | NO |
| HEAD INJURY | | YES | BI-ENN | NO |
| CHANGE OR LOSS OF VISION | | YES | BI-ENN | NO |
| LOSS OR CHANGE IN HEARING | | YES | BI-ENN | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BI-ENN | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BI-ENN | NO |
| KIDNEY DISEASE | | YES | BI-ENN | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BI-ENN | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | BI-ENN | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | BI-ENN | NO |
| MIGRAINE HEADACHE | | YES | BI-ENN | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | BI-ENN | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BI-ENN | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | BI-ENN | NO |
| TREATMENT FOR DRUG OR ALCOHOL USE | | YES | BI-ENN | NO |
| PERSONALITY CHANGE | | YES | BI-ENN | NO |
| MUSCLE OR JOINT PROBLEMS | | YES | BI-ENN | NO |
| PERMANENT DEFECT FROM ILLNESS, DISEASE OR INJURY | | YES | BI-ENN | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BI-ENN | NO |

COMMENTS ON MEDICAL HISTORY:

YES BI-ENN NO

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| BASELINE LIPID PROFILE | | YES | NO | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | BI-ENN | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | NO | * | NO |
| CARDIOLOGY: | | | | |
| ELECTROCARDIOGRAM | | YES | * | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | BI-ENN | NO |
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BI-ENN | NO |
| COLOR VISION | | YES | BI-ENN | NO |
| VISUAL FIELDS | | YES | BI-ENN | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BI-ENN | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BI-ENN | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | BI-ENN | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | BI-ENN | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | BI-ENN | NO |
| EXTREMITIES | | YES | BI-ENN | NO |
| CARDIOVASCULAR SYSTEM | | YES | BI-ENN | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | BI-ENN | NO |
| EYES | | YES | BI-ENN | NO |
| ABDOMEN | | YES | BI-ENN | NO |
| GENITOURINARY TRACT | | YES | BI-ENN | NO |
| RESPIRATORY SYSTEM | | YES | BI-ENN | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | BI-ENN | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BI-ENN | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BI-ENN | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BI-ENN | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS | | YES | BI-ENN | NO |
| LISTED BELOW | | | | |
| RECOMMENDATIONS: | | YES | BI-ENN | NO |

PROGRAM DESCRIPTION:

***EKG/Lipid panel should be done once after age 40.** Physical qualifications are contained in Federal Motor Carrier Safety Regulations, U. S. Department of Transportation, Federal Highway Administration, 49 CFR 391.41-49. A handbook containing the regulations can be ordered from: American Trucking Association 2200 Mill road, Alexandria, VA. 22314-4677, 1-800-ATA-LINE. PROGRAM REVIEWED 3/2000

Military personnel are exempt from the requirements of the Commercial Motor Vehicle Safety Act of 1986, and, in particular, from the requirements of 49 CFR Part 383 regarding physical examination requirements in order to obtain a commercial drivers license. The scope of the periodic examinations is considered sufficient to meet the requirements. The periodicity of examinations for active duty and reserve military personnel is outlined in the MANMED. Active duty members must meet the standards of MANMED, chapter 15, section III, with particular emphasis on the systems listed in that section. Navy Explosive Ordnance Disposal personnel must also meet the requirements of article 15-66. REFERENCES: (OTHER); 1. 49 CFR 391.41-49; 2. **Marine Corps TM 11240-14/3B, Standard Licensing Procedures for Operators of Military Motor Vehicles**; 3. DoD 4500.36-R, Management, Acquisition and Use of Motor Vehicles (http://www.efdlant.navfac.navy.mil/lantops_16/temc.htm); 4. NAVFAC P-300, Management of Civil Engineering Support Equipment, May 97 (http://www.efdlant.navfac.navy.mil/lantops_16/temc.htm) 5. Hartenbaum,N. The DOT Medical Examination, OEM Press, Boston, MA 1997.

Web sites:

1. Home page for FHWA - <http://www/fhwa.dot.gov/>
2. Regulations - <http://mcregis.fhwa.dot.gov/laws.htm>

PROGRAM REVISED 3/2000

A series of medical conferences on various diseases and commercial drivers were sponsored by DOT and the reports are available through National Technical Information Service (NITS). Condensed versions of these reports are available at <http://home.att.net/~NataH>.

PROVIDER COMMENTS:

This program is designed to provide guidance for physical standards of drivers who must meet the requirements from the Federal Department of Transportation. Activities must be familiar with individual state Department of Transportation motor vehicle operator requirements since some state requirements may be more stringent. Licensing officials in Public Works, Ordnance Department, Safety, Human Resources Office or Navy Supply can assist in determining the state requirements.

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705 DIVER/HYPERBARIC WORKER

PROGRAM FREQUENCY:

All active divers will have a diving medical examination every 5 years. If assigned remote from a Diving Medical Officer or Undersea Medical Officer, the examination will be conducted every 3 years.

After age 45 the examination will be conducted every 2 years.

PROGRAM DESCRIPTION:

This program is designated solely to provide guidance on scheduling frequency. Tests and forms required are promulgated in Manual of the Medical Department, NAVMED P-117, Chapter 15, Article 15-66, Change 108. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

A medical officer or DOD civilian physician must perform examinations. Examinations not performed by diving medical officer, undersea medical officer, or a clinical hyperbaric medical officer will be forwarded to CHBUMED (MED-21) for review and approval.

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720 EXPLOSIVES HANDLERS AND EXPLOSIVES VEHICLE OPERATORS (CIVILIANS)

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BY AGE | NO |
| MAJOR ILLNESS OR INJURY | | YES | BY AGE | NO |
| HOSPITALIZATION OR SURGERY | | YES | BY AGE | NO |
| CANCER | | YES | BY AGE | NO |
| BACK INJURY | | YES | BY AGE | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BY AGE | NO |
| HAVE YOU EVER SMOKED | | YES | BY AGE | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BY AGE | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BY AGE | NO |
| MEDICATION ALLERGIES | | YES | BY AGE | NO |
| USE OF SEAT BELTS (ALWAYS, MOSTLY, SOME, NONE) | | YES | BY AGE | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BY AGE | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | BY AGE | NO |
| SYPHILIS OR GONORRHEA | | YES | BY AGE | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | BY AGE | NO |
| NERVOUS STOMACH OR ULCER | | YES | BY AGE | NO |
| HEAD INJURY | | YES | BY AGE | NO |
| CHANGE OR LOSS OF VISION | | YES | BY AGE | NO |
| LOSS OR CHANGE IN HEARING | | YES | BY AGE | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BY AGE | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BY AGE | NO |
| KIDNEY DISEASE | | YES | BY AGE | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BY AGE | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | BY AGE | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | BY AGE | NO |
| MIGRAINE HEADACHE | | YES | BY AGE | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | BY AGE | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BY AGE | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | BY AGE | NO |
| TREATMENT FOR DRUG OR ALCOHOL USE | | YES | BY AGE | NO |
| PERSONALITY CHANGE | | YES | BY AGE | NO |
| MUSCLE OR JOINT PROBLEMS | | YES | BY AGE | NO |
| PERMANENT DEFECT FROM ILLNESS, DISEASE OR INJURY | | YES | BY AGE | NO |
| FAMILY HISTORY OF: | | | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | BY AGE | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| HEMATOLOGY: | | | | |
| HEMATOCRIT | | YES | BY AGE | NO |
| SERUM CHEMISTRY | | | | |
| FASTING BLOOD GLUCOSE | | YES | BY AGE | NO |
| BASELINE LIPID PROFILE | | YES | NO | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | BY AGE | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | NO | * | NO |
| CARDIOLOGY | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY- | | | | |
| AUDIOGRAM | | YES | BY AGE | NO |
| OPTOMETRY- | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BY AGE | NO |
| COLOR VISION | | YES | BY AGE | NO |
| VISUAL FIELDS | | YES | BY AGE | NO |
| TONOMETRY OVER AGE 40 (IF CLINICALLY INDICATED) | | YES | BY AGE | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BY AGE | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BY AGE | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | BY AGE | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | BY AGE | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | BY AGE | NO |
| EXTREMITIES | | YES | BY AGE | NO |
| CARDIOVASCULAR SYSTEM | | YES | BY AGE | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | BY AGE | NO |
| EYES | | YES | BY AGE | NO |
| ABDOMEN | | YES | BY AGE | NO |
| GENITOURINARY TRACT | | YES | BY AGE | NO |
| RESPIRATORY SYSTEM | | YES | BY AGE | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | BY AGE | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BY AGE | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BY AGE | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BY AGE | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BY AGE | NO |
| RECOMMENDATIONS: | | YES | BY AGE | NO |

PROGRAM DESCRIPTION:

*EKG/Lipid panel should be done once after age 40. The purpose of this program, as defined in Manual of the Medical Department (MANMED), is that medical examinations of explosive handlers and Hazardous Material Vehicle Operators are conducted to ensure employees who handle explosives or operate vehicles or machinery which transport explosive or other hazardous material are physically qualified. A separate program 721, is for military members.

REFERENCES: (OTHER); 1. 49 CFR, part 391; 2. Manual of the Medical Department, U.S. Navy, NAVMED P-117, Change 109. 3. DoD 4500.36-R, Management, Acquisition and Use of Motor Vehicles (http://www.efdlant.navfac.navy.mil/lantop_16/temc.htm); 4. NAVFAC P-300, Management of Civil Engineering Support Equipment, May 97 (http://www.efdlant.navfac.navy.mil/lantops_16/temc.htm); 5. Marine Corps TM 11240-14/3B, Standard Licensing Procedures for Operators of Military Motor Vehicles; 7. Hartenbaum, N. The DOT Medical Examination, OEM Press, Boston, MA 1997.

A series of medical conferences on various diseases and commercial drivers were sponsored by DOT and the reports are available through National Technical Information Service (NTIS). Condensed versions of these reports are available over the Internet at <http://home.att.net/~NataH> PROGRAM REVISED 3/2000

PROGRAM FREQUENCY

| Age | Frequency |
|------------------|-----------------|
| Up to 60 years | Every two years |
| Age 60 and above | Annual |

PROVIDER COMMENTS:

Civilian personnel must meet the general standards for employment as provided by the Office of Personnel Management and the standards for rejection listed in reference (2) above. Civilian contract carriers need only be qualified per Title 49, CFR, part 391.

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722 FIREFIGHTER (ANNUAL HEALTH SCREEN)

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | PERIODIC |
|--|--------------------|----------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | |
| PERSONAL HISTORY OF: | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | ANNUAL |
| MAJOR ILLNESS OR INJURY | | ANNUAL |
| HOSPITALIZATION OR SURGERY | | ANNUAL |
| CANCER | | ANNUAL |
| BACK INJURY | | ANNUAL |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | ANNUAL |
| HAVE YOU EVER SMOKED | | ANNUAL |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | ANNUAL |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | ANNUAL |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | ANNUAL |
| MEDICATION ALLERGIES | | ANNUAL |
| ANY REPRODUCTIVE HEALTH CONCERNS | | ANNUAL |
| BLOOD DISEASES (ANEMIA) | | ANNUAL |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | ANNUAL |
| SKIN DISEASE | | ANNUAL |
| HEAT INJURY (CRAMPS, EXHAUSTION, STROKE) | | ANNUAL |
| PERIPHERAL VASCULAR DISEASE | | ANNUAL |
| HEPATITIS OR JAUNDICE | | ANNUAL |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | ANNUAL |
| TUBERCULOSIS | | ANNUAL |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | ANNUAL |
| CHANGE OR LOSS OF VISION | | ANNUAL |
| LOSS OR CHANGE IN HEARING | | ANNUAL |
| CHEST PAIN, ANGINA, HEART ATTACK | | ANNUAL |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | ANNUAL |
| SHORTNESS OF BREATH | | ANNUAL |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | ANNUAL |
| CURRENT PREGNANCY (FEMALES ONLY) | | ANNUAL |
| EPILEPSY (SEIZURE DISORDER) | | ANNUAL |
| PROBLEMS WITH BALANCE & COORDINATION | | ANNUAL |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | ANNUAL |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | ANNUAL |
| MENTAL/EMOTIONAL ILLNESS | | ANNUAL |
| MUSCLE OR JOINT PROBLEMS | | ANNUAL |
| WORK HISTORY OF: | | |
| EXP TO POTENTIALLY INFECTIOUS BODY FLUIDS | | ANNUAL |
| COMMENTS ON MEDICAL HISTORY: | | ANNUAL |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | PERI ODIC |
|--|--------------------|--------------|
| LABORATORY- | | |
| ADDITIONAL LAB TESTS: | | |
| TUBERCULOSIS SCREEN | | ANNUAL |
| OPTOMETRY- | | |
| VISION SCREEN (VISUAL ACUITY) | | ANNUAL |
| COLOR VISION | | ANNUAL |
| COMMENTS ON LABORATORY RESULTS: | | ANNUAL |
| PHYSICAL EXAMINATION: | | |
| VITAL SIGNS | | ANNUAL |
| HEIGHT | | ANNUAL |
| WEIGHT | | ANNUAL |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | ANNUAL |
| COMMENTS ON PHYSICAL EXAMINATION: | | ANNUAL |
| SPECIAL REQUIREMENTS: | | |
| QUALIFICATIONS: | | |
| CURRENT IMMUNIZATIONS | | ANNUAL |
| IS HEPATITIS B VACCINE SERIES COMPLETE OR PRIOR INFECTION DOCUMENTED? | | ANNUAL |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | ANNUAL |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | ANNUAL |
| RECOMMENDATIONS: | | ANNUAL |

PROGRAM DESCRIPTION:

REFERENCE: (5) (OTHER); 1. Qualification Standards, Fire Protection and Prevention Series, GS-081, July 1993; 2. DODINST 6055.6 DoD Fire and Emergency Services Program, 15 DEC 94; 3. National Fire Fighters Protection Association, (NFPA) Standard on Fire Department Safety and Occupational Health (NFPA 1500), 1997 Edition. 4. NFPA Standard on Medical Requirements for Fire Fighters, (NFPA 1582), 1997 Edition; 5. NFPA Standard on Fire Department Infection Control Plan, (NFPA 1581), 1997 Edition; 6. OSHA Standard 29 CFR 1910.1030; 7. Orris, Peter, Melius, James and Duffy, RM, Occupational Medicine: State of the Air Review Firefighters' Safety and Health, Volume 10/Number 14, Hanley & Belfus, Inc., Philadelphia, PA. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Program 707 provides preplacement and periodic medical examination guidelines. Program 722 is used as an annual screen when the required periodic examination, Program 707, is not due. The extent of the medical evaluation and additional testing should be based on the firefighter's medical condition.

