

CYANIDE

Polk County Preparations

Because of ongoing concerns about potential terrorist attacks, the U.S. government is working to improve overall preparation against terrorism. One aspect of this preparation is to learn more about protecting ourselves against possible chemical attacks.

If a public health emergency happens in our community, the Polk County Public Health Department will be the local agency responsible for preparing and guiding medical response and public information efforts. During such an emergency, a critical role of the Public Health Department will be to work with other local first responders, such as fire and police. The Public Health Department will also coordinate response activities with state and federal agencies.

The Polk County Public Health Department is providing information to help you understand what cyanide is and what kind of response you should take in the event that you would be exposed to cyanide.

What is Cyanide?

Cyanide is a rapidly acting, potentially deadly chemical that can exist in different forms. Cyanide can be a colorless gas or a crystal form. Cyanide is sometimes described as having a “bitter almond” smell, but it does not always give off this odor.

Cyanide can also be released from natural substance in certain foods and plants. Cyanide is contained in cigarette smoke and is used to make paper, textiles and plastics. Cyanide gas is used to exterminate pests and vermin in ships and buildings.

Cyanide and Terrorism

Reports have indicated that during the Iran-Iraq War in 1980s, hydrogen cyanide gas may have been used against the inhabitants of the Kurdish city of Halabja in northern Iraq. The deliberate release of cyanide is considered a potential terrorist threat.

In the event of a terrorist attack with cyanide, the Public Health Department and emergency officials will provide emergency information and instructions on how to protect yourself and your family. You may be asked to evacuate (leave the area) or shelter-in-place (remain inside a building). In either case, it is important that you and your family have an Emergency Preparation Plan.

Symptoms of Exposure to Cyanide

The extent of harmful symptoms caused by cyanide depends on the amount of cyanide you were exposed to, the method of exposure and the length of exposure time. You could be exposed to cyanide by breathing air, drinking water, eating food or touching soil that contains cyanide.

If you were exposed to a small amount of cyanide, you may have some or all of the following symptoms: rapid breathing, headache, restlessness, nausea and vomiting, dizziness, rapid heart rate, and weakness. These symptoms may occur within minutes. If you were exposed to a large amount of cyanide, you may have other symptoms as well; convulsions, low blood pressure, slow heart rate, lung injury and respiratory failure. Severe respiratory failure may lead to death.

Treatment for Exposure to Cyanide

Cyanide poisoning is treated with antidotes and supportive medical care, which can include supplemental oxygen and assisted ventilation. If the patient is showing symptoms, emergency personnel will immediately start emergency life support measures, including the use of a cyanide antidote kit. The most important thing is to seek medical treatment as soon as possible.

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If You Were Exposed to Cyanide:

- **Move away from the source.** First, get fresh air by leaving the area where the cyanide was released. Moving to an area with fresh air can save your life. If the cyanide release was outside, move away from the area where the cyanide was released. If the cyanide release was indoors, get out of the building. If you can't leave the area that was exposed to cyanide, stay as low to the ground as possible.
- **Quickly remove clothing.** If possible, cut clothing off the body instead of pulling it over the head since cyanide may get onto uncontaminated skin. Avoid touching the contaminated clothing. If you are helping other people remove their clothing, use gloves to assist them.
- **Place your clothing, contact lenses, shoes, etc. inside a plastic bag.** If you can, wear rubber gloves and use tongs, tool handles, sticks or turn the bag inside out, and pick up the clothes. Seal the bag and place it inside another plastic bag. This will help protect you and other people from the cyanide that might be on the items.
- **As quickly as possible, immediately wash any cyanide from your skin** with large amounts of regular soap and water.
- **If your eyes are burning or your vision is blurred, rinse your eyes with plain water** for 10 to 15 minutes. If you wear contacts, remove them and dispose of them with the contaminated clothing. If eyeglasses or jewelry were exposed to cyanide, wash them with soap and water. You can put them back on after washing.
- **When the emergency personnel arrive,** tell them what you did with your clothes and other items. The emergency personnel will arrange for further disposal. Do not handle the plastic bags yourself.
- **If cyanide has been swallowed,** do not induce vomiting, do not give fluids to drink.
- **Seek medical attention right away.** Stay calm. Dial 911 and explain what has happened.

If you have any questions about cyanide, please contact the **Polk County Health Department at 515-286-3798**. Public Health Department staff members are available to answer your questions Monday to Friday from 8 a.m. to 5 p.m.

For information about putting together an Emergency Preparation Plan, visit the Department of Homeland Security site at www.ready.gov. Also, see the Centers for Disease Control and Prevention's Web site at www.bt.cdc.gov for additional information.

