

# Risk Factors at Work: Identify and Reduce Them

Many workplaces contain harmful substances. They put healthy people at risk and are very harmful to Alphas. Being aware of risk factors at work may help you make informed choices about your job and your career.

For example, if you're a young Alpha, avoiding jobs that expose you to toxic substances reduces your risk of lung or liver disease. And, if you get your diagnosis while working in a high-risk environment, you may need guidance and support to find and prepare for a new career.

## Risks & results

Risk factors at work come in many forms such as smoke, gas, dust, liquids, vapors, or mists. The greater your exposure to a toxic substance, the more damage you'll suffer. Many substances are twice as harmful to Alphas because they damage the lungs and liver.

Some hazards harm you right away. Others only cause damage after repeated, long-term exposure. For example, silica dust causes a serious lung disease called silicosis, but only after years of exposure. And long-term exposure to carbon tetrachloride can cause hepatitis.

You can see and smell some breathing hazards, like dust or gasoline fumes. Substances like these may irritate your eyes, nose, and throat. But other hazards, like carbon monoxide, have no odor. Or your sense of smell may weaken with repeated exposure to hazards. You may not be aware even when you're in danger.

### Risk factors at work — Exposure to toxic substances

**Ammonia:** A gas that is an irritant to the eyes, nose, and throat. It causes upper airway constriction.

**Asbestos:** A dust that causes lung fibrosis or scarring of the tiny air sacs in the lungs and surrounding tissue. It also causes lung cancer.

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**Phosgene:** A toxic gas that causes pulmonary edema, chemical pneumonitis, and corrosive burns to air passages. It also kills your liver cells.

**Carbon Monoxide:** A colorless, odorless gas that interferes with the ability of the blood to carry oxygen to the vital organs of the body.

**Carbon Tetrachloride:** A colorless liquid that causes cancer. It's toxic to the central nervous system, liver, and kidneys.

**Toluene:** A chemical with a distinctive smell, used in nail polish and paint thinners that has a distinctive smell. It's often used in the plastics, insulation, and automotive industries. Small amounts of toluene diisocyanate (TDI) in the workplace causes asthma and wheezing. Toluene in larger amounts is also toxic to the liver.

**Note:** If you are repeatedly exposed to toxic substances on the job, your employer must provide you with the right kind of safety equipment. This includes respirator masks and protective clothing.

You can educate yourself about the substances you'll come in contact with at work. They're listed on Material Safety Data Sheets (MSDS). These documents give recommendations for avoiding, reducing, and eliminating exposure. They also tell you what to do if you're exposed.

**Note:** As an employee, it's your job to report an unsafe and unhealthful work environment to the Occupational Safety and Health Administration (OSHA).

## Protect yourself with a mask

[Respirator masks](#) reduce the risk of exposure from inhaling smoke, dust, fumes, mist, or particles. Make sure

- You have the right mask for your specific exposure — the substance and the particle size.
- Your mask fits properly with no gaps or leaks

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- Your mask isn't worn out or damaged.

Respirator masks may not work for you, as they can restrict breathing even more. In this case, you may need to be reassigned to a job that doesn't put you in contact with harmful substances. Work closely with the occupational health nurse, your supervisor, and your doctor to make sure you have a safe work environment.

## More tips to reduce your risks

- [Outdoors](#)
- At [home](#)

***For more in-depth information on this topic, please visit the [Big Fat Reference Guide](#). If you are enrolled in AlphaNet's Subscriber Portal, you can access the BFRG [here](#).***