Reference (2) mandates the medical and physical criteria listed in references (3), (4) and (5). Reference (2) mandates that all personnel will participate in a physical fitness exercise program and shall be a special emphasis target group for DoD Components anti-smoking education programs.

References (2) and (4) contain conditions, by category, that are considered medically disqualifying. NOTE: The guidance in 5 CFR Part 339, "Medical Qualification Determinations", must be consulted on all civilian employees in which there is a question of worker fitness. The presence of a medically disqualifying condition does not automatically preclude continued work. This decision should be made by management with input from Occupational Medicine, Human Resources Office and possibly the worker's personal physician. Reference (6) considers public safety workers, policemen and Firefighters at risk for exposure to bloodborne pathogens. This risk is not universal since duties vary greatly between departments and locations. The purpose of requiring assessment of hepatitis B immune status is to determine the extent of potential exposure. Those who are felt to be at risk may be placed in Program 178, Blood and/or Body Fluids.

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707 FIREFIGHTER (PREPLACEMENT AND PERIODIC)

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BY AGE | *** |
| MAJOR ILLNESS OR INJURY | | YES | BY AGE | *** |
| HOSPITALIZATION OR SURGERY | | YES | BY AGE | *** |
| CANCER | | YES | BY AGE | *** |
| BACK INJURY | | YES | BY AGE | *** |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BY AGE | *** |
| HAVE YOU EVER SMOKED | | YES | BY AGE | *** |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BY AGE | *** |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | *** |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BY AGE | *** |
| MEDICATION ALLERGIES | | YES | BY AGE | *** |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BY AGE | *** |
| BLOOD DISEASES (ANEMIA) | | YES | BY AGE | *** |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | BY AGE | *** |
| SKIN DISEASE | | YES | BY AGE | *** |
| HEAT INJURY (CRAMPS, EXHAUSTION, STROKE) | | YES | BY AGE | *** |
| PERIPHERAL VASCULAR DISEASE | | YES | BY AGE | *** |
| HEPATITIS OR JAUNDICE | | YES | BY AGE | *** |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | BY AGE | *** |
| TUBERCULOSIS | | YES | BY AGE | *** |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | BY AGE | *** |
| CHANGE OR LOSS OF VISION | | YES | BY AGE | *** |
| LOSS OR CHANGE IN HEARING | | YES | BY AGE | *** |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BY AGE | *** |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BY AGE | *** |
| SHORTNESS OF BREATH | | YES | BY AGE | *** |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | BY AGE | *** |
| CURRENT PREGNANCY (FEMALES ONLY) | | YES | BY AGE | *** |
| EPILEPSY (SEIZURE DISORDER) | | YES | BY AGE | *** |
| PROBLEMS WITH BALANCE & COORDINATION | | YES | BY AGE | *** |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | BY AGE | *** |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | BY AGE | *** |
| MENTAL/EMOTIONAL ILLNESS | | YES | BY AGE | *** |
| MUSCLE OR JOINT PROBLEMS | | YES | BY AGE | *** |
| WORK HISTORY OF: | | | | |
| EXP TO POTENTIALLY INFECTIOUS BODY FLUIDS | | YES | BY AGE | *** |
| COMMENTS ON MEDICAL HISTORY: | | YES | BY AGE | *** |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |

COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) YES BY AGE ***

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| SERUM CHEMISTRY: | | | | |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS. | | YES | NO | *** |
| BUN AND CREATININE | | YES | BY AGE | *** |
| BASELINE LIPID PROFILE | | | | |
| SGOT (AST) | | YES | NO | NO |
| | | YES | BY AGE | *** |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITHOUT MICROSCOPIC | | YES | BY AGE | *** |
| ADDITIONAL LAB TESTS: | | | | |
| TUBERCULOSIS SCREEN | | YES | ANNUAL | *** |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | NO | * | *** |
| CARDIOLOGY: | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | BY AGE | *** |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | ** | ** |
| SPIROMETRY: | | | | |
| SPIROMETRY (FVC, FEV1, FEV1/FVC) | | YES | BY AGE | *** |
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BY AGE | *** |
| COLOR VISION | | YES | BY AGE | *** |
| PERIPHERAL VISION | | YES | BY AGE | *** |
| COMMENTS ON LABORATORY RESULTS: | | YES | BY AGE | *** |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BY AGE | *** |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | BY AGE | *** |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | BY AGE | *** |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | BY AGE | *** |
| CARDIOVASCULAR SYSTEM | | YES | BY AGE | *** |
| EYES | | YES | BY AGE | *** |
| GENITOURINARY TRACT | | YES | BY AGE | *** |
| LIVER | | YES | BY AGE | *** |
| RESPIRATORY SYSTEM | | YES | BY AGE | *** |
| EARS (TYMPANIC MEMBRANES) | | YES | BY AGE | *** |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | BY AGE | *** |
| THYROID | | YES | BY AGE | *** |
| METABOLIC DISTURBANCE (FEVER, TACHYCARDIA) | | YES | BY AGE | *** |
| OVERALL PHYSICAL FITNESS | | YES | BY AGE | *** |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BY AGE | *** |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BY AGE | *** |
| SPECIAL REQUIREMENTS: | | | | |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | BY AGE | NO |
| IS HEPATITIS B VACCINE SERIES COMPLETE OR PRIOR INFECTION DOCUMENTED? | | YES | BY AGE | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BY AGE | *** |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BY AGE | *** |
| RECOMMENDATIONS: | | YES | BY AGE | *** |

PROGRAM DESCRIPTION:

**Chest x-ray is not required and should be requested at the discretion of the provider.

***Workers who have not had an examination within 12 months should have a termination examination.

REFERENCE: (5) (OTHER); 1. Qualification Standards, Fire Protection and Prevention Series, GS-081, July 1993; 2. DODINST 6055.6 DoD Fire and Emergency Services Program, 15 DEC 94; 3. National Fire Fighters Protection Association, (NFFPA) Standard on Fire Department Safety and Occupational Health (NFFPA 1500), 1997 Edition. 4. NFFPA Standard on Medical Requirements for Fire Fighters, (NFFPA 1582), 1997 Edition; 5. NFFPA Standard on Fire Department Infection Control Plan, (NFFPA 1581), 1997 Edition; 6. OSHA Standard 29 CFR 1910.1030; 7. Orris, Peter, Melius, James and Duffy, RM, Occupational Medicine: State of the Air Review Firefighters' Safety and Health, Volume 10/Number 14, Hanley & Belfus, Inc., Philadelphia, PA. PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Program 707 provides guidelines for preplacement and periodic medical examinations. Program 722 provides guidelines for the annual medical evaluation, a medical screen to be done when the required periodic examination, Program 707, is not due. The extent of the medical evaluation and additional testing will depend on the firefighter's medical condition.

Reference (2) mandates the medical and physical criteria listed in references (3), (4) and (5). Reference (2) mandates that all personnel will participate in a physical fitness exercise program and shall be a special emphasis target group for DoD Components anti-smoking education programs.

References (2) and (4) contain conditions, by category, that are considered medically disqualifying. NOTE: The guidance in 5 CFR Part 339, "Medical Qualification Determinations", must be consulted on all civilian employees in which there is a question of worker fitness. The presence of a medically disqualifying condition does not automatically preclude continued work. This decision should be made by management with input from Occupational Medicine, Human Resources Office and possibly the worker's personal physician. Reference (6) considers public safety workers, policemen and Firefighters at risk for exposure to bloodborne pathogens. This risk is not universal since duties vary greatly between departments and locations. The purpose of requiring assessment of hepatitis B immune status is to determine the extent of potential exposure. Those who are felt to be at risk may be placed in Program 178, Blood and/or Body Fluids.

PROGRAM FREQUENCY

| <u>Age</u> | <u>Frequency</u> |
|--------------|-------------------|
| 29 and under | Every three years |
| 30-39 | Every two years |
| 40 and over | Every year |

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709 FOODSERVICE PERSONNEL

PROGRAM FREQUENCY: PREPLACEMENT

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| MAJOR ILLNESS OR INJURY | | YES | NO | NO |
| HOSPITALIZATION OR SURGERY | | YES | NO | NO |
| CANCER | | YES | NO | NO |
| BACK INJURY | | YES | NO | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | NO | NO |
| HAVE YOU EVER SMOKED | | YES | NO | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | NO | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | NO | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | NO | NO |
| MEDICATION ALLERGIES | | YES | NO | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | NO | NO |
| SKIN DISEASE | | YES | NO | NO |
| HEPATITIS OR JAUNDICE | | YES | NO | NO |
| TUBERCULOSIS | | YES | NO | NO |
| INFECTIOUS DISEASE | | YES | NO | NO |
| CHRONIC ABDOMINAL PAIN, VOMITING, OTHER GI SYMPTOMS | | YES | NO | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | NO | NO |
| LABORATORY- | | | | |
| ADDITIONAL LAB TESTS: | | | | |
| APPROPRIATE BY THE PHYSICIAN | | YES | NO | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | NO | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | NO | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | NO | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | NO | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | NO | NO |
| CERTIFICATIONS PERFORMED IAW: | | | | |
| NAVMED P-5010 | | YES | NO | NO |
| ASSESSMENT: | | YES | NO | NO |
| RECOMMENDATIONS: | | YES | NO | NO |

PROGRAM DESCRIPTION:

This program is required for preplacement exam. There is no requirement for a periodic examination. REFERENCES: (OTHER); 1. 132200Z DEC 89; 2. Manual of Naval Preventive Medicine NAVMED P-5010 (Find manual under publications at the Virtual Naval Hospital Web Site <http://www.vnh.org>).
PROGRAM REVISED 3/2000

PROVIDER COMMENTS:

The choice of additional examination elements and laboratory tests should be determined locally, based on Public Health regulations, if applicable. Individual considerations such as communicable disease risk in the community and medical and social history of the employee may affect the content of the exam. The concern is to avoid food-borne disease outbreaks. The focus of the exam is to identify potentially communicable conditions.

710 FORKLIFT OPERATOR

PROGRAM FREQUENCIES: TRIENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | TRI-ENN | NO |
| MAJOR ILLNESS OR INJURY | | YES | TRI-ENN | NO |
| HOSPITALIZATION OR SURGERY | | YES | TRI-ENN | NO |
| CANCER | | YES | TRI-ENN | NO |
| BACK INJURY | | YES | TRI-ENN | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | TRI-ENN | NO |
| HAVE YOU EVER SMOKED | | YES | TRI-ENN | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | TRI-ENN | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | TRI-ENN | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | TRI-ENN | NO |
| MEDICATION ALLERGIES | | YES | TRI-ENN | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | TRI-ENN | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | TRI-ENN | NO |
| HEAD INJURY | | YES | TRI-ENN | NO |
| CHANGE OR LOSS OF VISION | | YES | TRI-ENN | NO |
| LOSS OR CHANGE IN HEARING | | YES | TRI-ENN | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | TRI-ENN | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | TRI-ENN | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | TRI-ENN | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | TRI-ENN | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | TRI-ENN | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | TRI-ENN | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | TRI-ENN | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | TRI-ENN | NO |
| PERSONALITY CHANGE | | YES | TRI-ENN | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | TRI-ENN | NO |
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| BASELINE LIPID PROFILE | | YES | NO | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | YES | * | NO |
| CARDIOLOGY: | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | TRI-ENN | NO |
| OPTOMETRY | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | TRI-ENN | NO |
| COLOR VISION | | YES | TRI-ENN | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| DEPTH PERCEPTION | | YES | TRI-ENN | NO |
| VISUAL FIELDS | | YES | TRI-ENN | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | TRI-ENN | NO |
| PHYSICAL EXAMINATION: | | | | |
| REQUIRED WHEN POSITIVE HISTORY QUESTIONS ARE OBTAINED: | | | | |
| VITAL SIGNS | | YES | TRI-ENN | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | TRI-ENN | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | TRI-ENN | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | TRI-ENN | NO |
| CARDIOVASCULAR SYSTEM | | YES | TRI-ENN | NO |
| EYES | | YES | TRI-ENN | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | TRI-ENN | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | TRI-ENN | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | TRI-ENN | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | TRI-ENN | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | TRI-ENN | NO |
| RECOMMENDATIONS: | | YES | TRI-ENN | NO |

PROGRAM DESCRIPTION:

*EKG/Lipid panel should be done once after age 40. REFERENCES:
(OTHER); 1. NAVSEA SW023-AH-WHM-010, Chapter 3; 2. DoD 4145.19R-1 (NOTE:
These references are used by PWC to qualify Materials Handlers Operators.)
PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Civilian workers who operate MHE for handling ammunition and explosives must be examined under Program #720, Explosive Handler and Explosive Operators (Civilian).

