



## Occupational Lung Diseases

Occupational lung diseases are caused or made worse by your work environment. They occur from inhaling dusts, chemicals, or bacteria and molds at work. It is important to know about these lung diseases because they can be prevented or kept from getting worse.



The major groups of occupational lung diseases are:

- work-related asthma
- lung disease from dusts and metals
- allergic problems
- reactions from irritants
- lung or other cancers
- infections

### What is work-related asthma?

Work-related asthma is the most common occupational lung disease. There are two types of work-related asthma: **occupational asthma** and **work-exacerbated asthma**. Occupational asthma is asthma *caused* by being exposed to something at work. The asthma can be caused by exposure to high doses of something that **irritates** the lungs or from an **allergic** reaction. **Allergic occupational asthma** can develop when you gradually become allergic to something at work, such as auto spray paints, flour, latex gloves, or laboratory animals. **Work-exacerbated asthma** is asthma that is *made worse* by your work environment. This kind of asthma can occur due to many things, such as chemical irritants, very cold air, or heavy exertion.

### How does dust cause lung disease?

Some dusts, such as asbestos, silica, and coal can cause serious scarring (fibrosis) in the lungs. Lung disease that is caused by inorganic dusts is known as *pneumoconiosis*. This type of lung disease usually develops slowly with at least 10-20 years of exposure to the dust. The main symptoms of pneumoconiosis are shortness of breath and fatigue (tiredness).

### How does working with metal cause lung disease?

Working with metals such as beryllium (used in the aerospace and nuclear fields) and cobalt (from hard metal cutting tools) can cause lung scarring (fibrosis) and a decrease in your blood oxygen level. This scarring can lead to shortness of breath and fatigue.

### What about molds and infections?

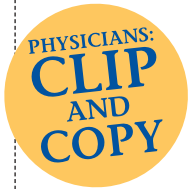
You can get asthma or rhinitis (nose inflammation) if there are high levels of mold where you work. Healthcare, prison, and social service workers can get influenza, tuberculosis, or other infections from work.

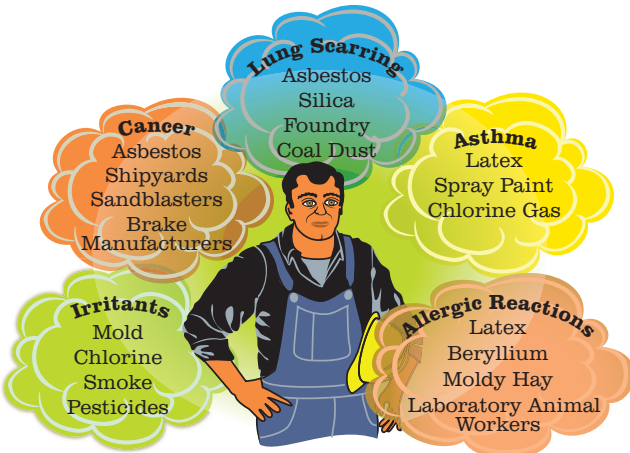
### Can I get cancer from occupational exposures?

Causes of work-related lung cancer include asbestos, silica, arsenic and chloromethyl ethers. Second hand smoke, diesel exhaust, beryllium, chromates, and other materials increase your risk of getting lung cancer. Asbestos also causes mesothelioma, which is a cancer of the lining of the chest and abdomen. Cancer from an occupational exposure is usually discovered many years after your first exposure to the cancer-causing agent.

### Are there tests that can tell me if I am getting or have an occupational lung disease?

Screening tests for all workers exposed to agents that may cause occupational lung diseases (even if they feel healthy) can sometimes find lung disease in the early stages. Tests may include periodic chest X-rays and pulmonary function tests. Workers who are exposed to beryllium should have a blood test for beryllium sensitization. If there is a known





exposure to particular agents, these tests may be required by the U.S. Occupational Safety and Health Administration (OSHA). Your employer usually pays for this testing.

### How would I know if I have an occupational lung disease, and what should I do?

You may have an occupational lung disease if:

- you have new coughing, wheezing or other breathing problems that occur at work or are made worse at work
- you have symptoms that improve when you are away from work
- other workers at your facility have similar breathing problems
- you have been exposed to chemicals that are known to cause asthma or pneumoconiosis
- Material Safety Data Sheet (MSDS) and Hazard postings show that the materials that you are exposed to can cause lung disease

Explain to your health care provider your symptoms, what type of job you do, and what substances you are exposed to at work. Bring all MSDS's and other work exposure information to your health care provider. Ask your Human Resources Manager or Safety Officer for further exposure information. If an occupational lung disease is highly suspected, you should be referred to an occupational medicine specialist and/or a physician specializing in pulmonary medicine. If your breathing problems are due to work, you may file a Worker's Compensation claim. Workers Compensation can pay for medical care and provide salary support if you are unable to work. You may also report unsafe conditions to the Occupational Safety and Health Administration (OSHA).

### How can occupational lung diseases be prevented?

Occupational lung diseases can be prevented by making sure you are not exposed to any agents at levels that can harm you. Some things that can be done to control exposure are wearing a *respirator* (protective mask), making sure the *exhaust ventilation system* pulls fumes away from you, and *replacing* dangerous materials with safer ones.

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For more information contact the following websites:

**State Health Departments in you State**

**Occupational Safety & Health Administration (OSHA)**

[www.osha.gov](http://www.osha.gov)

**National Institute for Occupational Safety & Health (NIOSH)**

[www.cdc.gov/niosh](http://www.cdc.gov/niosh)

**US Centers for Disease Control and Prevention (CDC)**

<http://www.atsdr.cdc.gov/contacts.html>

**Canadian Centre for Occupational Health and Safety**

<http://www.ccohs.ca/>

**MSDS (Material Safety Data Sheets)**

<http://ccinfoweb.ccohs.ca/msds/search.html>

**European Agency for Safety and Health at Work**

<http://ccinfoweb.ccohs.ca/msds/search.html>

## Rx Action Steps

- ✓ ask for training about lung hazards and prevention methods
- ✓ use the MSDS to find out what you may be exposed to
- ✓ if it is determined that you may have an occupational lung disease, ask to be referred to an occupational medicine specialist and/or a physician specializing in pulmonary medicine
- ✓ if you are advised to use a respirator at work, wear it
- ✓ do not smoke

**Doctor's Office Telephone:**

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