

# RICIN FACT SHEET

## What is ricin?

Ricin is a poison found naturally in castor beans. If castor beans are chewed and swallowed, the released ricin can cause harm. Ricin can also be made from the waste material left over from processing castor beans. It can be in the form of a powder, a mist, or a pellet, or it can be dissolved in water or weak acid.

## How are people exposed to ricin?

Ricin is not naturally occurring in the air you breathe or food you eat. You can only be exposed if someone deliberately makes ricin and uses it to poison you.

## How does ricin work?

Ricin enters the cells of your body and prevents them from making the proteins they need. Without the proteins, cells die. This can eventually result in death. The effects of ricin poisoning depends on whether ricin was inhaled, ingested (swallowed), or injected.

## What are the symptoms of ricin poisoning?

Symptoms vary depending on how the poison enters the body and the dose received.

- When a significant amount of ricin is ingested, it can cause vomiting and diarrhea (may be bloody). It can also cause seizures and blood in the urine. Severe dehydration may result, followed by low blood pressure. Within several days, the liver, spleen, and kidneys might stop working, leading to death.
- When a significant amount of ricin is inhaled, it can cause difficulty breathing, fever, cough, nausea, and chest tightness. The lungs can begin to fill with fluid making breathing more difficult. Finally, low blood pressure and respiratory failure may occur, leading to death.
- When the eye and skin is exposed to ricin, the exposure site can become red and painful. However, ricin is unlikely to be absorbed through normal skin. 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 ingest some.

## How soon do symptoms occur?

Initial symptoms of ricin poisoning by inhalation may appear within 4–8 hours and as late as 24 hours after exposure. When ingested, symptoms typically begin in less than 10 hours. Death from ricin poisoning could take place within 36–72 hours of exposure, depending on how you are exposed and the dose received.

## Is there a treatment for ricin poisoning?

No, there is no antidote for ricin. Persons are given supportive medical care to reduce the effects of the poison.

## What steps should someone take if exposed to ricin?

- Quickly leave the area where the ricin was released and get fresh air.
- Quickly take off clothing that may have ricin on it. Any clothing that has to be pulled over the head should be cut off the body instead of pulled over the head.
- Quickly 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 10–15 minutes.
- After you have washed yourself, place your clothing inside a plastic bag, seal the bag, and then place that bag in a second plastic bag.
- Seek medical attention immediately.
- If ingested, do not make yourself vomit or drink fluids.

## Where can I get more information?

Information about ricin and other related health topics can be found at [www.cdc.gov](http://www.cdc.gov). The DC Department of Health promotes the health and safety of the District residents. For additional information, please visit [www.doh.dc.gov](http://www.doh.dc.gov) or call (202) 442-9371.