718 FREON WORKERS

STRESSOR(S) IN THIS PROGRAM: NIOSH # CAS #
 1,1,2-TRICHLORO-1,2,2,-TRIFLUOROETHANE (FREON - 113) KJ4000000 76-13-1

PROGRAM FREQUENCY: ANNUAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | NO |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | NO |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | NO |
| CANCER | | YES | ANNUAL | NO |
| BACK INJURY | | YES | ANNUAL | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | NO |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | NO |
| MEDICATION ALLERGIES | | YES | ANNUAL | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | NO |
| SKIN DISEASE | | YES | ANNUAL | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | NO |
| SHORTNESS OF BREATH | | YES | ANNUAL | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | NO |
| PHYSICAL EXAMINATION | | | | |
| VITAL SIGNS | | YES | ANNUAL | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | NO |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | NO |
| RECOMMENDATIONS: | | YES | ANNUAL | NO |

PROGRAM DESCRIPTION:

Workers exposed to FC-113 at or above the action level, i.e., one half or more of the permissible exposure limits (8-hour TWA) for more than 30 days a year or 10 days a quarter, should be placed in a medical surveillance program and scheduled for annual examinations. Workers should have a preplacement examination if they do not fit the criteria for placement in the medical surveillance program but have potential exposure to FC-113 above the Short Term Exposure Limit (STEL). REFERENCES: (OTHER); 1. Commander, Naval Sea Systems Command letter, 4734/9210 Ser 06C13C/1117 of 29 Oct 85; 2. Federal Register 54FR 2539-2541 Jan 19, 1989; 3. NIOSH Alert, Request for Assistance in Preventing Deaths from Excessive Exposure to Chlorofluorocarbon 113 (CFC-113); Occupational Health Guidelines for Fluorotrichloromethane, DHHS (NIOSH) Publication No. 81-123, January 1981. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

A limited number of freons have cardiac sensitizing effects. Interval history should stress intake of oral medications with cardiac sensitizing effects (epinephrine, norepinephrine, dopamine, isoproterenol and other sympathomimetic drugs used by asthmatics).

711 HAZARDOUS WASTE WORKERS AND EMERGENCY RESPONDERS

PROGRAM FREQUENCY: ANNUAL

OSHA STANDARD 29 CFR 1910.120

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | ANNUAL | YES |
| MAJOR ILLNESS OR INJURY | | YES | ANNUAL | YES |
| HOSPITALIZATION OR SURGERY | | YES | ANNUAL | YES |
| CANCER | | YES | ANNUAL | YES |
| BACK INJURY | | YES | ANNUAL | YES |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | ANNUAL | YES |
| HAVE YOU EVER SMOKED | | YES | ANNUAL | YES |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | ANNUAL | YES |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | ANNUAL | YES |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | ANNUAL | YES |
| MEDICATION ALLERGIES | | YES | ANNUAL | YES |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | ANNUAL | YES |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | ANNUAL | YES |
| SKIN DISEASE | | YES | ANNUAL | YES |
| HEAT INJURY (CRAMPS, EXHAUSTION, STROKE) | | YES | ANNUAL | YES |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | ANNUAL | YES |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | ANNUAL | YES |
| COLD INJURY(FROSTBITE, CHILL, TRENCH FT, HYPOTHERMIA) | | YES | ANNUAL | YES |
| CHANGE OR LOSS OF VISION | | YES | ANNUAL | YES |
| LOSS OR CHANGE IN HEARING | | YES | ANNUAL | YES |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | ANNUAL | YES |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | ANNUAL | YES |
| SHORTNESS OF BREATH | | YES | ANNUAL | YES |
| CURRENT PREGNANCY (FEMALES ONLY) | | YES | ANNUAL | YES |
| EPILEPSY (SEIZURE DISORDER) | | YES | ANNUAL | YES |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | ANNUAL | YES |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | ANNUAL | YES |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | ANNUAL | YES |
| MENTAL/EMOTIONAL ILLNESS | | YES | ANNUAL | YES |
| WORK HISTORY OF: | | | | |
| EXP TO SKIN IRRITANTS | | YES | ANNUAL | YES |
| EXP TO RESPIRATORY IRRITANTS | | YES | ANNUAL | YES |
| EXP TO CARCINOGENS | | YES | ANNUAL | YES |
| COMMENTS ON MEDICAL HISTORY: | | YES | ANNUAL | YES |
| LABORATORY | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | ANNUAL | YES |

DIFFERENTIAL WHITE BLOOD CELL COUNT
SERUM CHEMISTRY:

YES ANNUAL YES

| EXAM ELEMENT | ELEMENT PERFORMED FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|------------------------|--------------|--------------|--------------|
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS | | YES | NO | YES |
| BASELINE LIPID PROFILE | | YES | NO | NO |
| BUN AND CREATININE | | YES | ANNUAL | YES |
| SGOT (AST) | | YES | * | YES |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | YES | ** | YES |
| CARDIOLOGY: | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | ANNUAL | YES |
| RADIOLOGY: | | | | |
| CHEST X-RAY (PA) | | YES | NO | YES |
| SPIROMETRY: | | | | |
| SPIROMETRY (FEV1, FVC, FEV1/FVC) | | YES | ANNUAL | YES |
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | ANNUAL | YES |
| COLOR VISION | | YES | ANNUAL | YES |
| COMMENTS ON LABORATORY RESULTS: | | YES | ANNUAL | YES |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | ANNUAL | YES |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | ANNUAL | YES |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | ANNUAL | YES |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | ANNUAL | YES |
| CARDIOVASCULAR SYSTEM | | YES | ANNUAL | YES |
| EYES | | YES | ANNUAL | YES |
| RESPIRATORY SYSTEM | | YES | ANNUAL | YES |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | ANNUAL | YES |
| THYROID | | YES | ANNUAL | YES |
| METABOLIC DISTURBANCE (FEVER, TACHYCARDIA) | | YES | ANNUAL | YES |
| OBESITY | | YES | ANNUAL | YES |
| OVERALL PHYSICAL FITNESS | | YES | ANNUAL | YES |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | ANNUAL | YES |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | ANNUAL | YES |
| SPECIAL NOTATIONS: | | | | |
| PHYSICIAN'S WRITTEN OPINION REQUIRED | | YES | ANNUAL | YES |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | ANNUAL | YES |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | ANNUAL | YES |
| RECOMMENDATIONS: | | YES | ANNUAL | YES |

PROGRAM DESCRIPTION:

*SGOT for baseline is included in baseline liver profile. Only SGOT is required on annual basis. **EKG/Lipid panel should be done once after age 40.
REFERENCES: (OTHER): 1. 29 CFR 1910.120. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

29 CFR 1910.120 establishes minimal medical surveillance for personnel who are or may be exposed to hazardous substances at or above the PEL for 30 days per year, wear a respirator 30 days per year, or sustain an overexposure incident involving hazardous substances. CFR requires an annual exam unless the attending physician feels longer intervals are appropriate. Under no circumstances should the frequency be less than every two years. A sample Physician's Written Opinion, required by OSHA, can be found in Appendix E.

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719 HEALTH CARE WORKERS (HCWs)

PROGRAM FREQUENCY: BASELINE

OSHA STANDARD 1910.1030

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | NO | ** |
| MAJOR ILLNESS OR INJURY | | YES | NO | ** |
| HOSPITALIZATION OR SURGERY | | YES | NO | ** |
| CANCER | | YES | NO | ** |
| BACK INJURY | | YES | NO | ** |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | NO | ** |
| HAVE YOU EVER SMOKED | | YES | NO | ** |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | NO | ** |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | NO | ** |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | NO | ** |
| MEDICATION ALLERGIES | | YES | NO | ** |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | NO | ** |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | NO | ** |
| HAVE YOU EVER BEEN EVALUATED FOR LATEX ALLERGY | | YES | NO | ** |
| SKIN DISEASE | | YES | NO | ** |
| RECURRENT SKIN RASH | | YES | NO | ** |
| TUBERCULOSIS | | YES | NO | ** |
| HEPATITIS OR JAUNDICE | | YES | NO | ** |
| HISTORY OF CHICKEN POX | | YES | NO | ** |
| CURRENT PREGNANCY (SELF OR SPOUSE) | | YES | NO | ** |
| INFERTILITY OR MISCARRIAGE (SELF OR SPOUSE) | | YES | NO | ** |
| ADVERSE REACTION TO EATING ANY VEGETABLE OR FRUIT | | YES | NO | ** |
| ADVERSE REACTION TO ANY RUBBER/LATEX CONTAINING PRODUCT | | YES | NO | ** |
| MULTIPLE OPERATIONS OR CHRONIC MEDICAL INSTRUMENTATION | | YES | NO | ** |
| UNEXPLAINED HIVES OR SYMPTOMS OF SHOCK | | YES | NO | ** |
| ITCHY EYES, RUNNY NOSE, RESPIRATORY SYMPTOMS WHEN USING LATEX GLOVES | | YES | NO | ** |
| WORK HISTORY OF: | | | | |
| EXP TO CHEMOTHERAPEUTIC/ANTINEOPLASTIC AGENTS | | YES | NO | ** |
| EXP TO AEROSOLIZED ANTIBIOTICS/ANTIVIRALS | | YES | NO | ** |
| EXP TO ANESTHETIC GASES | | YES | NO | ** |
| EXP TO ETHYLENE OXIDE | | YES | NO | ** |
| EXP TO IONIZING RADIATION | | YES | NO | ** |
| EXP TO NON-IONIZING RADIATION (LASER, IR, MW, UV) | | YES | NO | ** |
| EXP TO POTENTIALLY INFECTIOUS BODY FLUIDS | | YES | NO | ** |
| EXP TO FORMALDEHYDE | | YES | NO | ** |
| REGULAR CONTACT WITH LATEX GLOVES OR OTHER RUBBER PRODUCTS? | | YES | NO | ** |
| COMMENTS ON MEDICAL HISTORY: | | YES | NO | ** |

LABORATORY:

ADDITIONAL LAB TESTS:

TUBERCULOSIS SCREEN

YES ANNUAL NO

COMMENTS ON LABORATORY RESULTS:

YES ANNUAL NO

| EXAM ELEMENT | ELEMENT GIVE FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|-------------------|--------------|--------------|--------------|
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | NO | ** |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | NO | ** |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | NO | ** |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | * | ** |
| MEASLES/MUMPS/RUBELLA IMMUNE STATUS | | YES | NO | ** |
| VARICELLA IMMUNE STATUS | | YES | NO | ** |
| IS HEPATITIS B VACCINE SERIES COMPLETE OR PRIOR INFECTION DOCUMENTED? | | YES | NO | ** |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | NO | ** |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | NO | ** |
| RECOMMENDATIONS: | | YES | NO | ** |

PROGRAM DESCRIPTION:

This program provides for a baseline review of immunization status and history. ***Annual PPD requirements and/or immunizations review drive the need to bring HCW to the clinic. Otherwise, there is no requirement for periodic evaluation.** **A termination examination provides an opportunity to review the medical record and document any medical conditions and concerns. REFERENCES: (OTHER); 1. OSHA Standard 1910.1030; 2. NIOSH, Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to health-care and public-safety workers, 1989, DHHS (NIOSH) Pub. No. 89-107, US Government Printing Office, Washington, D.C.; 3. Center for Disease Control and Prevention Morbidity and Mortality Weekly Report "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Healthcare Facilities, 28 Oct 1994, Volume 43, No. RR-13; 4. McDiarmid MA, Kessler, ER, The Health Care Worker, Occupational Medicine State of the Art Reviews, Vol. 12/Number 4, Oct-Dec 1997, Hanley & Belfus, Inc.; 5. niosh alert, Preventing Allergic Reactions to Natural Rubber Latex in the Workplace, June 1997, DHHS (NIOSH) Publication No. 97-135 (<http://www.cdc.gov/niosh/latexalt.html>) PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

A screening form for latex allergy is available in the Navy Environmental Health Center Occupational Medicine Field Operations Manual.

The immunization requirements promulgated by the various references can be summarized as follows:

A. Hepatitis B vaccine series is required for those medical and dental workers with exposure or potential exposure to blood or body fluids unless there is a contraindication. Those with exposure to blood and other infectious bodily fluids should be placed in Program 178.

B. HCWs who have no history of varicella or serologic evidence of immunity should be counseled to report varicella exposure to the clinic since patient care restrictions may be appropriate 8 - 21 days after exposure.

Those HCWs who work in patient care and have not had varicella should have varicella antibody measured.

C. Immunizations against tetanus and diphtheria should be current.

D. Immunity to measles, mumps and rubella is required. This requirement can be met by documentation of physician-diagnosed illness (except rubella), serologic evidence of immunity, or documented immunization (for measles, 2 doses 1 month apart after 1 year of age in individuals born in or after 1957 is required).

E. It is reasonable to obtain rubella antibody titer for females of child-bearing age as part of the pre-employment exam.

F. Specific requirements are contained in the instructions listed in the program description.

G. Guidance on periodic screening and the booster phenomenon is covered in reference (3).

H. Annual influenza immunization for HCWs is recommended.

There is no specific exam required. The content of the exam and assignment to specific stressors are determined by review of responses to history questions and further interview of the worker as deemed appropriate. Health care workers are potentially exposed to a wide variety of chemical, physical and biologic agents. These exposures may change over time. Annual update of work exposures allows for adjustment of exposure programs as appropriate.

