

STATE OF NEVADA

Medical Monitoring Protocols

Hazmat Certification

Prepared by the Risk Management Division

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HAZMAT EXAMS OVERVIEW:

Hazardous Materials (Hazmat) exams and related medical surveillance activities for State employees required pursuant to NRS Chapter 618 and CFR 1910.120 (b) and(f); and 1910.134 (e) are available through Occupational Health Services Contracts established through the Risk Management Division. These exams are intended for employees involved in various levels of emergency response, hazmat teams, support duties for hazmat teams, employees working with or at wastewater treatments plants, or employees who are subject to intermittent hazardous/toxic materials or exposures (unrelated to specific Hazmat Team activities). Exams have been established at three separate levels and have been reviewed and approved by a Board-Certified Occupational Health Physician. Each level requires a baseline exam, which is provided to the employee upon the commencement of work activities that fall under the various levels described; ongoing annual or biennial exams and a termination exam. Acute exposures will be treated on an “as needed” basis, depending on the substance or substances the employee has been exposed to. A C-1 Notice of Injury Form must be completed for each acute exposure and referral made to an Occupational Medicine physician when indicated. Each State agency involved in the provision of these exams will develop internal policies and procedures that identify job positions and the Level of Exam that are required, as well, establishing confidentiality of all medical reports. A tracking system must be developed to monitor the exams.

Level One-Advanced Level of Certification

This level is required for:

- Employees whose job activities require that they respond to hazardous materials releases or potential releases for the purpose of stopping, or mitigating the release and who are certified at the Hazmat Technician Level; or
- Employees who are required to use a respirator and chemical protective clothing on a regular basis (more than 30 days a year); or
- Employees who manage uncontrolled hazardous waste sites and spill site activities.

Participation in the Occupational Medical Surveillance Program and a respirator fit test *is required.*

Recommended Medical Surveillance Protocols:

- A. Medical and Occupational History Form Questionnaire completed by all employees annually.
 - i. Specific clarification for employees who have had their job requirements changed during the year.
 - ii. These questionnaires will be stored on a database to track changes in exposure potentials over the years.
- B. A complete baseline, annual, and termination physical exam (as per the attached protocols Attachment I.

- C. Lab screening to include the following:
 - i. A basic metabolic screen, complete blood count, and a urine analyses
 - ii. Blood and body fluid protocols laid out by state statues should be required for all employees
- D. Immunizations against hepatitis A and B and tetanus immunization need to be offered at baseline and kept up to date for all employees
- E. Respiratory Clearance Questionnaires part 1 and 2 to be filled out by the employee
- F. Spirometry, if necessary
- G. Respirator fit test, if not provided by agency
- H. Additional annual lab screening tests needed for this tertiary level
 - i. Twenty-four-hour urine collection for heavy metal screening and urine phenol levels
 - ii. Serum Acryl Cholinesterase
 - iii. Serum PCP level
 - iv. Benzene serum level
- I. Audiogram
- J. Stress EKG test utilizing Bruce Protocol-
 - i. 10.1 Met Level Required
- K. Frequency of chest X-rays
 - i. Three view chest x-ray at baseline screen and termination screen.
 - ii. Two view chest x-ray (AP and Lateral views) on an annual basis.
 - iii The asbestos chest x-ray protocols will be implemented after a known exposure to asbestos has occurred or a documented exposure to asbestos in the past is proven. The frequency of chest x-rays and use of b readers is outlined below in the asbestos standard.

FREQUENCY OF CHEST X-RAYS

Time since exposure	Age of employee		
	15 to 35	35 + to 45	45 +
0 to 10	Every 5 years	Every 5 years	Every 5 years
10 +	Every 5 years	Every 2 years	Every 1 years

Level Two- Intermediate Level of Certification

This level is required for:

- Employee's, including first responders, who's job activities involve response to releases or potential releases of hazardous substances for the purpose of monitoring or protecting nearby persons, property or the environment from the effects of the release activities, and who are certified at the Hazmat First Responder Operations Level.

