

Meeting WISHA Training Requirements

- To meet the WISHA training requirements for arsenic, you must include information specific to your worksite as indicated in slides #5, 9, 11, 16, 18, 23 and 25.
- Preview this program and include your specific workplace information before conducting the training.
- It is recommended you keep an attendance roster for your records to document training.

How To Use This PowerPoint Program

- Users with PowerPoint can download, edit, and use the program for training with a laptop and multimedia projector.
- Additional information is also found in the Notes section of this presentation below the slides. You can read the text in quotations found in the Notes section or use your own words.
- If you want to print out this program, the PDF file uses less computer memory and prints faster.

Arsenic

What this training will cover

Health hazards of arsenic

How you are exposed to arsenic

Control of your arsenic exposure

How to protect yourself from arsenic

Use of respirators

Medical surveillance

WISHA rules on arsenic



Health Hazards of Arsenic

Exposure to arsenic can cause:

Sore throat,

Skin rash, irritation and warts,

Numbness in hands and feet,

Lung cancer and other cancers,

Death



← Arsenic Warts

Where Arsenic Can Be Found

In Washington state, arsenic can be found:

In soil around old smelter sites,



In old orchard soil,



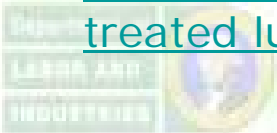
In treated lumber,



In scrap metal



[Link to handout on treated lumber](#)



Exposure to Arsenic at Work

In Washington, workers have been exposed to arsenic while:

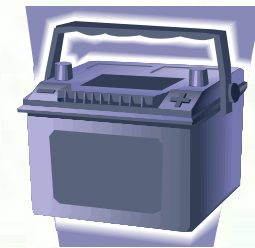
Torch-cutting scrap metal



Sawing treated lumber



Working in a battery manufacturing plant



Working at a hazardous waste site



Arsenic Exposure

You may be or are exposed to arsenic at this jobsite in the following activities or locations:

Employer: describe the quantity, location, manner of use, storage, source of exposure and specific activities that could or will result in employee exposure to arsenic.

Health Hazards of Arsenic

Arsenic Exposure Limits

WISHA has set a level in the air that can't legally be exceeded.



WISHA Legal Limit: **10 micrograms per cubic meter** – like a drop of red dye in 55-gallon drum of water.

If the level in the air is above **5 micrograms per meter**, certain protective steps must be taken.

Arsenic Exposure

How can arsenic get in your body?

Inhaling arsenic fumes while torch-cutting metal,



Inhaling dust from sawing arsenic-treated lumber, or dust from contaminated soil,



Swallowing arsenic dust on your hands while eating, drinking or smoking.



Arsenic effects on skin

Dust containing arsenic can cause skin irritation and other skin problems.



The form of arsenic known as arsenic trichloride is easily absorbed through the skin.

Protective gloves and clothing must be worn when handling products containing arsenic or if arsenic dust can get on your skin.



Controls

We have put the following controls in place to reduce the amount of arsenic you are exposed to:

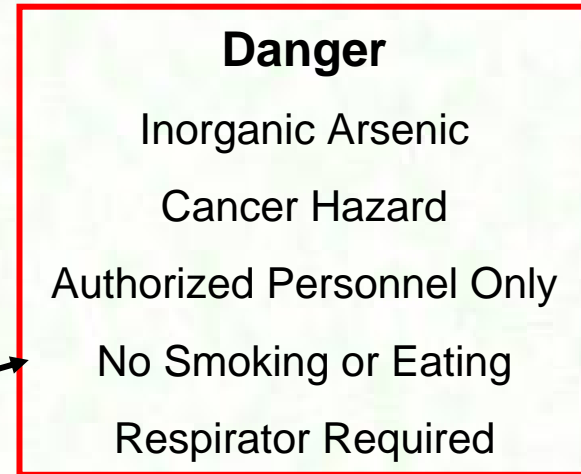
[List controls here]

Warning Signs and Labels

Warning signs are posted at the entrance to any area where the levels of arsenic exceed the WISHA permissible limits.

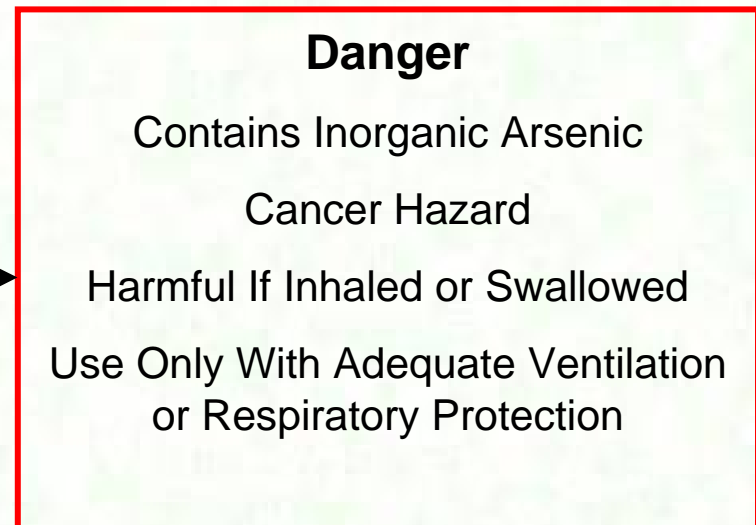
These areas are called "exposure control areas". No one can enter them without a respirator or protective clothing.

All containers containing arsenic also must have a warning label.