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721 MILITARY DOT, EXPLOSIVE HANDLER/VEHICLE OPERATORS (INTERIM EXAMINATION)

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | PERI ODIC |
|---|--------------------|--------------|
| MEDICAL HISTORY: | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | *** |
| SINCE LAST SF 88/93 PHYSICAL HAVE YOU HAD? | | *** |
| MAJOR ILLNESS OR INJURY | | *** |
| HOSPITALIZATION OR SURGERY | | *** |
| CANCER | | *** |
| BACK INJURY | | *** |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK | | *** |
| HAVE YOU EVER SMOKED | | *** |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | *** |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | *** |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | *** |
| MEDICATION ALLERGIES | | *** |
| USE OF SEAT BELTS (ALWAYS, MOSTLY, SOME, NONE) | | *** |
| ANY REPRODUCTIVE HEALTH CONCERNS | | *** |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | *** |
| SYPHILIS OR GONORRHEA | | *** |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | *** |
| NERVOUS STOMACH OR ULCER | | *** |
| HEAD INJURY | | *** |
| CHANGE OR LOSS OF VISION | | *** |
| LOSS OR CHANGE IN HEARING | | *** |
| CHEST PAIN, ANGINA, HEART ATTACK | | *** |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | *** |
| KIDNEY DISEASE | | *** |
| EPILEPSY (SEIZURE DISORDER) | | *** |
| PROBLEMS WITH BALANCE AND COORDINATION | | *** |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN IN HANDS OR FEET | | *** |
| MIGRAINE HEADACHE | | *** |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | *** |
| MENTAL/EMOTIONAL ILLNESS | | *** |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | *** |
| TREATMENT FOR DRUG OR ALCOHOL USE | | *** |
| PERSONALITY CHANGE | | *** |
| MUSCLE OR JOINT PROBLEMS | | *** |
| PERMANENT DEFECT FROM ILLNESS, DISEASE OR INJURY | | *** |
| FAMILY HISTORY OF: | | |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | *** |
| COMMENTS ON MEDICAL HISTORY: | | *** |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | PERI ODIC |
|--|--------------------|--------------|
| PHYSICAL EXAMINATION: | | |
| VITAL SIGNS | | *** |
| COMMENTS ON PHYSICAL EXAMINATION: | | *** |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | *** |
| SF 88/93 REVIEWED AND FOUND COMPLETE | | *** |
| RECOMMENDATIONS: | | *** |

PROGRAM DESCRIPTION:

Medical examinations of explosive handlers and Hazardous Material Vehicle Operators are conducted to ensure active duty personnel who handle explosives or operate vehicles or machinery which transport explosive or other hazardous material are physically qualified. This program is designed to provide a screen at an interim basis when the required periodic examination is not due. This program is used to review interim history, document vital signs, document that the SF 88 and SF 93 from the most recent examination were reviewed, and certification based on the review of a current periodic physical examination. If a complete physical examination is required, the SF 88 and SF 93 should be used for documentation following the requirements of MANMED.

Military personnel are exempt from the requirements of the Commercial Motor Vehicle Safety Act of 1986, and, in particular, from the requirements of 49 CFR Part 383 regarding physical examination requirements in order to obtain a commercial drivers license. The scope of the periodic examinations is considered sufficient to meet the requirements. **(This would apply to the less demanding physical requirements for MVO and Forklift Driver.)** The periodicity of examinations for active duty and reserve military personnel is outlined in the MANMED. Active duty members must meet the standards of MANMED, chapter 15, section III, with particular emphasis on the systems listed in that section. Navy Explosive Ordnance Disposal personnel must also meet the requirements of article 15-66.

REFERENCES: (OTHER); Manual of the Medical Department, U.S. Navy, NAVMED P-117, Change 109. 2. Marine Corps TM 11240-14/3B, Standard Licensing Procedures for Operators of Military Motor Vehicles; 3. DoD 4500.36-R, Management, Acquisition and Use of Motor Vehicles (http://www.efdlant.navy.mil/lantops_16/temc.htm); 4. NAVFAC P-300, Management of Civil Engineering Support Equipment, May 97 (http://www.efdlant.navy.mil/lantops_16/temc.htm); 5. Hartenbaum, N. The DOT Medical Examination, OEM Press, Boston, MA 1997. PROGRAM REVISED 3/2000

Periodicity:

Active duty military personnel who are explosive handlers or hazardous material vehicle operators will have a medical examination per the periodicity in MANMED, article 15-11.

712 MOTOR VEHICLE OPERATOR (OTHER THAN DOT)

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | *** | NO |
| MAJOR ILLNESS OR INJURY | | YES | *** | NO |
| HOSPITALIZATION OR SURGERY | | YES | *** | NO |
| CANCER | | YES | *** | NO |
| BACK INJURY | | YES | *** | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | *** | NO |
| HAVE YOU EVER SMOKED | | YES | *** | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | *** | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | *** | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | *** | NO |
| MEDICATION ALLERGIES | | YES | *** | NO |
| USE OF SEAT BELTS (ALWAYS, MOSTLY, SOME, NONE) | | YES | *** | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | *** | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | *** | NO |
| HEAD INJURY | | YES | *** | NO |
| CHANGE OR LOSS OF VISION | | YES | *** | NO |
| LOSS OR CHANGE IN HEARING | | YES | *** | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | *** | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | *** | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | *** | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | *** | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | *** | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | *** | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | *** | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | *** | NO |
| PERSONALITY CHANGE | | YES | *** | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | *** | NO |
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| BASELINE LIPID PROFILE | | YES | NO | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | *** | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | YES | *** | NO |
| CARDIOLOGY: | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY- | | | | |
| AUDIOGRAM | | YES | *** | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | *** | NO |
| VISUAL FIELDS | | YES | *** | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | *** | NO |
| PHYSICAL EXAMINATION: | | | | |
| REQUIRED WHEN POSITIVE HISTORY QUESTIONS ARE OBTAINED: | | | | |
| VITAL SIGNS | | YES | *** | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | *** | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | *** | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | *** | NO |
| CARDIOVASCULAR SYSTEM | | YES | *** | NO |
| EYES | | YES | *** | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | *** | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | *** | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | *** | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | | | |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | *** | NO |
| RECOMMENDATIONS: | | YES | *** | NO |

PROGRAM DESCRIPTION:

***At least once every 4 years, each agency will ensure that employees who operate Government-owned or leased vehicles are medically able to do so without undue risk to themselves or others. When there is a question about an employee's ability to operate a motor vehicle safely, the employee may be referred for a medical examination in accordance with the provisions of 5 CFR Part 339, Medical Qualification Determinations. **EKG/Lipid profile should be done once after age 40.**

Form OF 345, Physical Fitness Inquiry for Motor Vehicle Operators, is used by licensing examiners to screen health status.

This program, #712, can be used to meet local requirements for performing periodic medical examinations when requested.

REFERENCES: (Other); 1. 5 CFR Part 930.108, Subpart A-Motor Vehicle Operators; 2. 5 CFR Part 339; 3. **DoD 4500.36-R, Management, Acquisition and Use of Motor Vehicles** (http://www.efdlant.navy.mil/lantops_16/temc.htm); 4. NAVFAC P-300, **Management of Civil Engineering Support Equipment, May 97** (http://www.efdlant.navy.mil/lantops_16/temc.htm); 5. Marine Corps TM 11240-14/3B, Standard Licensing Procedures for Operators of Military Motor Vehicles. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

Guidelines for examinations for interstate driving and any driver covered by Federal Motor Carrier Safety regulations, 49 CFR 391.41-49, Subpart E, are contained in Program #706.

713 NAVAL CRIMINAL INVESTIGATIVE SERVICE

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BY AGE | NO |
| MAJOR ILLNESS OR INJURY | | YES | BY AGE | NO |
| HOSPITALIZATION OR SURGERY | | YES | BY AGE | NO |
| CANCER | | YES | BY AGE | NO |
| BACK INJURY | | YES | BY AGE | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BY AGE | NO |
| HAVE YOU EVER SMOKED | | YES | BY AGE | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BY AGE | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BY AGE | NO |
| MEDICATION ALLERGIES | | YES | BY AGE | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BY AGE | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE OR STROKE | | YES | BY AGE | NO |
| TUBERCULOSIS | | YES | BY AGE | NO |
| COMMUNICABLE DISEASE | | YES | BY AGE | NO |
| NERVOUS STOMACH OR ULCER | | YES | BY AGE | NO |
| LOSS OR CHANGE IN HEARING | | YES | BY AGE | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BY AGE | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BY AGE | NO |
| PERMANENT DEFECT FROM ILLNESS, DISEASE OR INJURY | | YES | NO | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | BY AGE | NO |
| LABORATORY- | | | | |
| HEMATOLOGY: | | | | |
| COMPLETE BLOOD COUNT (HGB, HCT, WBC, MCV, MCH, MCHC) | | YES | BY AGE | NO |
| SERUM CHEMISTRY: | | | | |
| BASIC PROFILE TO INCLUDE: | | | | |
| BUN, CREATININE, URIC ACID, CALCIUM, TOT. BILI., ALK. PHOS, SGOT (AST) | | YES | BY AGE | NO |
| LIVER PROFILE TO INCLUDE: | | | | |
| SGOT (AST), TOT. BILI., ALK. PHOS | | YES | BY AGE | NO |
| CHOLESTEROL | | YES | BY AGE | NO |
| TRIGLYCERIDES | | YES | BY AGE | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | BY AGE | NO |
| CARDIOLOGY- | | | | |
| ELECTROCARDIOGRAM | | YES | *** | NO |
| AUDIOLOGY- | | | | |
| AUDIOGRAM | | YES | BY AGE | NO |

| EXAM ELEMENT: | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| RADIOLOGY | | | | |
| CHEST X-RAY (PA) | | YES | NO | NO |
| OPTOMETRY- | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BY AGE | NO |
| COLOR VISION | | YES | BY AGE | NO |
| DEPTH PERCEPTION | | YES | BY AGE | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BY AGE | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BY AGE | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BY AGE | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BY AGE | NO |
| CERTIFICATIONS PERFORMED IAW: | | | | |
| NCIS MANUAL FOR ADMINISTRATION | | YES | BY AGE | NO |
| REVIEW OF FUNCTIONAL/ENVIRONMENTAL REQUIREMENTS OF SF 78 | | YES | BY AGE | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BY AGE | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BY AGE | NO |
| RECOMMENDATIONS: | | YES | BY AGE | NO |

PROGRAM DESCRIPTION:

***The EKG is given every 5 years beginning at age 35. REFERENCES: (OTHER); 1. NCIS Administrative Manual, NCIS-1, Chapter 13; 2. OSHA Standard 1910.1030. PROGRAM REVIEWED 1/98.

PROVIDER COMMENTS:

OSHA Regulation 1910.1030 considers public safety workers, including both policemen and firefighters at risk for exposure to bloodborne pathogens.

This risk is not universal since duties of public safety workers vary greatly between departments and locations. The purpose of the requirement for assessment of hepatitis B immune status is to determine for the individual the extent of potential exposure. Those who are felt to be at significant risk may be placed in Program 178, Blood and/or Body Fluids.

Weight certification is required for NCIS agents. Weight certification is accomplished by completing the weight range chart (addendum 2, NCIS-1, Chapter 13) provided with the SF 78 at each examination and annually.

PC Matrix is an acceptable form for this examination. Original forms are submitted for headquarters review. A copy of the examination should be kept in a health record. Certificate of Medical Examination, SF 78, is used for replacement examinations.

PROGRAM FREQUENCY

| Age | Frequency |
|--------------------|------------|
| Up to 37 years | Tri-ennial |
| Age 38 to 40 years | Bi-ennial |
| Age 41 and over | Annual |

714 POLICE/GUARD SECURITY

PROGRAM FREQUENCY: BY AGE

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BY AGE | NO |
| MAJOR ILLNESS OR INJURY | | YES | BY AGE | NO |
| HOSPITALIZATION OR SURGERY | | YES | BY AGE | NO |
| CANCER | | YES | BY AGE | NO |
| BACK INJURY | | YES | BY AGE | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BY AGE | NO |
| HAVE YOU EVER SMOKED | | YES | BY AGE | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BY AGE | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BY AGE | NO |
| MEDICATION ALLERGIES | | YES | BY AGE | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BY AGE | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | BY AGE | NO |
| CHANGE OR LOSS OF VISION | | YES | BY AGE | NO |
| LOSS OR CHANGE IN HEARING | | YES | BY AGE | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BY AGE | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BY AGE | NO |
| SHORTNESS OF BREATH | | YES | BY AGE | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BY AGE | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | BY AGE | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | BY AGE | NO |
| THYROID DISEASE (HEAT OR COLD INTOLERANCE) | | YES | BY AGE | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | BY AGE | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BY AGE | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | BY AGE | NO |
| PERSONALITY CHANGE | | YES | BY AGE | NO |
| WORK HISTORY: | | | | |
| EXPOSURE TO POTENTIALLY INFECTIOUS BODY FLUIDS | | YES | BY AGE | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | BY AGE | NO |
| LABORATORY- | | | | |
| SERUM CHEMISTRY: | | | | |
| BASIC PROFILE TO INCLUDE: | | | | |
| BUN, CREATININE, URIC ACID, CALCIUM, | | YES | BY AGE | NO |
| TOTAL BILIRUBIN, ALK. PHOS., SGOT (AST) | | | | |
| BASELINE LIPID PROFILE | | YES | NO | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS WITH MICROSCOPIC | | YES | BY AGE | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | YES | * | NO |
| CARDIOLOGY: | | | | |
| BASELINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | BY AGE | NO |
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BY AGE | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BY AGE | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BY AGE | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | BY AGE | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | BY AGE | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | BY AGE | NO |
| CARDIOVASCULAR SYSTEM | | YES | BY AGE | NO |
| EYES | | YES | BY AGE | NO |
| RESPIRATORY SYSTEM | | YES | BY AGE | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | BY AGE | NO |
| SKIN-WITH REGARD TO MALIGNANT & PRE-MALIGNANT COND | | YES | BY AGE | NO |
| THYROID | | YES | BY AGE | NO |
| METABOLIC DISTURBANCE (FEVER, TACHYCARDIA) | | YES | BY AGE | NO |
| OVERALL PHYSICAL FITNESS | | YES | BY AGE | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BY AGE | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BY AGE | NO |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | BY AGE | NO |
| IS HEPATITIS B SERIES COMPLETE OR PRIOR INFECTION DOCUMENTED? | | YES | BY AGE | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BY AGE | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BY AGE | NO |
| RECOMMENDATIONS: | | YES | BY AGE | NO |

PROGRAM DESCRIPTION:

*EKG/Lipid profile should be done once after age 40. REFERENCES:
(OTHER); 1. OSHA Standard 1910.1030; 2. 5 CFR 930; 3.
X-118 Series GS-083.

