INTRODUCTION

A Medical Monitoring Program is required by law, for the workplace that has job assignments that involve working in potentially hazardous conditions. It is also required for job assignments that include work with specific chemicals, substances, or hazardous materials. A Medical Monitoring Program involves medical monitoring and testing that is generally used to determine and track the health of employees working with specific chemicals, substances, or physical hazards and to evaluate and monitor potential exposure to employees who perform work in hazardous conditions.

Medical examinations and testing are required to be conducted to identify health effects or exposures that require further follow-up. Improvements to work practices, engineering controls, or personal protective equipment may be necessary to limit exposures. The type of medical monitoring depends on a number of factors including, but not limited to, the chemical, substances, or physical hazards the employee is working with, the number of days per year the employee works with or is exposed to the materials, and the types of functions performed by the employee.

INITIAL/BASELINE MEDICAL EVALUATIONS AND VACCINATIONS

Initial baseline medical evaluations are required for individuals who are hired or who transfer to University positions, will be based on the essential functional analysis and require:

1) medium to heavy work activity and stamina
2) involve work with specific hazardous chemicals, substances, and materials;
3) require the use of a respirator;
4) require a commercial driver license; and/or
5) involve noise exposure.

The medical evaluations are designed to obtain baseline medical information, to determine if an individual is physically able to do the tasks necessary for the job; and/or to determine if an individual is medically able to use specific safety equipment. Individuals may need to complete a Medical Evaluation Questionnaire as part of the medical examination process.

VACCINATIONS FOR HEPATITIS B

Vaccinations for Hepatitis B need to be made available to at-risk positions within ten (10) days of employees taking applicable positions.

REGULATED HAZARDOUS CHEMICALS, CARCINOGENS, AND MATERIALS

Medical Monitoring is required by law for the following hazardous chemicals, carcinogens, and materials:

- 1,2-Dibromo-3-chloropropane (WAC 296-62-07342(14) & 07346)
- Acrylonitrile (WAC 296-62-07336(14) & 07339)
REQUIRED MEDICAL MONITORING AND TESTING

- Arsenic (WAC 296-848-30010)
- Asbestos (WAC 296-62-07725)
- Benzene (WAC 296-849-120 through 12080)
- Butadiene (WAC 296-62-07460(11))
- Cadmium (WAC 296-62-07423)
- Carcinogens (WAC 296-62-07314)
  - 2-Acetylaminofluorene
  - Alpha-Naphthylamine
  - 4-Aminodiphenyl
  - Beta-Naphthylamine Benzidine
  - Beta-Propiolactone
  - Bis-Chloromethyl ether
  - 3,3’-Dichlorobenzidine (and its salts)
  - 4-Dimethylaminoazobenzene
  - Ethyleneimine
  - Methyl chloromethyl ether
  - Methylenedianiline
  - 4,4’ Methylene bis (2 - chloroaniline)
  - 4-Nitrophenol
  - N-Nitrosodimethylamine
- Coke Ovens (WAC 296-62-20017)
- Cotton Dust (WAC 296-62-14533(8))
- Emergency Response, (WAC 296-824-400 through 4005)
- Ethylene Oxide (WAC 296-855-30030 and WAC 296-62-07387)
- Formaldehyde (WAC 296-856-300)
- Hazardous Waste, (WAC 296-843-210 through 21005)
- Lead (WAC 296-62-07521 occupational exposure except construction or agriculture)
- Lead (WAC 296-155-17621 for construction work)
- Methylene Chloride, (WAC 296-62-07470(10))
- Vinyl Chloride (WAC 296-62-07329(10))

POSITIONS SUBJECT TO INITIAL MEDICAL EVALUATIONS

The Environmental Health and Safety Department (EH&S) determines the need for medical evaluation on a position by position basis. See Initial/Baseline Medical Evaluations above.