Danger
Inorganic Arsenic
Cancer Hazard
Authorized Personnel Only
No Smoking or Eating
Respirator Required

An arrow points from the text "These areas are called 'exposure control areas'" to this sign.



Danger
Contains Inorganic Arsenic
Cancer Hazard
Harmful If Inhaled or Swallowed
Use Only With Adequate Ventilation
or Respiratory Protection

An arrow points from the text "All containers containing arsenic also must have a warning label." to this label.

Worksite Exposure Control Areas

[List specific worksite exposure control areas where respirators must be worn here.]

How to Protect Yourself

Required Work Practices

Wear respirators assigned to you,



Wear coveralls and gloves if working with arsenic-contaminated dust or dirt,



Wash your hands before eating, drinking or smoking.



Use the separate change room and clean lunch area we have provided.

How to Protect Yourself

Required Work Practices

Don't take your work clothing or boots home,

Dispose or have protective clothing laundered by us,



Keep your street clothing in a clean place,



Clean your respirator daily and store in a clean, dry place.

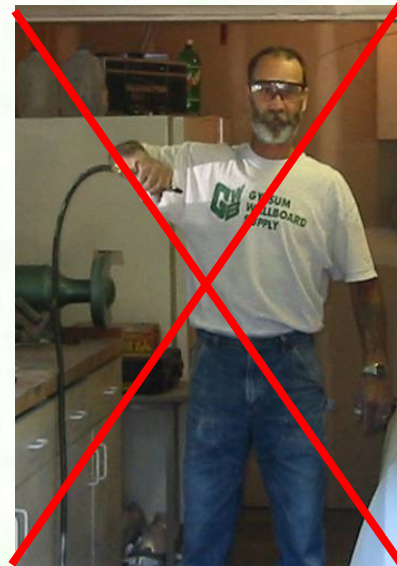


Don't do this!

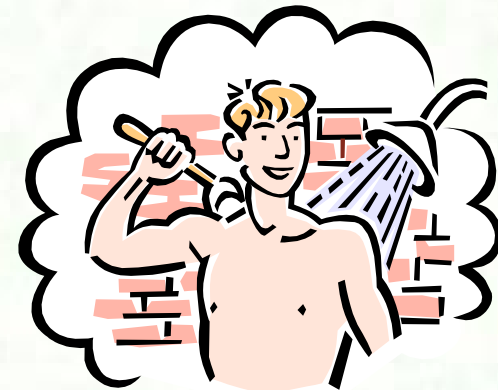
How to Protect Yourself

More Required Work Practices

Don't remove dust by blowing down or shaking out your clothing.



Take a shower at the end of the shift when required. Showers are required if levels in the air are above the WISHA PEL.



How to Protect Yourself

Even more required work practices

Don't dry sweep or blow down dust containing arsenic,



Use a vacuum with high efficiency filters for cleanup,



Use exhaust ventilation when sawing or sanding arsenic-treated wood.



Required work practices at this worksite

[List worksite-specific work practices that reduce or control exposures here.]

Respirators

Type of Respirators for Arsenic

In some jobs involving arsenic, you may need a respirator.

The type of respirator worn depends on the amount of arsenic in the air.

We will provide you with the proper respirator:



Respirators You Must Use

[List or describe respirators used here]

Respirators

Using Respirators

Respirators must be worn at all times when the amount of arsenic in the air is above the legal limit.

You must have a medical evaluation before you wear a respirator.

Respirators must fit properly to prevent leaks.



Respirators

Respirators Must Fit Properly

You must pass a respirator fit-test before you wear a respirator to protect yourself from inhaling arsenic.



You can't have a beard when you wear a tight-fitting respirator.



We will train you on how to use your respirator.

Medical Monitoring

What medical monitoring is needed?

Anyone who is exposed to arsenic above the “**action level**” 30 days or more per year must be offered a medical exam.

The medical exam includes a chest x-ray and nasal and skin examination.

We offer you a medical exam at least once a year.



More on Medical Exams

We will provide additional medical exams if you develop any signs or symptom associated with arsenic.

We will provide the doctor information on your arsenic exposure and respirator.

We will get the doctor's written opinion on the results of the exam and any further steps recommended to protect you.

You will get a copy of the doctor's report.



Worksite Medical Surveillance Program

Describe details of worksite specific medical surveillance program here.

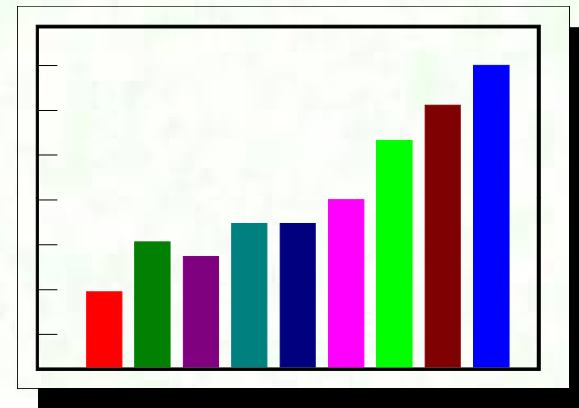
Records

Medical and Air Sampling Records

You have the right to see any of your medical records related to arsenic.



You also have the right to see results of any air sampling for arsenic we have done.



Air Monitoring

We do regular air monitoring of arsenic in the air. You have the right to observe this monitoring.

Results of **air monitoring** are as follows:



Arsenic Regulations

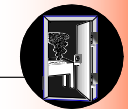
WISHA Arsenic Regulations

The WISHA arsenic regulations contains much more information in detail.

A copy of this standard is available if you are interested.

WISHA Department of Labor & Industries

Arsenic



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