- Employees not involved in Hazmat team activities, but who's job activities require occasional use of a respirator and chemical protective clothing while performing field activities; or
- Employees who are or may be exposed to hazardous substances at or above the Permissible Exposure Limit without regard to the use of respirators for 30 days or more a year.

Participation in the Occupational Medical Surveillance Program and a respirator fit test is required.

Recommended Medical Surveillance Protocols:

- A. Medical and Occupational History Form questionnaire to be filled out annually by the employee
 - i. Specific clarification for employees who have had their job requirements changed during the year.
 - ii. Questionnaires will be stored on a database to track changes in exposure potentials over the years.
- B. A complete baseline, annual, and termination physical exam as per established protocols identified in Attachment A
- C. Lab screening to include the following:
 - i. A basic metabolic screen, complete blood count, and a urine analysis
 - ii. Blood and body fluid protocols laid out by state statues should be required for all employees
- D. Immunizations against hepatitis A and B and tetanus immunization must be offered and kept up to date for all employees involved in these activities.
- E. Respiratory Clearance Questionnaires part 1 and 2 to be filled out by the employee
- F. Spirometry, if necessary
- G. Respirator fit test, if not provided by agency
- I. Additional Baseline and Termination Lab screening tests:
 - i.* Twenty-four-hour urine collection for heavy metal screening and urine phenol levels
 - ii.* Serum Acetyl Cholinesterase
 - iii.* Serum PCP
- J. Audiogram at baseline, and if indicated on an annual basis.
- K. Frequency of chest X-rays
 - i. Two view chest x-ray at baseline screen and termination screen.
 - ii. Two view chest x-ray (AP and Lateral views) as determined by physician upon review of Annual Questionnaire.
 - iii. The asbestos chest x-ray protocols will be implemented after a known exposure to asbestos has occurred or a documented exposure to asbestos in the past is proven. The frequency of chest x-rays and use of b readers as outlined above in the asbestos standard.

Level Three- Basic Level of Hazmat Certification

This level is intended for employees performing field activities, including inspections and monitoring activities, in which intermittent hazardous or toxic exposures may occur, but whose job activities do not require the use of a respirator or chemical protective clothing. Employees at this level are required to complete training at the Hazmat First Responder Awareness Level.

Participation in the Medical Surveillance Program *may be required* for employees who fall under this category.

Recommended Medical Surveillance Protocols:

- A. Medical and Occupational History Questionnaire required to be filled out annually by the employee
 - i. Specific clarification for employees who have had their job requirements changed during the year.
 - ii. These questionnaires will be stored on a database to track changes in exposure potentials over the years.
- B. A complete baseline and termination physical exam
- C. Physical exam required every two years for employees involved in wastewater treatment plants, wetlands and other hazardous treatment plants.
- D. Intermittent physical exams as recommended by the Occupational Health Physician after review of annual questionnaires
- E. Lab screening to include the following:
 - i. A basic metabolic screen, complete blood count, and a urine analysis
 - ii. Blood and body fluid protocols laid out by state statues should be required for all employees involved in wastewater treatment plants, wetlands and other hazardous treatment plants.
- F. Immunizations against hepatitis A and B and tetanus immunization must be offered at baseline and kept up to date for all employees involved in these activities.
- G. Frequency of chest X-rays
 - Two view chest x-ray at baseline screen and termination screen.

REPORTING

The results of all physical exams will be recorded on the attached “HAZMAT Exam Report of Results Form”. Copies of these forms will be forwarded to the designated agency representative and the Health Program Specialist at the Risk Management Division. Copies of the diagnostic testing results and communications to the employees directly from the physician will be maintained at the Risk Management Division under the custody of the Health Program Specialist unless other specific arrangements are made by Risk Management with the using agency.