Hazardous Chemicals, Materials and Wastes

The majority of University employees are not exposed to the hazardous chemicals and materials listed in the regulated hazardous chemicals, carcinogens and materials section above. However, some employees may deal with regulated hazardous chemicals and materials as part of their job duties. Any position that has duties which create exposure to the above chemicals and materials will be subject to medical monitoring as required by law. See EH&S form Initial Medical Questionnaire. The positions that have been identified as subject to initial medical examinations
before assignments as specified in the applicable WAC provisions, include, but are not necessarily limited to the following:

<table>
<thead>
<tr>
<th>Departments/Shops</th>
<th>Required Medical Tests</th>
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</thead>
<tbody>
<tr>
<td>Insulation Maintenance/Asbestos</td>
<td>See WAC 296-62-07725 regarding Asbestos, and WAC 296-155-17621 regarding Lead</td>
</tr>
<tr>
<td>Abatement Department</td>
<td></td>
</tr>
<tr>
<td>Environmental Health and Safety</td>
<td>See WAC 296-843-21005 regarding Hazardous Substances</td>
</tr>
<tr>
<td>All Hazardous Materials/Waste Employees</td>
<td></td>
</tr>
<tr>
<td>Academics</td>
<td><strong>See specific WAC’s identified in the section above which are applicable to Chemicals and Materials Identified in the EH&amp;S form Regulated Chemical Use Questionnaire to be completed by applicable employees.</strong></td>
</tr>
<tr>
<td>Applicable Employees*</td>
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</tbody>
</table>

*These employees include instructors in Biology, Chemistry, Geology and Art. The use of hazardous chemicals and materials in other areas of the University, particularly academic settings, varies based on the instructor working in the position and the specific academic courses being offered. Therefore, in order to determine potential for exposure to regulated chemicals and materials, the EH&S form *Regulated Chemical Use Questionnaire* will be sent to employees who may use these items in the workplace, before work begins. The completed forms will be returned to EH&S within one week of the employee’s receipt of the forms and before use of the regulated chemicals.

**Based on the questionnaire response, specific medical testing may be required as noted in regulated hazardous chemicals, carcinogens, and materials section above. EH&S will work with individual employees in these areas to ensure required medical testing is completed by the University’s’ authorized Licensed Health Care Provider(s) (LHCP).

**Commercial Driver’s Licenses**

For University positions that require a commercial driver’s license, the Uniform Commercial Driver’s License Act, Chapter 46.25 RCW, and the federal Commercial Motor Vehicle Safety Act of 1986, 49 CFR Part 40, require a current medical certificate that an individual is physically qualified to a commercial motor vehicle. Additionally, random drug and alcohol testing is required. Types of vehicles that require a CDL include:

- All single vehicles with a manufacturer’s weight rating of 26,001 pounds or more.
- All trailers with a manufacturer’s weight rating of 10,001 pounds or more, and a combined vehicles’ gross weight rating of 26,001 pounds or more.
- All vehicles designed to transport 16 or more persons (including the driver). This includes private and church buses.
- All school buses, regardless of size.
• All vehicles used to transport any material that requires hazardous material placarding or any quantity of a material listed as a select agent or toxin in 42 CFR 73.

Respiratory Protection

Initial medical evaluations, which include the completion of a LHCP Respirator Medical Evaluation Questionnaire and/or a medical exam are required before respirators are fit-tested or used in the workplace by employees in the following University departments pursuant to WAC 296-842-14005:

<table>
<thead>
<tr>
<th>Facilities Maintenance Departments</th>
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<tbody>
<tr>
<td>Boiler Plant Operations (Emergency Response)</td>
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<tr>
<td>Building Maintenance</td>
</tr>
<tr>
<td>HVAC/R Department (Heating, Ventilating, Air-Conditioning and Refrigeration)</td>
</tr>
<tr>
<td>Housing Maintenance</td>
</tr>
<tr>
<td>Paint/Sign Shop</td>
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<tr>
<td>Plumbing Maintenance Department (Supervisor and Lead)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Facilities Services Department</th>
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<tbody>
<tr>
<td>Landscape Maintenance Department (Grounds)</td>
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<table>
<thead>
<tr>
<th>Campus Police</th>
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<tbody>
<tr>
<td>Aquatics</td>
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<tr>
<td>Aquatics Manager</td>
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</table>

<table>
<thead>
<tr>
<th>Academics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Response Personnel (Small Spill)</td>
</tr>
<tr>
<td>Other positions by request and evaluation</td>
</tr>
</tbody>
</table>

