Ricin

Fact Sheet



Maine Center for Disease Control and Prevention

An Office of the Department of Health and Human Services

What is ricin?

Ricin is a poison that is found naturally in castor beans. Ricin can be made from the waste that is left over when castor beans are processed. Ricin can be in the form of a powder, liquid, mist or pellet. If ricin is made into a mist, or put in food or water, you can't see it or smell it.

Who gets ricin poisoning?

It would take an act that was done on purpose to make ricin and use it to poison people. Accidental exposure is very rare. You can be exposed to ricin through swallowing (ingesting) or breathing in (inhaling) material that contains ricin. Ricin has been injected into people's bodies, but this is very unlikely method of exposure. Ricin poisoning cannot be spread from person to person.

What are the signs and symptoms of ricin poisoning?

The effects of ricin poisoning depend on whether ricin was swallowed, breathed in or injected.

- Symptoms of swallowed ricin include abdominal pain, nausea, vomiting, diarrhea, and bloody diarrhea. Other signs or symptoms include fever, hallucinations, seizures, and blood in the urine.
- Inhaling ricin can cause nose and throat pain, cough (that may be bloody), chest tightness or pain, difficulty breathing, fever, and nausea.
- Injecting ricin can destroy the skin and muscles around the injection site and cause many of the same symptoms of poisoning through swallowing or breathing in ricin.
- Ricin is not likely to be absorbed through healthy skin. If ricin touches your skin or eyes, it will cause redness and pain. However, if you touch ricin that is on your skin and then eat food with your hands or put your hands in your mouth, you may swallow it.

Death from ricin poisoning can take place within 36 to 72 hours of exposure. If you have these signs and symptoms and have come in contact with ricin, see a healthcare provider immediately.

How soon do symptoms appear?

Symptoms from ricin poisoning can appear four to eight hours after breathing in ricin, or six to twelve hours after swallowing ricin.

How is ricin poisoning diagnosed?

Ricin poisoning is difficult to diagnose. Diagnosis is based on symptoms, especially if many people attending the same event become sick at the same time. Ricin poisoning is diagnosed when a laboratory finds the poison or evidence of a reaction to the poison in a sample of a person's blood, respiratory fluids or urine. Environmental samples collected from filters, swabs or wipes may also be tested.

How is ricin poisoning treated?

There is no specific treatment for ricin poisoning. Healthcare providers will treat the symptoms.

What do I do if I think I was exposed to ricin? Call 911.

Where can I get more information?

For more information contact your healthcare provider or local health center. You can also contact Maine Center for Disease Control and Prevention by calling 1-800-821-5821 or visiting www.mainepublichealth.gov. The federal Centers for Disease Control and Prevention website, http://www.cdc.gov and the Emergency Preparedness Response Website. and http://emergency.cdc.gov, are excellent sources of information.