

Training, Exposure Monitoring, and Medical Monitoring

WAC 296-848-300

Section Contents

YOUR RESPONSIBILITY:

To detect any significant changes in employee health and exposure monitoring results

IMPORTANT:

- These sections apply when skin or eye irritation could occur or when employee exposure monitoring results are either:
 - At or above the action level (AL) of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for inorganic arsenic
- or**
- Above the permissible exposure limit (PEL) of 10 $\mu\text{g}/\text{m}^3$ for inorganic arsenic.

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Training, Exposure Monitoring, and Medical Monitoring

WAC 296-848-300

Rule

WAC 296-848-30005

Training

You must

- Train employees:
 - Who are exposed above the action level (AL) of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air
 - or**
 - Who could experience eye or skin irritation from exposure.
- Provide training:
 - At the time of initial assignment
 - and**
 - At least every 12 months after initial training.
- Make sure training and information includes all of the following:
 - A review of WAC 296-848-100 through 296-848-40045, and 296-848-500.
 - The following health information about inorganic arsenic:
 - Inorganic arsenic is a poison and can affect your body if it is swallowed or inhaled
 - Exposure to airborne concentrations of inorganic arsenic may cause lung cancer and can be a skin irritant
 - Arsenic trichloride can be absorbed readily through your skin and is especially dangerous
 - Wash hands thoroughly before eating or smoking to help minimize your risk for swallowing inorganic arsenic.
 - The purpose for medical evaluations and a description of how you are fulfilling the medical evaluation requirements of this chapter found in Medical evaluations, WAC 296-848-30030.

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WAC 296-848-30005 (continued)

You must

- Make a copy of this chapter readily available to all employees required to be trained under this section.



Reference:

- To see additional training and information requirements in other chapters, go to the:
 - Respirators rule, Chapter 296-842 WAC.
 - Safety and Health Core Rules, Chapter 296-800 WAC, and find the section titled, Inform and train your employees about hazardous chemicals in your workplace, WAC 296-800-17030.
- When following these requirements, include specific information about potential exposures to inorganic arsenic, such as the types of operations, locations, quantities, exposure sources, exposure controls, inorganic arsenic use, and storage.



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WAC 296-848-30010

Periodic exposure evaluations



Exemption:

- Periodic exposure evaluations are not required if exposure monitoring results conducted to fulfill requirements in Exposure evaluation, WAC 296-848-20060, are below the action level (AL).

You must

- Obtain employee exposure monitoring results as specified in Table 2 by repeating Steps 2, 4, and 5 of the Exposure Evaluation Process found within this chapter, in Exposure evaluations, WAC 296-848-20060.



Note:

- If you document that one work shift consistently has higher exposure monitoring results than another for a particular operation, then you limit sample collection to the work shift with higher exposures and can use results to represent all employees performing the operation on other shifts.



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WAC 296-848-30010 (continued)

Table 2
Periodic Exposure Evaluation Frequencies

If 8-hour employee exposure monitoring results	Then
Are between the: <ul style="list-style-type: none"> - Action level (AL) of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and - Permissible exposure limit (PEL) of 10 $\mu\text{g}/\text{m}^3$ 	Conduct additional exposure evaluations at least every 6 months for the employees represented by the monitoring results.
Are above the PEL	Conduct additional exposure evaluations at least every 3 months for the employees represented by the monitoring results.
For employees previously above the PEL, have decreased: <ul style="list-style-type: none"> - To a concentration between the PEL and AL and - The decrease is demonstrated by 2 consecutive exposure evaluations made at least 7 days apart 	You may decrease your evaluation frequency to every 6 months for the employees represented by the monitoring results.
Have decreased to below the AL and The decrease is demonstrated by 2 consecutive exposure evaluations made at least 7 days apart.	You may stop periodic employee exposure evaluations for employees represented by the monitoring results.



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WAC 296-848-30030

Medical evaluations

IMPORTANT:

- Medical evaluations conducted under this section will satisfy the medical evaluation requirement found in another chapter, Respirators, Chapter 296-842 WAC.

You must

- Make medical evaluations available to current employees who have been, are, or will be exposed to inorganic arsenic concentrations above the AL:
 - At least 30 days in any 12-month period
- **or**
 - A total of 10 years or more of combined employment with you or previous employers with at least 30 days of exposure per year.
- Make medical evaluations available at no cost to employees.
 - Pay all costs, including travel costs and wages associated with any time spent outside of the employee's normal work hours.
- Make medical evaluations available at reasonable times and places.
- Make medical evaluations available by completing Steps 1 through 6 of the Medical Evaluation Process for each employee covered.

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Note:

- Employees who wear respirators need to be medically evaluated to make sure the respirator will not harm them, before they are assigned work in areas requiring respirators. Employees who decline to receive medical examination and testing to monitor for health effects caused by inorganic arsenic are not excluded from receiving a separate medical evaluation for a respirator use.
- If employers discourage participation in medical monitoring for health effects caused by inorganic arsenic, or in any way interfere with an employee's decision to continue with this program, this interference may represent unlawful discrimination under RCW 49.17.160, Discrimination against employee filing, instituting proceeding, or testifying prohibited--Procedure--Remedy.