Audiometric Examinations (Hearing Tests)

A baseline audiometric examination is required for all employees when first assigned to work involving noise exposure equal or over 85 dBA over an 8 hour TWA pursuant to WAC 296-817-40010. The following shops and positions require baseline audiometric examinations based on potential noise exposure:

<table>
<thead>
<tr>
<th>Facilities Maintenance Departments</th>
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</thead>
<tbody>
<tr>
<td>Access Control</td>
</tr>
<tr>
<td>Boiler Plant Operations</td>
</tr>
<tr>
<td>Building Maintenance</td>
</tr>
<tr>
<td>Electrical Maintenance</td>
</tr>
<tr>
<td>Energy Management Services</td>
</tr>
<tr>
<td>Fabrication Shop</td>
</tr>
<tr>
<td>HVAC/R Department (Heating, Ventilating, Air-Conditioning and Refrigeration)</td>
</tr>
<tr>
<td>Housing Maintenance</td>
</tr>
<tr>
<td>Insulation Maintenance/Asbestos Abatement Department</td>
</tr>
</tbody>
</table>
### Hepatitis B--Availability of Vaccinations for Employees

The University, consistent with WAC 296-823-13005, will make sure the Hepatitis B vaccination (HBV) is available to all employees who, as part of their job duties, are exposed to human body fluids within ten (10) working days of initial assignment. Employees who have previously received the complete HBV vaccination series; who have an antibody test that revealed immunity to HBV or for whom there is a medical reason not to provide the HBV is exempt from this requirement. Those Departments/Shops employees and other specific employees for whom shots will be made available are as follows:

<table>
<thead>
<tr>
<th>Departments/Services</th>
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</thead>
<tbody>
<tr>
<td>Facilities Departments</td>
</tr>
<tr>
<td>Plumbing Maintenance Department</td>
</tr>
<tr>
<td>Custodial Services Department</td>
</tr>
<tr>
<td>Environmental Health and Safety</td>
</tr>
<tr>
<td>All hazardous materials employees</td>
</tr>
<tr>
<td>Campus Recreation &amp; Sports</td>
</tr>
<tr>
<td>Athletic Coach, Staff</td>
</tr>
<tr>
<td>Athletic Trainer</td>
</tr>
<tr>
<td>Aquatics Manager</td>
</tr>
<tr>
<td>Campus Police</td>
</tr>
<tr>
<td>Dental Hygiene</td>
</tr>
<tr>
<td>Instructors and Technicians, (handled by dental hygiene)</td>
</tr>
<tr>
<td>Biology</td>
</tr>
<tr>
<td>Instructors who work with cadaver and cadaver parts</td>
</tr>
<tr>
<td>Occupational Therapy</td>
</tr>
</tbody>
</table>
Instructors who work with cadaver and cadaver parts

**Early Head Start**

Handled by Early Head Start*

* In addition to Hepatitis B vaccinations, documentation of other vaccinations is required. See Early Head Start form *Staff Health Exam Record (Communicable Disease and Tuberculosis)*. Those employees offered the HBV, but who decide not to take the vaccination, or who received the shots prior to University employment, will be required to sign the EH&S form *Hepatitis B Vaccination Declination*, declining the shots.

**SUBSEQUENT MEDICAL EVALUATIONS**

Subsequent medical evaluations are required by law in certain circumstances which include:

- exposure to regulated substances above permissible rates,
- exhibition of medical signs or symptoms,
- and/or related injury.

Additionally, periodic evaluations may be required either at specified intervals (e.g. annual evaluations) or at the recommendation of the LHCP responsible for the medical evaluations.

**Chemicals and Hazardous Materials**

- **Hazardous Materials**: Subsequent medical evaluations are necessary:
  - at least once every 12 months after initial assignment (unless physician recommends a shorter interval or longer interval which may not exceed 24 months);
  - as soon as possible after an employee reports: signs or symptoms of possible overexposure to hazardous substances or health hazards, injury, and/or exposure above the permissible exposure limits or published exposure levels;
  - at the termination of employment unless employee was examined within the past 6 months;
  - as soon as possible after an incident or development of signs or symptoms; and/or
  - when the physician determines follow-up is medically necessary.