Web sites:

OPM Qualification Standards for General Schedule Positions.
<http://www.opm.gov/qualifications/sec-iv/b/qs0000/0083.htm>
<http://www.opm.gov/qualifications.sec-iv/b/qs0000/0085.htm>

PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

OSHA Regulation considers public safety workers, including both policemen and firefighters, at risk for exposure to bloodborne pathogens. This risk is not universal since duties of public safety workers vary greatly between departments and locations. The purpose of the requirement for assessment of hepatitis B immune status is to determine for the individual the extent of potential exposure. Those who are felt to be at significant risk may be placed in Program 178, Blood and/or Body Fluids.

Local activities may have more stringent examination and frequency requirements. If local requirements are more stringent, the medical clinic should keep a copy of written requirements for additional tests.

Tetanus immunization should be kept current.

PROGRAM FREQUENCY

| Age | Frequency |
|----------------|------------------|
| Up to 34 years | Every five years |
| 35 to 44 years | Bi-ennial |
| 45+ years | Annual |

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716 RESPIRATOR USER CERTIFICATION EXAM

PROGRAM FREQUENCY: BY AGE

OSHA STANDARD 29 CFR 1910.134

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BY AGE | NO |
| MAJOR ILLNESS OR INJURY | | YES | BY AGE | NO |
| HOSPITALIZATION OR SURGERY | | YES | BY AGE | NO |
| CANCER | | YES | BY AGE | NO |
| BACK INJURY | | YES | BY AGE | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BY AGE | NO |
| HAVE YOU EVER SMOKED | | YES | BY AGE | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BY AGE | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BY AGE | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BY AGE | NO |
| MEDICATION ALLERGIES | | YES | BY AGE | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BY AGE | NO |
| ALLERGIES (ASTHMA, HAY FEVER, ECZEMA) | | YES | BY AGE | NO |
| SKIN DISEASE | | YES | BY AGE | NO |
| LUNG/RESP DISEASE (EX: COPD, BRONCHITIS, PNEUMONITIS) | | YES | BY AGE | NO |
| WHEEZING | | YES | BY AGE | NO |
| TUBERCULOSIS | | YES | BY AGE | NO |
| USE OF EYE GLASSES | | YES | BY AGE | NO |
| CONTACT LENS USE | | YES | BY AGE | NO |
| LOSS OF VISION IN EITHER EYE | | YES | BY AGE | NO |
| COLOR BLINDNESS | | YES | BY AGE | NO |
| EYE IRRITATION | | YES | BY AGE | NO |
| ANY OTHER EYE OR VISION PROBLEM | | YES | BY AGE | NO |
| INABILTIY TO SMELL | | YES | BY AGE | NO |
| ANY INJURY TO YOUR EARS | | YES | BY AGE | NO |
| RUPTURED EAR DRUM | | YES | BY AGE | NO |
| LOSS OR CHANGE IN HEARING | | YES | BY AGE | NO |
| A NEED TO WEAR A HEARING AID | | YES | BY AGE | NO |
| ANY OTHER HEARING OR EAR PROBLEM | | YES | BY AGE | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BY AGE | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BY AGE | NO |
| FREQUENT PAIN OR TIGHTNESS IN YOUR CHEST | | YES | BY AGE | NO |
| SWELLING IN LEGS OR FEET (NOT CAUSED BY WALKING) | | YES | BY AGE | NO |
| ANY OTHER HEART PROBLEM YOU'VE BEEN TOLD ABOUT | | YES | BY AGE | NO |
| SHORTNESS OF BREATH | | YES | BY AGE | NO |
| COUGH (DRY OR PRODUCTIVE) | | YES | BY AGE | NO |
| CURRENT PREGNANCY (FEMALES ONLY) | | YES | BY AGE | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BY AGE | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | BY AGE | NO |

| | | | |
|--|-----|--------|----|
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | YES | BY AGE | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | YES | BY AGE | NO |
| MENTAL/EMOTIONAL ILLNESS | YES | BY AGE | NO |
| CLAUSTROPHOBIA | YES | BY AGE | NO |
| MUSCLE OR JOINT PROBLEMS | YES | BY AGE | NO |
| ANY OTHER MUSCLE OR SKELETAL PROBLEM THAT MAY INTERFERE WITH USING A RESPIRATOR | YES | BY AGE | NO |

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| WORK HISTORY OF: | | | | |
| PRIOR RESPIRATOR USE | | YES | BY AGE | NO |
| IF YES, ANY PROBLEMS THAT INTERFERED WITH USE | | YES | BY AGE | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | BY AGE | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BY AGE | NO |
| HEIGHT | | YES | BY AGE | NO |
| WEIGHT | | YES | BY AGE | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CARDIOVASCULAR SYSTEM | | YES | BY AGE | NO |
| EYES | | YES | BY AGE | NO |
| RESPIRATORY SYSTEM | | YES | BY AGE | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | BY AGE | NO |
| SKIN (RASH, EROSION, ULCER, PIGMENT, ECZEMA, ETC) | | YES | BY AGE | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BY AGE | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BY AGE | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BY AGE | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BY AGE | NO |
| RECOMMENDATIONS: | | YES | BY AGE | NO |

PROGRAM DESCRIPTION:

REFERENCES: (OTHER); 1. OSHA Standard 29 CFR 1910.134; 2. ANSI Standard Z88.2-1980, Practices for Respiratory Protection; 3. NIOSH Respirator Decision Logic, U.S. Department of Health and Human Services, DHHS (NIOSH) Pub. No. 87-108; 4. OPNAVINST 5100.23E, Chapter 15; 5. OPNAVINST 5100.19D, Chapter B6; 5. OPNAVINST 6000.1A MANAGEMENT OF PREGNANT SERVICEWOMEN. 7. American Thoracic Society, Respiratory Protection Guidelines, American Journal of Respiratory Critical Care Medicine, Vol. 154. pp 1153-1165, 1996; 8. **Navy Environmental Health Center (NEHC) A Guide for Respiratory Protection Program Managers, NEHC TM-96-1, 1996.** PROGRAM REVIEWED 3/2000

PROVIDER COMMENTS:

Spirometry and chest x-rays are not routinely required. They are not recommended solely as data to determine if a respirator should be worn, but may be medically indicated in some cases when additional information is needed to determine fitness. (2) Workers who wear respirators may receive spirometry and chest x-rays as part of surveillance requirements for specific hazards.

PROGRAM FREQUENCY

| Age | Frequency |
|----------------|------------------|
| 15 to 34 years | Every five years |
| 35 to 44 years | Every two years |

| | |
|-----------|--------|
| 45+ years | Annual |
|-----------|--------|

717 SUBMARINE DUTY

PROGRAM FREQUENCY: PREPLACEMENT AND ALL SUBSEQUENT COMPLETE EXAMS
FOR OTHER REASONS

PROGRAM DESCRIPTION:

This program is designated solely to provide guidance on scheduling frequency. The program requires an exam for pre-placement. Thereafter, on all subsequent and periodic physical examinations for any purpose, submarine duty should be included as an additional purpose and a qualification determination made. Tests and forms required are promulgated in Manual of the Medical Department, NAVMED P-117, Chapter 15, Article 15-69, Change 107. For civilian personnel embarked on submarines consult SECNAVINST 6420.1D, 7 April 1986. PROGRAM REVISED 10/97.

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702 WASTEWATER/SEWAGE WORKER

PROGRAM FREQUENCY: PENTA-ENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | PENTA-E | NO |
| MAJOR ILLNESS OR INJURY | | YES | PENTA-E | NO |
| HOSPITALIZATION OR SURGERY | | YES | PENTA-E | NO |
| CANCER | | YES | PENTA-E | NO |
| BACK INJURY | | YES | PENTA-E | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | PENTA-E | NO |
| HAVE YOU EVER SMOKED | | YES | PENTA-E | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | PENTA-E | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | PENTA-E | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | PENTA-E | NO |
| MEDICATION ALLERGIES | | YES | PENTA-E | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | PENTA-E | NO |
| SKIN DISEASE | | YES | PENTA-E | NO |
| COMMENTS ON MEDICAL HISTORY: | | YES | PENTA-E | NO |
| QUALIFICATIONS: | | | | |
| CURRENT IMMUNIZATIONS | | YES | PENTA-E | NO |
| CERTIFICATIONS PERFORMED IAW: | | | | |
| NAVMED P-5010 | | YES | PENTA-E | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | PENTA-E | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | PENTA-E | NO |
| RECOMMENDATIONS: | | YES | PENTA-E | NO |

PROGRAM DESCRIPTION:

The immunization status of wastewater/sewage worker should be reviewed every five years. Tetanus-diphtheria vaccine should be updated according to current recommendations. Polio vaccine is administered to individuals not fully immunized. Specific guidance is contained in these references: (OTHER); 1. NAVMED P-5010, Manual of Naval Preventive Medicine; 2. NAVMEDCOMINST 6230.3, Immunizations and Chemoprophylaxis. PROGRAM REVISED 10/97.

PROVIDER COMMENTS:

For those applicants without a written record of polio immunization status, attendance at public school in the U.S. is adequate for presumption of prior oral polio vaccine administration.

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704 WEIGHT HANDLING EQUIPMENT (MANAGEMENT OF)

OCCUPATIONS IN THIS PROGRAM: CRANE OPERATORS
 *RAILROAD EQUIPMENT OPERATORS
 *CONDUCTORS
 *BRAKEMEN
 *RIGGERS
 *CLIMBERS

PROGRAM FREQUENCY: BI-ENNIAL

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|--|--------------------|--------------|--------------|--------------|
| MEDICAL HISTORY: HAVE YOU EVER HAD? | | | | |
| PERSONAL HISTORY OF: | | | | |
| IS YOUR WORK EXPOSURE HISTORY CURRENT (OPNAV 5100/15) | | YES | BI-ENN | NO |
| MAJOR ILLNESS OR INJURY | | YES | BI-ENN | NO |
| HOSPITALIZATION OR SURGERY | | YES | BI-ENN | NO |
| CANCER | | YES | BI-ENN | NO |
| BACK INJURY | | YES | BI-ENN | NO |
| DO YOU DRINK 6 OR MORE DRINKS PER WEEK (BEER, WINE, LIQUOR) | | YES | BI-ENN | NO |
| HAVE YOU EVER SMOKED | | YES | BI-ENN | NO |
| DO YOU CURRENTLY SMOKE (PACKS/DAY) | | YES | BI-ENN | NO |
| HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE | | YES | BI-ENN | NO |
| CURRENT MEDICATION USE (PRESCRIPTION OR OTC) | | YES | BI-ENN | NO |
| MEDICATION ALLERGIES | | YES | BI-ENN | NO |
| ANY REPRODUCTIVE HEALTH CONCERNS | | YES | BI-ENN | NO |
| LUNG/RESP DISEASE (EX:COPD, BRONCHITIS, PNEUMONITIS) | | YES | BI-ENN | NO |
| SYPHILIS OR GONORRHEA | | YES | BI-ENN | NO |
| HEADACHE, DIZZINESS, LIGHT-HEADEDNESS, WEAKNESS | | YES | BI-ENN | NO |
| NERVOUS STOMACH OR ULCER | | YES | BI-ENN | NO |
| HEAD INJURY | | YES | BI-ENN | NO |
| CHANGE OR LOSS OF VISION | | YES | BI-ENN | NO |
| LOSS OR CHANGE IN HEARING | | YES | BI-ENN | NO |
| CHEST PAIN, ANGINA, HEART ATTACK | | YES | BI-ENN | NO |
| REPEATED EPISODES OF LOSS OF OR NEAR LOSS OF CONSCIOUSNESS | | YES | BI-ENN | NO |
| KIDNEY DISEASE | | YES | BI-ENN | NO |
| EPILEPSY (SEIZURE DISORDER) | | YES | BI-ENN | NO |
| PROBLEMS WITH BALANCE AND COORDINATION | | YES | BI-ENN | NO |
| PROBLEMS WITH NUMBNESS, TINGLING, WEAKNESS IN HANDS OR FEET | | YES | BI-ENN | NO |
| MIGRAINE HEADACHE | | YES | BI-ENN | NO |
| DIABETES OR OTHER ENDOCRINE GLAND DISORDER | | YES | BI-ENN | NO |
| MENTAL/EMOTIONAL ILLNESS | | YES | BI-ENN | NO |
| DEPRESSION, DIFF CONCENTRATING, EXCESSIVE ANXIETY | | YES | BI-ENN | NO |
| TREATMENT FOR DRUG OR ALCOHOL USE | | YES | BI-ENN | NO |
| PERSONALITY CHANGE | | YES | BI-ENN | NO |
| MUSCLE OR JOINT PROBLEMS | | YES | BI-ENN | NO |
| PERMANENT DEFECT FROM ILLNESS, DISEASE OR INJURY | | YES | BI-ENN | NO |
| FAMILY HISTORY OF: | | | | |

