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What is ricin?

Ricin is a poisonous waste that is left over when castor oil is made from castor beans. Experts are concerned that terrorist groups or others might make ricin and use it to intentionally poison people.

How can people be exposed to ricin?

Ricin can be made into a powder, mist or pellet, or dissolved in liquid. It is dangerous if it is breathed in, injected or swallowed; even very small amounts could be enough to kill a person. Ricin poisoning cannot spread from one person to another.

How can people recognize that they are sick from an exposure to ricin?

Symptoms of ricin exposure can be different depending on how the poison enters the body:

- If it is breathed in, symptoms can include cough, chest tightness, shortness of breath and pneumonia.
- If it is injected, symptoms can include muscle pain, weakness, vomiting and shock.
- If it is swallowed, symptoms can include nausea, vomiting, diarrhea and stomach cramps. Severe illness can include bloody diarrhea, bloody vomit and shock.
- If there is contact with the skin or eye, symptoms can include redness and pain of the skin and eye. Ricin is unlikely to be absorbed through intact skin.

How soon after exposure do the symptoms appear?

Symptoms might start hours to days after exposure to ricin. Death from ricin poisoning can occur within 36 to 72 hours, depending on how the poison enters the body and the amount that enters.

How can people avoid exposure to ricin?

If a chemical is released in an area, people should calmly and quickly leave the area. It is dangerous to return to an area with chemical contamination until it has been cleaned up and checked by experts.

What should people do if they have been exposed to ricin?

It is important to act quickly if exposed.

- If you have breathed a chemical, immediately move to fresh air.
- If liquid chemical soaks clothes or skin, then take all clothes off right away. Contaminated clothes and other belongings (such as watches, jewelry and purses) should be placed

- somewhere away from other people (sealed in a double layer of plastic bags, if available). Call the local health department or emergency management agency to request advice on disposal.
- Wash skin and hair with soap and large amounts of water to flush away the liquid chemical. If you cannot find soap, just use plain water. Flush eyes with water following liquid exposure to the eye.

- If you have been exposed to powder, remove contaminated clothing and wash exposed skin and hair with soap and water.
- People feeling sick should get medical care immediately. If you need immediate medical attention, call 911 or go to a local emergency department. Often the local emergency department is the best place for a medical evaluation after a chemical exposure. Always remove contaminated clothing before entering a medical facility.

How is an exposure to ricin recognized and treated?

There is no antidote (medicine) for ricin poisoning. People exposed to ricin should seek medical care to treat symptoms and minimize the effects of the poisoning. Special laboratory tests might be available to show that an exposure occurred.

Where can more information about ricin poisoning be found?

- If you have concerns about ricin poisoning, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at the VDH Local Health Districts page.
- Visit the Centers for Disease Control and Prevention website at the CDC page on ricin.

Ricin: Overview for Health Care Providers (Updated May 2023)

Key Medical and Public Health Interventions After Identification of a Suspected Case

March 2019

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