All hazardous waste workers will be required to fill out the EH&S form *Periodic Medical Questionnaire* yearly.

- **Lead**: Subsequent medical evaluations and biological monitoring are necessary if exposure to lead is at or above the action level of 30 μg/m³ – eight hour time weighted average for more than 30 days a year.
  - **Biological monitoring**. Biological monitoring includes blood lead and zinc protoporphyrin level sampling and analysis. Biological monitoring is required:
    - at least every two months for the first six months and every six months thereafter for employees who are or may be exposed by the workplace to lead at or above the action level for more than thirty days in any consecutive twelve months;
    - for any employee occupationally exposed on any day to lead at or above the action level;
    - for any employees who were tested pursuant to hazardous materials or lead above and whose blood sampling and analysis tests indicate a blood lead level at or above 40 μg/dl,
biological monitoring will continue at least every two months until two consecutive blood samples and analysis indicate a blood level below 40 µg/dl;

- for each employee who is removed from exposure to lead due to an elevated blood level at least monthly during the removal period;
- within two weeks after the University receives the results of the first blood sampling test for any employee whose blood lead level results are at or above 50 µg/dl.

### Medical examinations and consultations

- at least annually for each employee for whom a blood sampling test conducted at any time during the preceding twelve months indicated a blood lead level at or above 40 µg/dl;
- as soon as possible after employee reports: signs or symptoms commonly associated with lead intoxication, a desire for medical advice concerning the effects of current or past exposure to lead on the employee's ability to procreate a healthy child, pregnancy, or when employee has demonstrated difficulty in breathing during a respirator fitting test or during use; and
- as medically appropriate for employees either removed from exposure to lead due to a risk of sustaining material impairment to health, or otherwise limited pursuant to a final medical determination.

Medical examinations will include:

- a brief history regarding any new exposure to potential liver toxins, changes in drug, tobacco, and alcohol intake, and the appearance of physical signs relating to the liver and the skin;
- appropriate tests and examinations including liver function tests and skin examinations; and
- appropriate additional tests or examinations as deemed necessary by the physician.

### Asbestos

- Subsequent medical evaluations are required:
  - annually;
  - or more frequently than annually, to affected employees, as specified by the physician; and
  - within thirty calendar days before or after the date of termination of employment for employee who has been exposed to airborne concentrations of fibers of asbestos at or above the permissible exposure limits.
  - For new employees and existing employees that historically worked with asbestos abatement projects not as their primary job description, but as a secondary project position, they will need to fill out the EH&S form Periodic Medical Questionnaire, in preparation for the baseline/exit exam.

Note: If adequate records show the employee has been examined in accordance with the requirements for asbestos medical evaluations within the past one-year period, that exam does not need to be repeated. Medical examinations will include a complete physical of all systems with special emphasis on the pulmonary, cardiovascular, and gastrointestinal systems, completion of the respiratory disease standardized questionnaire, a chest roentgenogram,
pulmonary function tests to include forced vital capacity, and other tests deemed appropriate by examining physician. Asbestos workers will be required to fill out the EH&S form *Periodic Medical Questionnaire* yearly.

- **Other Regulated Hazardous Chemicals and Materials**: Subsequent medical evaluations are required based on the specific hazardous chemical/materials being used. Regulated hazardous chemicals, carcinogens and materials as specified above, indicates the medical monitoring required for each chemical/material. An appropriate program will be implemented based on the information provided in the questionnaire required in the Positions Subject to Initial and Baseline Medical Evaluations section above.

**Commercial Driver’s License**

Random drug and alcohol testing will be conducted pursuant 49 CFR Part 40 and Chapter 46.25 RCW. DOT Physical Examinations are required every two years unless that employee has certain medical conditions which could lead to more frequent medical examinations.

**Respiratory**

The respiratory medical questionnaire will be provided to new employees that have been identified by job position for their baseline physical. The new employee will take the paperwork provided, to the designated LHCP for evaluation.