HEART DISEASE, HIGH BLOOD PRESSURE, OR STROKE
COMMENTS ON MEDICAL HISTORY:

YES BI-ENN NO
YES BI-ENN NO

| EXAM ELEMENT | ELEMENT GIVEN FOR: | BASE LINE | PERI ODIC | TERM EXAM |
|---|--------------------|--------------|--------------|--------------|
| LABORATORY: | | | | |
| SERUM CHEMISTRY: | | | | |
| BASILINE LIPID PROFILE | | YES | NO | NO |
| URINALYSIS: | | | | |
| ROUTINE: | | | | |
| URINALYSIS | | YES | BI-ENN | NO |
| ADDITIONAL LAB TESTS: | | | | |
| EKG/LIPID PROFILE DONE ONCE PAST AGE 40? | | YES | * | NO |
| CARDIOLOGY: | | | | |
| BASILINE ELECTROCARDIOGRAM | | YES | NO | NO |
| AUDIOLOGY: | | | | |
| AUDIOGRAM | | YES | BI-ENN | NO |
| OPTOMETRY: | | | | |
| VISION SCREEN (VISUAL ACUITY) | | YES | BI-ENN | NO |
| COLOR VISION | | YES | BI-ENN | NO |
| VISUAL FIELDS | | YES | BI-ENN | NO |
| COMMENTS ON LABORATORY RESULTS: | | YES | BI-ENN | NO |
| PHYSICAL EXAMINATION: | | | | |
| VITAL SIGNS | | YES | BI-ENN | NO |
| SPECIAL ATTENTION IN EXAMINATION TO: | | | | |
| CENTRAL NERVOUS SYSTEM | | YES | BI-ENN | NO |
| PERIPHERAL NERVOUS SYSTEM (STRENGTH, SENSATION, DTR) | | YES | BI-ENN | NO |
| BACK & MUSCULOSKELETAL SYSTEM | | YES | BI-ENN | NO |
| EXTREMITIES | | YES | BI-ENN | NO |
| CARDIOVASCULAR SYSTEM | | YES | BI-ENN | NO |
| PERIPHERAL VASCULAR SYSTEM (RAYNAUD'S) | | YES | BI-ENN | NO |
| EYES | | YES | BI-ENN | NO |
| ABDOMEN | | YES | BI-ENN | NO |
| GENITOURINARY TRACT | | YES | BI-ENN | NO |
| RESPIRATORY SYSTEM | | YES | BI-ENN | NO |
| EARS (TYMPANIC MEMBRANES) | | YES | BI-ENN | NO |
| OVERALL PHYSICAL FITNESS | | YES | BI-ENN | NO |
| OTHER APPROPRIATE EXAMINATION (SPECIFY) | | YES | BI-ENN | NO |
| COMMENTS ON PHYSICAL EXAMINATION: | | YES | BI-ENN | NO |
| IS SURVEILLANCE/PPE CONSISTENT WITH EXPOSURES LISTED BELOW | | YES | BI-ENN | NO |
| ARE ANY ABNORMALITIES RELATED TO EXPOSURES/OCCUPATIONS LISTED BELOW | | YES | BI-ENN | NO |
| RECOMMENDATIONS: | | YES | BI-ENN | NO |

PROGRAM DESCRIPTION:

REFERENCES: 1. NAVFAC P-307, 2. 49 CFR 391.41-49.

Military personnel are exempt from the requirements of the Commercial Motor Vehicle Safety Act of 1986, and, in particular, from the requirements of 49 CFR Part 383 regarding physical examination requirements in order to obtain a commercial drivers license. The scope of the periodic examination is considered sufficient to meet the requirements. Waivers for previously qualified operators are authorized by activity Commanding Officers after appropriate medical and management review - see reference 1.

PROVIDER COMMENTS:

*Waivers pertain only to crane operators.

APPENDIX A
Listing of Tests

| Test | Test Name |
|------|---|
| 1000 | MEDICAL HISTORY: HAVE YOU EVER HAD? |
| 1100 | Personal History of: |
| 1105 | Is Your Work Exposure History Current (OPNAV 5100/15) |
| 1107 | Since last SF 88/93 physical have you had? |
| 1110 | Major Illness or Injury |
| 1120 | Hospitalization or Surgery |
| 1130 | Cancer |
| 1140 | Back Injury |
| 1150 | Do You Drink 6 or More Drinks per week? (beer, wine, liquor) |
| 1155 | Have You Ever Smoked? |
| 1160 | Do You Currently Smoke? (packs/day) |
| 1161 | How Many Years Have or Did You Smoke? |
| 1162 | None _____ Number Years _____ |
| 1163 | Greatest Number of Packs Per Day Smoked _____ |
| 1164 | Former Smokers - Time Since Quitting: Years _____ |
| 1165 | Do You Use Smokeless Tobacco? |
| 1169 | Average Packs Per Day Smoked |
| 1170 | Heart Disease, High Blood Pressure or Stroke |
| 1180 | Current Medication Use (Prescription or OTC) |
| 1182 | Medication Allergies |
| 1190 | Use of Seat Belts (Always, Mostly, Some, None) |
| 1192 | Any Reproductive Health Concern |
| 1200 | Blood Diseases (Anemia) |
| 1210 | Blood Transfusions |
| 1220 | Allergies (Asthma, Hay Fever, Eczema) |
| 1225 | Have You Ever Been Evaluated for Latex Allergy? |
| 1230 | Skin Disease |
| 1231 | Recurrent Skin Rash |
| 1235 | Precancerous Lesions |
| 1240 | Heat Injury (Cramps, Exhaustion, Stroke) |
| 1250 | Peripheral Vascular Disease |
| 1260 | Hepatitis or Jaundice |
| 1270 | Radiation Therapy or Radiopharmaceutical Treatment |
| 1280 | Lung/Resp Disease (Ex:COPD, Bronchitis, Pneumonitis) |
| 1285 | Wheezing |
| 1290 | Tuberculosis |
| 1300 | Infectious Disease |
| 1302 | History of Chicken Pox |
| 1304 | Communicable Disease |
| 1305 | Syphilis or gonorrhea |
| 1310 | Treatment with Steroids or Cancer (Cytotoxic) Drugs |
| 1315 | Decreased Immunity |
| 1320 | Use of Nitrate Medication (Nitroglycerine) |
| 1330 | Use of Anticholinergic Drugs (Donnatal) |
| 1340 | Use of Barbiturates |

| Test | Test Name |
|------|--|
| 1400 | Headache, Dizziness, Light-headedness, Weakness |
| 1410 | Nausea or Vomiting |
| 1415 | Nervous Stomach or Ulcer |
| 1420 | Exposure (Acclimatization) to Heat |
| 1421 | Cold Injury (Frostbite, Chill, Trench Foot, Hypothermia) |
| 1430 | Weight Loss |
| 1440 | Head Injury |
| 1450 | Tremors |
| 1455 | Use of Eye Glasses |
| 1460 | Change or Loss of Vision |
| 1461 | Contact Lens Use |
| 1462 | Lens Surgery |
| 1463 | Photosensitizing Medications |
| 1464 | Unusual Sensitivity to Sunlight |
| 1465 | Loss of Vision in Either Eye |
| 1466 | Color Blindness |
| 1470 | Cataracts |
| 1480 | Eye Irritation |
| 1490 | Eye Injury |
| 1500 | Glaucoma |
| 1505 | Any Other Eye or Vision Problem |
| 1510 | Perforation of Nasal Septum |
| 1512 | Sinus/Nasal Symptoms |
| 1513 | Rhinitis |
| 1514 | Nose Bleeds |
| 1515 | Inability to Smell |
| 1520 | Tooth or Gum Disease |
| 1530 | Ringing in the Ear (Tinnitus) |
| 1534 | Any Injury to Your Ears |
| 1535 | Ruptured Ear Drum |
| 1540 | Loss or Change in Hearing |
| 1541 | A Need to wear a Hearing Aid |
| 1542 | Any Other Hearing or Ear Problem |
| 1550 | Chest Pain, Angina, Heart Attack |
| 1551 | Repeated Episodes of Loss of or Near Loss of Consciousness |
| 1555 | Frequent Pain or Tightness in Chest |
| 1557 | Swelling in Legs or Feet (Not Caused By Walking) |
| 1559 | Any Other Heart Problems You've Been Told About |
| 1560 | Coughing Up Blood (Hemoptysis) |
| 1570 | Shortness of Breath |
| 1580 | Cough (Dry or Productive) |
| 1585 | Any Finding Related to Asbestos Exposure |
| 1590 | Pneumonia |
| 1600 | Chronic Abdominal Pain, Vomiting, Other GI Symptoms |
| 1605 | Change in Frequency or Appearance of Bowel Movements |
| 1610 | Liver Disease |
| 1620 | Kidney Disease |
| 1625 | Kidney Stones |
| 1630 | Problems with Urination/Blood in Urine |
| 1635 | Protein in Urine |
| 1640 | Current Pregnancy (Self or Spouse) |
| 1645 | Current Pregnancy (Females Only) |

| | |
|------|---|
| 1646 | Infertility or miscarriage (Self or Spouse) |
| 1650 | Impotence or Sexual Dysfunction |
| 1660 | Infertility or Miscarriage (Self or Spouse) |
| 1670 | Epilepsy (Seizure Disorder) |
| 1680 | Problems with Balance & Coordination |
| 1682 | Problems with Numbness, Tingling, Weakness in Hands or Feet |
| 1690 | Migraine Headache |

| Test | Test Name |
|------|---|
| 1700 | Thyroid Disease (Heat or Cold Intolerance) |
| 1710 | Diabetes or Other Endocrine Gland Disorder |
| 1720 | Mental/Emotional Illness |
| 1730 | Depression, Difficulty Concentrating, Excessive Anxiety |
| 1732 | Treatment for Drug or Alcohol Use |
| 1740 | Personality Change |
| 1745 | Claustrophobia |
| 1750 | Vibration White Finger Disease |
| 1755 | Bone Problems (Broken Bones) |
| 1760 | Muscle or Joint Problems |
| 1763 | Any Other Muscle or Skeletal Problem That May Interfere |
| 1764 | With Using a Respirator |
| 1765 | Permanent Defect from Illness, Disease or Injury |
| 1770 | Adverse Reaction to Eating Any Vegetable or Fruit |
| 1775 | Adverse Reaction to Any Rubber/Latex Containing Product |
| 1780 | Multiple Operations or Chronic Medical Instrumentation |
| 1785 | Unexplained Hives or Symptoms of Shock |
| 1790 | Itchy Eyes, Runny Nose, Respiratory Symptoms |
| 1791 | When Using Latex Gloves |
| 2000 | Work History Of: |
| 2005 | Prior Respirator Use |
| 2007 | If Yes, Any Problems That Interfered With Use |
| 2010 | Exposure to Dusts (Coal, Blast. Grit, Sand, Nuisance) |
| 2020 | Exposure to Asbestos |
| 2021 | 10 or More Years Since First Exposure to Asbestos |
| 2030 | Exposure to Lead |
| 2040 | Exposure to Benzene |
| 2050 | Exposure to Chemotherapeutic/Antineoplastic Agents |
| 2055 | Exposure to Aerosolized Antibiotics/Antivirals |
| 2060 | Exposure to Anesthetic Gases |
| 2070 | Exposure to Ethylene Oxide |
| 2080 | Exposure to Chromium or Chromic Acid |
| 2090 | Exposure to Silica or Sand |
| 2100 | Exposure to Hydrogen Fluoride or Inorganic Fluorides |
| 2104 | 10 or More Years Since First Exposure to Arsenic |
| 2105 | 10 or More Years Since First Exposure to Vinyl Chloride |
| 2110 | Exposure to Ionizing Radiation |
| 2120 | Exposure to Non-Ionizing Radiation (Laser, IR, MW, UV) |
| 2130 | Exposure to Vibration (Segmental or Whole Body) |
| 2135 | Exposure to Excessive Noise |
| 2140 | Eye Injury |
| 2150 | Exposure to Skin Irritants |
| 2160 | Exposure to Respiratory Irritants |
| 2170 | Exposure to Carcinogens |
| 2180 | Exposure to Isocyanate Foam or Paint |
| 2190 | Sensitization to Isocyanates (TDI, MDI) |
| 2200 | Exposure to Solvents (MEK, PERC, TCE, Toluene..) |
| 2205 | Exposure to Potentially Infectious Body Fluids |
| 2210 | Exposure to Formaldehyde |
| 2215 | Exposure to Cadmium |
| 2220 | Do You Handle Organophosphate or Carbamate Pesticides |
| 2221 | Reserved |

| | |
|------|--|
| 2222 | Reserved |
| 2223 | Reserved |
| 2226 | Exposure to Methylene Chloride, |
| 2227 | Dichloromethane, Methylene Dichloride |
| 2230 | Regular Contact With Latex Gloves or Other |
| 2231 | Rubber Products |

