



# Chemical Emergencies

## Ricin

<p><b>What is Ricin?</b></p>	<p>A poison that is made from the waste leftover from processing castor beans.</p> <p>Ricin can be in the form of a powder, a mist, or a pellet, or it can be dissolved in water or weak acid.</p>
<p><b>What are the dangers?</b></p>	<p>Ricin prevents cells from making the proteins that are needed for normal cell function.</p> <p>Effects of ricin poisoning depend on whether ricin was inhaled, ingested, or injected.</p>
<p><b>How can I be exposed?</b></p>	<ul style="list-style-type: none"> <li>• It would take a deliberate act to make ricin and use it to poison people. Accidental exposure to ricin is highly unlikely.</li> <li>• People can breathe in ricin mist or powder and be poisoned.</li> <li>• Ricin can also get into water or food and then be swallowed.</li> <li>• Depending on the route of exposure (such as injection or inhalation), as little as 500 micrograms of ricin could be enough to kill an adult. (500 micrograms = size of a pinhead)</li> <li>• Ricin poisoning is not contagious and cannot be spread from person to person through casual contact.</li> </ul>
<p><b>What are the signs and symptoms of ricin exposure?</b></p>	<ul style="list-style-type: none"> <li>• The major symptoms of ricin poisoning depend on the route of exposure and the dose received, though many organs may be affected in severe cases.</li> <li>• If inhaled the following symptoms may occur within 8 hours: difficulty breathing, fever, cough, nausea, and tightness in the chest.</li> <li>• If ingested, some or all of the following symptoms may occur: Vomiting and diarrhea with possible traces of blood, hallucinations, seizures, and blood in the urine.</li> <li>• Exposure to skin and eyes may result in redness and pain.</li> </ul>
<p><b>How is ricin poisoning treated?</b></p>	<ul style="list-style-type: none"> <li>• No antidote exists for ricin; therefore the most important factor is avoiding ricin exposure. If exposed, the most important factor is then getting the ricin off or out of the body as quickly as possible. Seek immediate medical attention to minimize the poisoning effects of ricin.</li> </ul>