- required by the Washington Administrative Code
- recommended by the LHCP (e.g. periodic evaluations at specified intervals);
- respirator program administrator or supervisor indicates an employee needs reevaluation;
- medical signs or symptoms are observed during fit testing;
- medical signs or symptoms are reported by employee;
- there are changes in worksite conditions such that physical work effort, personal protective clothing, or temperature that could substantially increase the employee’s physiological stress.

Employees are to fill out the LHCP *Respiratory Medical Evaluation Questionnaire* and return them to EH&S. EH&S will send the questionnaires to the LHCP for evaluation. Forms that are incomplete or indicate a medical change may require a medical examination. If an employee does not wish to fill out the form then a medical examination will be required.

**Audiology**

Subsequent audiograms are required on an annual basis for employees as long as they continue to be exposed to noise that equals or exceeds 85 dBA over an 8 hour TWA. If an annual audiogram indicates an employee has suffered a standard threshold shift, a retest can be conducted within thirty days which can be considered the annual audiogram.
Hepatitis B

If an employee has occupational exposure to blood or other potentially infectious materials which would include an exposure incident involving contact with a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact, then a post-exposure medical evaluation will be made available. Examples of non-intact skin include skin with dermatitis, hangnails, cuts, abrasions, chafing, or acne.

EXIT EXAMINATIONS

Upon retirement, termination of employment, or reduction in force terminations, exit examinations are provided to all employees who worked with asbestos pursuant to WAC 296-62-07725 or with hazardous waste pursuant to WAC 296-843-210. The exit exams will be provided to employees who worked in asbestos abatement, hazardous waste collection and sampling, and any other positions whose duties qualify under these provisions. See the Regulated Hazardous Chemicals, Carcinogens and Materials section above.

RESPONSIBILITY FOR MEDICAL MONITORING AND TESTING

HUMAN RESOURCES

Human Resources will include the Essential Function Analysis (EFA) form with each position classification that a EWU supervisor must fill out. The position information and associated EFA form once completed will be sent to EH&S for review. EH&S will confirm the medical test(s), if any, that will be required for the position by reviewing the position details and EFA form. EH&S will send to Human Resources, the EH&S Authorization Form that will identify what medical testing is required for the position. Human Resources will then forward the information to the perspective employee. The perspective employee will be instructed to take the forms to the authorized LHCP for the testing to be conducted. It may take two weeks for test results to become available before a perspective employee is medically cleared for the position. Newly hired instructors in chemistry, geochemistry and biology will be provided the EH&S Regulated Chemical Use Questionnaire to determine if medical monitoring is required upon employment.

ENVIRONMENTAL HEALTH AND SAFETY

EH&S will provide notification to employees and their supervisors of needed and required update medical monitoring when required. EH&S will maintain medical monitoring records and where needed, track changes. Deleterious changes to an employee’s hearing, blood lead levels etc. will prompt EH&S to investigate the employees work habits and determine if proper personal protection is used and engineering controls are in place.
DEPARTMENTS AND SHOPS

Departments and shops are responsible for all financial costs associated with their employees medical monitoring. All medical monitoring will be conducted through the authorized University medical provider for medical monitoring.

SUPERVISORS

Supervisors are responsible to ensure that all employees conduct their jobs in a safe manner using, proper procedures, personal protection equipment and engineering controls. If questions arise as to the safety of the work; contact EH&S for assistance. It is the supervisor’s responsibility to ensure that those employees do not conduct work where a respirator is required unless they have: completed a medical evaluation and been cleared to wear a respirator by the LHCP, have been fit-tested; and wear a respirator.

Supervisors that request employees to perform jobs that involve, body fluids, chemicals, paints, electricity, confined spaces or noisy environments should contact EH&S to confirm that all medical monitoring and training requirements are complete.

UNIVERSITY SELECTION OF LICENSED HEALTH CARE PROVIDERS

The University will select and provide a LHCP for all required medical monitoring. Employees cannot use their personal physicians.

Attached Forms

EH&S Form - Initial Medical Questionnaire
EH&S Form – Authorization Form
EH&S Form - Regulated Chemical Use Questionnaire
LHCP Respiratory Medical Evaluation Questionnaire
Early Head Start Staff Health Exam Record
EH&S Form - Hepatitis B Vaccination Declination
EH&S Form - Periodic Medical Questionnaire

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<th>Revision History</th>
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