| Test | Test Name |
|------|--|
| 2500 | Family History Of: |
| 2510 | Blood Diseases (Anemia) |
| 2520 | Genetic Disease (Include Children) |
| 2530 | Cancers (Leukemia, Tumors) |
| 2540 | Heart Disease, High Blood Pressure or Stroke |
| 2545 | Cataracts |
| 2550 | Decreased Immunity |
| 2990 | COMMENTS ON MEDICAL HISTORY |
| 3000 | LABORATORY |
| 3100 | Hematology: |
| 3110 | Complete Blood Count (HGB, HCT, WBC, MCV, MCH, MCHC) |
| 3111 | Hemoglobin (HBG) |
| 3112 | Mean Corpuscular Volume (MCV) |
| 3113 | White Blood Count (WBC) |
| 3114 | Hematocrit |
| 3120 | Differential White Blood Cell Count |
| 3125 | RBC Morphology |
| 3130 | Reticulocyte count |
| 3140 | Platelet Estimate |
| 3141 | Platelet Count |
| 3500 | Serum Chemistry: |
| 3510 | Random Serum/Plasma Glucose |
| 3511 | Fasting Blood Glucose |
| 3520 | Basic Profile to Include: |
| 3521 | BUN, Creatinine, Uric Acid, Calcium, |
| 3522 | Total Bilirubin, Alk. Phos., SGOT (AST) |
| 3530 | Liver Profile to Include: |
| 3531 | SGOT (AST), Total Bilirubin, Alk. Phos. |
| 3532 | Albumin, Alkaline Phosphatase, LDH |
| 3541 | BUN, Creatinine, Serum Electrolytes (Na, K) |
| 3545 | BUN and Creatinine |
| 3546 | Creatinine |
| 3547 | Cholesterol |
| 3548 | Cholesterol Every 5 Years |
| 3550 | SGOT (AST) |
| 3551 | SGOT (AST) Every 5 Years |
| 3560 | Phosphate |
| 3570 | Globulin |
| 3580 | Acid Phosphatase |
| 3590 | CPK |
| 3600 | Bilirubin (Direct) |
| 3608 | Baseline Lipid Profile |
| 3609 | Lipid Profile (if clinically indicated) |
| 3610 | Triglycerides |
| 3611 | Triglycerides (if clinically indicated) |
| 3620 | GGT |
| 3630 | Blood Lead and Zinc Protoporphyrin (ZPP) |
| 3631 | Blood Lead |
| 3640 | RBC Cholinesterase |
| 3641 | Plasma (or Serum) Cholinesterase |

| Test | Test Name |
|------|---|
| 3650 | Serum FSH, LH and Estrogen |
| 3660 | Blood Methemoglobin (If cyanotic) |
| 3670 | Blood Acetone |
| 3675 | Serum Total Estrogen (female) |
| 3680 | Serum Follicle Stimulating Hormone (FSH) |
| 3685 | Serum Luteinizing Hormone (LH) |
| 3690 | Cadmium in Blood |
| 4000 | Urinalysis: |
| 4100 | Routine: |
| 4110 | Urinalysis with Microscopic |
| 4120 | Urinalysis without Microscopic |
| 4200 | Urine Chemistry: |
| 4210 | Urine Total Phenol |
| 4220 | Urine Hydroquinone (If Urine is Dark Brown) |
| 4230 | Urine Mercury |
| 4250 | Urine Fluoride - Post Shift |
| 4260 | Urine 24 - Hour Protein (Quantitative) |
| 4270 | Urine P-Nitrophenol (If Darkening Observed) |
| 4280 | Blank |
| 4285 | Cadmium in Urine (CdU) |
| 4290 | Beta-2-Microglobulin (β_2 -M) in Urine |
| 4295 | Urine total Arsenic |
| 4500 | Cytology: |
| 4510 | Sputum Cytology |
| 4520 | Urine Cytology |
| 4800 | Additional Lab Tests: |
| 4810 | Stool Hemocult (Over age 40) |
| 4811 | Stool Hemocult (Required for Males) |
| 4820 | Sperm Count (Male) |
| 4830 | RPR |
| 4840 | Tuberculosis Screen |
| 4850 | Pregnancy Testing or Laboratory Testing of |
| 4851 | Fertility if Requested by Employee and Deemed |
| 4852 | Appropriate by the Physician |
| 4855 | Serum to be frozen |
| 4860 | Pressure and Oxygen Tolerance Test |
| 4870 | Whole Body Count |
| 4872 | EKG/Lipid Profile Done Once Past Age 40? |
| 5000 | Cardiology: |
| 5010 | Electrocardiogram |
| 5015 | Electrocardiogram Every 5 Years |
| 5020 | Exercise Cardiac Stress Test |
| 5025 | Electrocardiogram (if Clinically Indicated) |
| 5030 | Baseline Electrocardiogram |
| 5200 | Audiology: |
| 5210 | Audiogram |
| 5220 | Audiogram - 15 hr/40 hr Noise Free |
| 5225 | Follow-up Audiogram |
| 5230 | Tympanogram Status |
| 5400 | Radiology: |

| Test | Test Name |
|------|--|
| 5410 | Chest X-ray (PA) |
| 5411 | Chest X-ray (PA) Every 5 Years |
| 5420 | Chest X-ray (Asbestos) |
| 5421 | Chest X-ray (Asbestos) Every 5 Years |
| 5422 | Chest X-ray (Asbestos) Every 2 Years |
| 5423 | Chest X-ray (Asbestos) Age Dependent |
| 5424 | Chest X-ray (PA) (frequency determined by examining physician) |
| 5425 | Using Form - NAVMED 6260/7 |
| 5426 | Reserved |
| 5428 | Reserved |
| 5430 | Reserved |
| 5431 | Reserved |
| 5600 | Spirometry: |
| 5605 | Ethnic Background |
| 5610 | Spirometry (FVC, FEV ₁ , FEV ₁ /FVC) |
| 5611 | Forced Vital Capacity (FVC) |
| 5612 | Forced Expiratory Volume in One Second (FEV ₁) |
| 5800 | Optometry: |
| 5805 | Date of Most Recent Refraction - When Applicable |
| 5807 | Current Refraction Prescription - When Applicable |
| 5810 | Vision Screen (Visual Acuity) |
| 5811 | Reserved |
| 5812 | Reserved |
| 5813 | Reserved |
| 5814 | Reserved |
| 5815 | Reserved |
| 5816 | Reserved |
| 5817 | Reserved |
| 5818 | Reserved |
| 5819 | Color Vision |
| 5820 | Depth Perception |
| 5830 | Visual Fields |
| 5835 | Contrast Sensitivity |
| 5836 | External Ocular and Fundus Examination |
| 5840 | Ophthalmologic Exam |
| 5850 | Slit Lamp Exam |
| 5860 | Tonometry |
| 5861 | Tonometry Over Age 40 (if clinically indicated) |
| 5865 | Near Vision (Welders Only) |
| 5870 | Peripheral Vision |
| 5900 | Dental: |
| 5910 | Dental Exam |
| 5920 | Other Tests Deemed Appropriate by the Physician |
| 5990 | COMMENTS ON LABORATORY RESULTS: |
| 6000 | Physical Examination: |
| 6005 | Required When Positive History Questions are Obtained: |
| 6010 | Vital Signs |
| 6011 | Height |
| 6012 | Weight |
| 6013 | Diastolic Blood Pressure |
| 6100 | Special Attention in Examination to: |
| 6110 | Central Nervous System |

| Test | Test Name |
|------|---|
| 6120 | Peripheral Nervous System (Strength, Sensation, DTR) |
| 6130 | Back and Musculoskeletal System |
| 6135 | Extremities |
| 6140 | Cardiovascular System |
| 6150 | Peripheral Vascular System (Raynaud's) |
| 6155 | Varicose Veins of Lower Extremities |
| 6160 | Cyanosis |
| 6165 | Clubbing |
| 6170 | Eyes |
| 6175 | Eyes |
| 6180 | Gums (e.g., Lead Lines?) |
| 6190 | Teeth (Acid Erosion) |
| 6200 | Abdomen |
| 6205 | Breast Examination (Female) |
| 6210 | Genitourinary Tract |
| 6215 | GU (including Testicle Size) |
| 6220 | Testes (Male) |
| 6230 | Kidney |
| 6240 | Liver |
| 6245 | Spleen |
| 6250 | Mucous Membranes |
| 6260 | Nasal Mucosa (Septal Perforation) |
| 6262 | Sinuses |
| 6265 | Nasal Mucosa |
| 6270 | Respiratory System |
| 6280 | Ears (Tympanic Membranes) |
| 6290 | Skin (Rash, Erosion, Ulcer, Pigment, Eczema, Etc.) |
| 6300 | Skin, With Regard to Malignant and Pre-malignant Conditions |
| 6310 | Thyroid |
| 6320 | Metabolic Disturbance (Fever, Tachycardia) |
| 6340 | Immunocompetence (Lymphatic System) |
| 6350 | Obesity |
| 6360 | Overall Physical Fitness |
| 6365 | Rectal Examination |
| 6366 | Hemorrhoids |
| 6367 | Prostate Palpation or Other At-Least-As-Effective |
| 6368 | Diagnostic Test(s) for Males Over 40 Years Old |
| 6370 | Body Habitus |
| 6900 | Other Appropriate Examination (Specify): |
| 6990 | COMMENTS ON PHYSICAL EXAMINATION: |
| 7100 | Qualifications: |
| 7110 | Respiratory Protection - Ensure Worker is Enrolled in RPP |
| 7120 | Sight Conservation |
| 7130 | Current Immunizations |
| 7140 | Measles/Mumps/Rubella Immune Status |
| 7145 | Measles Immune Status |
| 7147 | Varicella Immune Status |
| 7150 | Is Hepatitis B Vaccine Series Complete or |

| Test | Test Name |
|------|---|
| 7151 | Prior Infection Documented? |
| 7500 | Certifications Performed IAW: |
| 7510 | NAVMED P117, Chapter 15 |
| 7520 | NAVMED P-5010 |
| 7530 | NAVSEA OP-2239 |
| 7540 | FPM TS 146 |
| 7560 | NAVMED P-5055 |
| 7570 | NAVFAC P-306 |
| 7575 | FPM 930 |
| 7576 | ANSI A136.1 OF 1986 |
| 7577 | OPNAVINST 5100.23B CHAPTER 22 |
| 7580 | NCIS Manual for Administration |
| 7596 | Asbestos History Form 2493-1 Completed |
| 7597 | Asbestos History Form 2493-2 Completed |
| 7700 | Update SF 93 as Applicable |
| 7710 | Review Functional/Environmental Requirements of SF 78 |
| 7720 | Complete NAVMED 6260/5, Rev (5/90), Periodic Health Evaluation |
| 7730 | Review DD 2493-1, Initial Exam or DD 2493-2, Periodic Exam |
| 8000 | Hearing Conservation: |
| 8100 | Has Baseline Been Reestablished Due to PTS? |
| 8110 | High Frequency Average Exceeds 45 dB Bilaterally? |
| 8120 | Ear Plugs Fitted and Issued |
| 8130 | Refer to Audiologist or Physician |
| 9000 | Special Notations: |
| 9010 | Substance(s) Known Human Carcinogen |
| 9020 | Substance(s) Suspected Human Carcinogen |
| 9030 | Substance(s) Known Mutagenic or Fetotoxic Effects |
| 9040 | Substance(s) Suspected Human Mutagenic/Fetotoxic Effects |
| 9050 | Counseling Regarding Combined Effects of Smoking |
| 9051 | and Asbestos Exposure |
| 9060 | Assess Knowledge of Universal Blood/Body Fluid Precautions |
| 9065 | Physician's Written Opinion Required |
| 9067 | Written Notification of Permanent Threshold Shift Required |
| 9070 | Physician's Written Opinion not Required |
| 9075 | DD 2493-1 Initial Exam or DD 2493-2 Periodic Exam not Required |
| 9970 | Is surveillance/PPE Consistent With Exposures Listed Below |
| 9975 | ASSESSMENT: |
| 9980 | Are Any Abnormalities Related To Exposures/Occupations Listed Below |
| 9985 | SF 88/93 Reviewed and Found Complete |
| 9990 | RECOMMENDATIONS: |

APPENDIX B

Reviews and Revisions

The following list of stressors was reviewed and not included in the Medical Matrix. Any questions or concerns should be addressed to Committee members or Occupational Medicine staff at NAVENVIRHLTHCEN. The list will be reviewed periodically and updated.

| Stressor | Date reviewed |
|---|---------------|
| Acetone | Dec 1989 |
| Asphalt Fumes | Dec 1989 |
| Benzo(a) pyrine | Dec 1989 |
| Crysene | Dec 1989 |
| Fungicides | Nov 1990 |
| N-heptane | Dec 1989 |
| N-Hexane | Dec 1989 |
| Petroleum distillates (kerosene, Stoddard Solvent, Naphtha, Mineral Spirits | Dec 1989 |
| Silver | Dec 1989 |

On further review for chronic effects and evaluation of usage, these programs were removed from the Medical Matrix. Solvents were included in Program #603, Mixed Solvents, and program #157 was combined with an existing program. The program numbers will be retained for historical purposes.

| Program Number | Stressor | Date Reviewed |
|----------------|--|---------------|
| 107 | Ammonia | Aug 1990 |
| 119 | Benzoyl Peroxide | Aug 1990 |
| 120 | Benzyl Chloride | Aug 1990 |
| 123 | 2-Butanone (Methyl Ethyl Ketone | Aug 1990 |
| 129 | Chlorine | Aug 1990 |
| 136 | Cyclohexanone | Aug 1990 |
| 144 | Ethyl Butyl Ketone | Aug 1990 |
| 147 | Ethylene Glycol | Aug 1990 |
| 153 | Glycol Ethers (other than ethoxy and methoxy ethanol | Aug 1990 |
| 212 | N-Heptane | Aug 1990 |
| 154 | Hexone | Aug 1990 |
| 157 | Hydrogen Fluoride (Combined with #150) | Aug 1990 |
| 160 | Isopropyl Alcohol | Aug 1990 |
| 164 | Methyl (N-Amyl) Ketone | Aug 1990 |
| 165 | Methyl Alcohol | Aug 1990 |
| 169 | Morpholine | Aug 1990 |
| 101 | Nuisance Dusts | Aug 1990 |
| 181 | 2-Pentanone (Methyl Propyl Ketone) | Aug 1990 |

APPENDIX B (con't)

| Program Number Reviewed | Stressor | Date |
|----------------------------|--------------------------------------|----------|
| 182 | Phenol | Aug 1990 |
| 183 | Phosgene | Aug 1990 |
| 504 | Radiation- Infrared, UV and visible | Apr 1995 |
| 507 | Radiation-Radiofrequency & Microwave | Apr 1995 |
| 188 | Sodium Hydroxide | Aug 1990 |
| 193 | TMPP (Trimethylolpropane Phosphate | Aug 1990 |
| 199 | Triorthocresylphosphate (TOCP) | Aug 1990 |
| 200 | Tungsten (merged with #208) | Feb 1994 |
| 201 | Vanadium | Feb 1994 |
| 202 | Vinyl Acetate | Aug 1990 |
| 206 | Zinc Oxide | Aug 1990 |

The following programs were moved from the chemical stressors section to the mixed exposures section.

| | | |
|-----|-------------------------------------|----------|
| 108 | Anesthetic Gases | Apr 1995 |
| 207 | Animal Associated Disease | Apr 1995 |
| 110 | Antineoplastic Drugs | Apr 1995 |
| 216 | Herbicides | Apr 1995 |
| 162 | Machine Oil Mists | Apr 1995 |
| 212 | Manmade Mineral Fibers | Apr 1995 |
| 179 | Organophosphate/Carbamate Compounds | Apr 1995 |

Asbestos Current Worker - 10+ years since first exposure (#113) and Asbestos Current Worker - 0 to 10 years since first exposure (#114) were combined into one program, Asbestos Current Worker (#113).