Helpful tool:

Declination form for nonemergency related medical evaluations

You may use this optional form to document employee decisions to decline participation in the medical evaluation process for exposure to inorganic arsenic. To see this form, go to the Resources section within this chapter.

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WAC 296-848-30030 (continued)

Medical Evaluation Process

Step 1: Identify employees who qualify, as stated above, for medical evaluations.

Step 2a: Make medical evaluations available for employees identified in Step 1 at the following times:

- Initially, when employees are assigned to work in an area where exposure monitoring results are, or will likely be, above the action level for at least 30 days in a 12-month period.
- Periodically as specified in Table 3.
- When employment with exposure ends, if the employee has not had an evaluation within the 6-month period before exposure ends. Include in these evaluations the same content as specified in Table 4 for initial evaluations, excluding a chest X ray.

Table 3
Frequencies for Periodic Medical Evaluations

For	Provide periodic medical evaluations every
Employees less than 45 years old with less than 10 years of exposure above the AL	12 months
Employees 45 or older and Employees with more than 10 years of exposure above the AL	6 months and 12 months to obtain a 14- by 17-inch posterior-anterior chest X ray for monitoring purposes, unless the LHCP has determined a different frequency for periodic X rays.

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- Step 2b:** Provide appropriate medical examination and emergency treatment when an employee identified in Step 1 develops signs or symptoms commonly associated with inorganic arsenic exposure.
- Step 3:** Select a licensed healthcare professional (LHCP) who will conduct or supervise examinations and procedures.
- Step 4:** Make sure the LHCP receives all of the following before the medical evaluation is performed:
- A copy of this chapter.
 - A description of the duties of the employee being evaluated and how these duties relate to inorganic arsenic exposure.
 - The anticipated or representative exposure monitoring results for the employee being evaluated.
 - A description of the personal protective equipment (PPE) each employee being evaluated uses or will use.
 - Information from previous employment-related examinations when this information is not available to the examining LHCP.
- Instructions that the written opinions the LHCP provides you be limited to the following information:
 - Results from examinations and tests.
 - The LHCP's opinion about whether or not medical conditions were found that would increase the employee's risk for impairment from exposure to inorganic arsenic.
 - Any recommended limitations for:
 - Inorganic arsenic exposure
 - and**
 - Use of respirators or other PPE.

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- A statement that the employee has been informed of medical results and medical conditions caused by inorganic arsenic exposure requiring further examination or treatment.

Step 5: Make the medical evaluation available to the employee. Make sure it includes the content listed in Table 4, Content of Medical Evaluations.

Step 6: Obtain the LHCP's written opinion for the employee's medical evaluation and give a copy to the employee.

- Make sure the written opinion is limited to the information specified for written opinions in Step 4.



Note:

- If the written opinion contains specific findings or diagnoses unrelated to occupational exposure, send it back and obtain a revised version without the additional information.



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WAC 296-848-30030 (continued)

Table 4
Content of Medical Evaluations

When conducting	Include
An initial evaluation	<ul style="list-style-type: none"> • A work history and medical history including: <ul style="list-style-type: none"> – Smoking history. – The presence and degree of respiratory symptoms such as breathlessness, cough, sputum production, and wheezing. • A physical examination that includes: <ul style="list-style-type: none"> – A 14- by 17-inch posterior-anterior chest X ray and the International Labor Office UICC/Cincinnati (ILO U/C) rating. – A nasal and skin examination. • Additional examinations the licensed healthcare professional (LHCP) believes appropriate based on the employee's exposure to inorganic arsenic or respirator use.
Periodic evaluations for employees less than 45 years old with less than 10 years of exposure above the action level (AL)	The same content as specified for initial evaluations repeated every 12 months.
Periodic evaluations for employees: <ul style="list-style-type: none"> • 45 or older or • With more than 10 years of exposure above the AL 	<ul style="list-style-type: none"> • The following content repeated every 6 months: <ul style="list-style-type: none"> – A work history and medical history including: <ul style="list-style-type: none"> • Smoking history. • The presence and degree of respiratory symptoms such as breathlessness, cough, sputum production, and wheezing. – A physical examination that includes a nasal and skin examination. – Additional examinations the LHCP believes appropriate based on the employee's exposure to inorganic arsenic or respirator use. • A physical examination, repeated every 12 months, that obtains a 14- by 17-inch posterior-anterior chest X ray and the International Labor Office UICC Cincinnati (ILO U/C) rating.

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WAC 296-848-30080

Medical records

IMPORTANT:

- This section applies when a medical evaluation is performed, or any time a medical record is created for an employee exposed to inorganic arsenic.

You must

- Establish and maintain complete and accurate medical records for each employee receiving a medical evaluation and make sure the records include all the following:
 - The employee's name and Social Security number, or other unique identifier.
 - A description of the employee's duties.
 - A copy of the licensed healthcare professional's (LHCP's) written opinions.
 - The anticipated or representative employee exposure monitoring results provided to the LHCP for the employee.
- Maintain medical evaluation records for the duration of employment plus 30 years.



Note:

- Your medical provider may keep these records for you. Other medical records, such as the employee's medical history or X ray, need to be kept as a confidential record by the medical provider and accessed only with the employee's consent.



Reference:

- To see additional requirements for employee medical record, including access and transfer requirements, go to Employee Medical and Exposure Records, chapter 296-802 WAC.

