



Sedgwick County...
working for you

Health Department

FACTS&details

about Sedgwick County Government

Ricin

April 2013

What is ricin?

Ricin is a poison that can be made from the waste left over from processing castor beans. It can come in the form of powder, mist, pellet, or it can be dissolved in water or weak acid. Ricin has some potential medical uses, such as in bone marrow transplants and cancer treatments.

What are the symptoms of ricin poisoning?

Symptoms of ricin poisoning depend on the type and amount of exposure.

Inhalation: Symptoms that may occur after inhaling significant amounts of ricin include difficulty breathing, fever, cough, nausea, and tightness in the chest. Heavy sweating may follow, as well as fluid build up in the lungs. The skin may turn blue with low blood pressure and respiratory failure occurring. These symptoms can ultimately lead to death.

Ingestion: Symptoms that would occur if someone swallows a significant amount of ricin include vomiting and diarrhea that may become bloody. As a result, severe dehydration may follow, along with low blood pressure. Other signs or symptoms may include hallucinations, seizures, and blood in the urine. Within several days the person's liver, spleen and kidneys may stop working, leading to death.

Skin/eye exposure: Ricin is unlikely to be absorbed through skin. In the powder or mist form, ricin can cause redness and pain on the skin and in the eyes.

How soon do symptoms appear after exposure?

Initial symptoms of ricin poisoning by inhalation may occur as early as 4 to 8 hours and as late as 24 hours after exposure. Once someone has ingested ricin, symptoms typically occur in less than 10 hours. Death from ricin poisoning could take place within 36 to 72 hours of exposure, depending on how the person was exposed and the amount of ricin he/she was exposed to.

What should I do if I or someone else is experiencing symptoms of ricin exposure?

Seek medical attention right away.

How is ricin spread?

Ricin poisoning is not contagious, as it cannot be spread from person to person through casual contact. If you come into contact with someone who has ricin on his or her body or clothes, you could become exposed to it. However, people who were not present where the ricin was found are not likely to have been exposed at levels high enough to negatively affect their health. Accidental exposure to ricin is highly unlikely. It would take a deliberate act to make ricin and use it to poison people.

Poisoning could occur if you ingest (swallow) or inhale (breathe) material containing ricin. In a few rare, past cases, injections of ricin have led to poisoning. This is a very unlikely method of exposure because it requires someone to actually inject the material into you.



Ricin - page 2

April 2013

How is Ricin poisoning treated?

A medicine to treat ricin does not exist, making it very important to get the ricin off or out of the body as quickly as possible. Ricin poisoning is treated by giving those exposed supportive medical care to minimize the effects of the poisoning. Depending on the type of exposure, medical care could include measures to help the person breathe, giving him or her fluids through a needle inserted into a vein, giving medications to treat conditions such as seizure and low blood pressure, flushing the stomach with activated charcoal (if the ricin has very recently been ingested), or washing out the eyes with water (if irritated).

How can you protect yourself and what should you do if you are exposed to ricin?

Leave the area where the ricin was released. This is a good way to reduce the possibility of death from exposure. If you think you have been exposed to ricin, get medical care as soon as possible and follow these tips:

Remove your clothing: Any clothing that has to be pulled over the head should be cut off the body instead of being pulled over the head. If you are helping someone remove his or her clothing, try to avoid touching any contaminated areas and remove the clothing as quickly as possible.

Wash yourself: Immediately wash any ricin from your skin with large amounts of 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 put them with the contaminated clothing. Do not put the contacts back in your eyes. If you wear glasses, wash them with soap and water. You can put your eyeglasses back on after you wash them.

Dispose of clothing: After you have washed yourself, place your clothing inside a plastic bag. Avoid touching contaminated areas of clothing. If you cannot avoid touching or are not sure where the contaminated areas are, wear rubber gloves, turn the bag inside out and use it to pick up the clothing. You can also put the clothing in the bag using tongs, tool handles, sticks, or similar objects. Anything that touches the contaminated clothing should also be placed in the bag. Seal the bag and then seal that bag inside of another plastic bag. This will help protect you and others from any chemicals that might be on the clothing.

For more information:

Visit www.sedgwickcounty.org or call Public Health Incident Planning and Response (PHIPR) at (316) 660-5551 to learn more.