APPENDIX C

General References

- (1) Zenz, Carl, editor. Occupational medicine: principles and practical applications. 3rd ed. St. Louis: Mosby Year Book, Inc. 1994.
- (2) Rom, William N., editor. Renzetti, Attilio D., Jr.; Lee, Jeffrey S.; Archer, Victor E., assistant editors. Environmental and occupational medicine. 2nd ed. Boston: Little, Brown; 1992.
- (3) Hathaway, Gloria J; Proctor, Nick H; Hughes, James P; editors. Chemical hazards of the workplace. 4th ed. New York: Van Nostrand Reinhold; 1996.
- (4) Hamilton, Alice. Hamilton and Hardy's Industrial hygiene. 4th ed. Boston: Wright-PSG; 1983.
- (5) Sullivan, John B., Jr.; Krieger, Gary R., editors. Hazardous materials toxicology: clinical principles of environmental health. Baltimore: Williams & Wilkins; 1992.

APPENDIX D

IMPROVEMENT REQUEST
MEDICAL MATRIX

DATE

Originator:

Address:

Telephone: (COM) _____ (DSN)

_____ This is a request for a CHANGE in a current program.

Name and number of program:

Recommendation:

_____ This is a request for ADDITION of a new program.

Recommendation: Include references and description of program currently in use.

Additional comments:

Mail to:
Commanding Officer
ATTN: Medical Matrix Committee
Navy Environmental Health Center
2510 Walmer Avenue
Norfolk, VA 23513-2617

APPENDIX E

PHYSICIAN'S WRITTEN OPINION

On the following pages are samples of physician's written opinions required by OSHA for certain programs. The physician's written opinion contains the results of the medical examination and the following:

1. The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of health impairment from continued exposure to the particular hazard.
2. Any recommendations for limitations on the employee or for use of personal protective equipment.
3. A statement that the employee has been informed of the results of the medical evaluation and about any medical conditions resulting from exposure to the particular hazard.

The physician's written opinion is given to the employee's command and therefore must not reveal specific findings or diagnoses unrelated to occupational exposure to the hazards.

Sample Physician's Written Opinion for:

Asbestos Medical Surveillance Program
Hazardous Waste Workers and Emergency Responders
Notification of Permanent Threshold Shift
Occupational Exposure to Blood and/or Body Fluids
Occupational Exposure to Butadiene
Occupational Exposure to Cadmium
Occupational Exposure to Ethylene Oxide
Occupational Exposure to Formaldehyde
Occupational Exposure to Lead
Occupational Exposure to Methylene Chloride
Occupational Exposure to Methylenedianiline

DATE

ASBESTOS MEDICAL SURVEILLANCE PROGRAM

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code: _____

1. The above noted individual was examined according to current guidelines regarding exposure to asbestos. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material health impairment from exposure to asbestos, tremolite, anthophyllite, or actinolite. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

5. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions resulting from asbestos, tremolite, anthophyllite or actinolite exposure that require further explanation or treatment, as noted by his/her signature below.

(employee's signature)

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

THIS LETTER IS PROTECTED BY THE PRIVACY ACT OF 1974

DATE

HAZARDOUS WASTE WORKERS AND EMERGENCY RESPONDERS

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code: _____

1. The above noted individual was examined according to 29 CFR 1910.120 regarding hazardous waste operations or emergency response. On the basis of this examination the following comments are submitted.

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from hazardous waste operations or emergency response. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions that require further evaluation or treatment.

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

THIS LETTER IS PROTECTED BY THE PRIVACY ACT OF 1974

DATE

NOTICE OF SIGNIFICANT THRESHOLD SHIFT

NAME: _____ SSN: _____ CODE/DEPT

Ref: (a) 29 CFR 1910.95

1. The results of the hearing test provided to you as part of the Navy Hearing Conservation Program indicate that you may have suffered a deterioration in your hearing sensitivity. This condition is referred to as a Significant Threshold Shift (STS). Because of the test results, you have been or will be scheduled for one or more hearing tests to confirm the findings. Also, you may be given a medical examination to determine the probable cause of the STS. This written notification is presented under the requirements of reference (a).

2. Audiometric technicians have provided you with properly fitted hearing protection devices and given you a reindoctrination of the Hearing Conservation Program requirements. In addition, the following steps have been taken in response to your change in hearing:

_____ Follow-up Audiogram(s)
 _____ Medical Consultation
 _____ Referral to Audiologist
 _____ Other _____

3. In order to preserve your hearing, it is very important that you wear your hearing protection at all times when in areas identified as noise hazardous or in the vicinity of noise hazardous tools, weapons or operations.

I HAVE READ AND UNDERSTAND THE ABOVE INFORMATION:

PATIENT SIGNATURE: _____ DATE: _____

(Audiometric Technician's Signature and Stamp)_____
(date)

DATE

OCCUPATIONAL EXPOSURE TO BLOOD AND/OR BODY FLUIDS

HEALTHCARE PROFESSIONAL'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to current guidelines regarding exposure to blood and/or body fluids. On the basis of this examination the following comments are submitted:

2. There ARE/ARE NOT recommended limitations upon the employee's ability to receive hepatitis B vaccination. Limitations, if recommended, are based on the following findings:

3. The employee has been informed of the results of this medical evaluation and about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

(employee's signature)

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

THIS LETTER IS PROTECTED BY THE PRIVACY ACT OF 1974

DATE

OCCUPATIONAL EXPOSURE TO BUTADIENE

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to 29 CFR 1910.1051 regarding occupational exposure to butadiene. On the basis of this examination the following comments are submitted.

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to butadiene. Comments (if applicable):

4. Limitations ARE/ARE NOT recommended on this individual's exposure to butadiene.

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation, and of any medical conditions resulting from butadiene exposure that require further evaluation or treatment.

5. Next biological monitoring or medical examination scheduled for _____(date)

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
 medical record

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DATE

OCCUPATIONAL EXPOSURE TO CADMIUM

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to 29 CFR 1910.1027 regarding occupational exposure to cadmium. On the basis of this examination the following comments are submitted.

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to cadmium. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation, including results of biological monitoring, and of any medical conditions resulting from cadmium exposure that require further evaluation or treatment, and any limitation on the employee's diet or use of medications.

5. Next biological monitoring or medical examination scheduled for

(employee's signature)

(date)

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

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DATE

OCCUPATIONAL EXPOSURE TO ETHYLENE OXIDE

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to 29 CFR 1910.1047 regarding occupational exposure to ethylene oxide. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to ethylene oxide. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions resulting from ethylene oxide exposure that require further evaluation or treatment.

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

THIS LETTER IS PROTECTED BY THE PRIVACY ACT OF 1974

DATE

OCCUPATIONAL EXPOSURE TO FORMALDEHYDE

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to current guidelines regarding exposure to formaldehyde. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to formaldehyde. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding (1) the results of this medical evaluation, (2) any medical conditions which would be aggravated by exposure to formaldehyde or which may have resulted from past formaldehyde exposure or from exposure in an emergency, and (3) whether there is a need for further examination or treatment.

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

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DATE

OCCUPATIONAL EXPOSURE TO LEAD

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code

1. The above noted individual was examined according to 29 CFR 1910.1025 regarding occupational exposure to lead. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to lead. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions resulting from lead exposure that require further evaluation or treatment.

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

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DATE

OCCUPATIONAL EXPOSURE TO METHYLENE CHLORIDE

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to 29 CFR 1910.1052 regarding occupational exposure to methylene chloride. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to methylene chloride. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been informed that methylene chloride is a potential occupational carcinogen;

5. The employee has been informed of risk factors for heart disease and the potential for exacerbation of underlying heart disease by exposure to methylene chloride through its metabolism to carbon monoxide;

6. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions resulting from methylene chloride exposure that require further explanation or treatment, as noted by his/her signature below.

(employee's signature)

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

THIS LETTER IS PROTECTED BY THE PRIVACY ACT OF 1974

DATE

OCCUPATIONAL EXPOSURE TO METHYLENEDIANILINE

PHYSICIAN'S WRITTEN OPINION in the case of:

Name: _____ SSN: _____ Dept/Code:

1. The above noted individual was examined according to 29 CFR 1910.1050 regarding occupational exposure to cadmium. On the basis of this examination the following comments are submitted:

2. A medical condition WAS/WAS NOT detected that would place the employee at an increased risk of material impairment of health from exposure to methylenedianiline. Comments (if applicable):

3. Limitations ARE/ARE NOT recommended on this individual's exposure or use of personal protective equipment, including respirators. Comments (if applicable):

4. The employee has been counseled regarding the results of this medical evaluation and of any medical conditions resulting from methylenedianiline exposure that require further explanation or treatment, as noted by his/her signature below.

(examiner's signature and stamp)

(date)

Original: employer
Copies: employee
medical record

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APPENDIX F

American Cancer Society (ACS) recommendations to maximize the performance of the Hemoccult II.

1. Subjects should avoid ingesting red meat and high-peroxidase foods for three days before and during testing.
2. Use of vitamin C, iron tablets and nonsteroidal anti-inflammatory drugs should be avoided.
3. Two samples of each of three consecutive stools should be tested.
4. The delay between preparation and laboratory testing should not exceed three days.
5. Slides should not be rehydrated.
6. A single positive smear should be considered a positive test result, even in the absence of dietary restriction.

Guidelines for Screening and Surveillance for the Early Detection
of Colorectal Polyps and Cancer, by Risk Category.

| Recommendations for Average Risk Adults 50+ (i.e. Men and women without moderate and high risk characteristics) | |
|--|---|
| One of the following: | Screening Interval & Recommendations |
| Fecal Occult Blood Test (FOBT) | Annual, beginning at age 50 |
| Flexible Sigmoidoscopy | Every 5 years, beginning at age 50 |
| Annual Fecal Occult Blood Test and Flexible Sigmoidoscopy | FOBT every year, and Flexible Sigmoidoscopy every 5 years |
| Double Contrast Barium Enema (DCBE) | Every 5-10 years |
| Colonoscopy | Every 10 years |

References:

1. Byers T, Levin B, Rothenberger D, Dodd GD, Smith RA. American Cancer Society guidelines for screening and surveillance for early detection of colorectal polyps and cancer: update 1997. CA Cancer J Clin. 1997;47(3):154-160.
2. Winawer SJ, Fletcher RH, Miller L, et al. Colorectal cancer screening: clinical guidelines and rationale [published errata appear in Gastroenterology 1997 Mar;112(3):1060 and 1998 Mar;114(3):625]. Gastroenterology. 1997;112(2):594-642.
3. U.S. Preventive Services Task Force. Guide to Clinical Preventive Services. Baltimore: Williams & Wilkins; 1996.

APPENDIX G

ALPHABETICAL LISTING OF STRESSORS

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| 103 | ACRYLAMIDE | 4-3 |
| 104 | ACRYLONITRILE (VINYL CHLORIDE)..... | 4-5 |
| 105 | ALLYL CHLORIDE..... | 4-7 |
| 152 | ALLYL GLYCIDYL ETHER (AGE)..... | 4-91 |
| 106 | 4-AMINODIPHENYL..... | 4-9 |
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| 113 | AMOSITE..... | 4-17 |
| 108 | ANESTHETIC GASES..... | 6-3 |
| 207 | ANIMAL ASSOCIATED DISEASE..... | 6-5 |
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| 110 | ANTINEOPLASTIC DRUGS..... | 6-9 |
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| 113 | ASBESTOS, CURRENT WORKER..... | 4-17 |
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| 603 | GLYCOL ETHERS (OTHER THAN ETHOXY AND METHOXY ETHANOL)..... | 6-19 |
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ALPHABETICAL LISTING OF STRESSORS/PROGRAMS

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| 719 | HEALTH CARE WORKER..... | 7-33 |
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