Ricin

Definition:
Ricin is a poison found naturally in castor beans. If castor beans are chewed and swallowed, the released ricin can cause injury. Ricin can be made from the waste material left over from processing castor beans. Ricin can be in the form of a powder, mist, dissolved in water or weak acid, or pellet. Most ricin poisonings have occurred when the ricin was injected or when the person swallowed the ricin. Ricin poisoning reports are to be strongly considered as terrorism incidents until determined otherwise.

Signs and symptoms:
Symptoms depend on the route of exposure and can occur 4 hours to 24 hours after exposure. When an exposure occurs, symptoms can vary. Symptoms may include but are not limited to: cough, chest tightness, difficulty breathing, nausea, vomiting, bloody diarrhea, fever, severe dehydration, hypotension, cyanosis, seizures, hypovolemic shock, and multiple organ failure. Death from ricin poisoning can occur within 36 to 72 hours of exposure.

Transmission:
It would take a deliberate act to make ricin and use it to poison people. Transmission can occur through skin or eye exposure, ingestion, injection, or inhalation. Ricin poisoning is not contagious. It cannot spread from person to person through casual contact. However, if you come into contact with someone who has ricin powder or mist on their body or clothes, you could become exposed to it through accidental ingestion or inhalation.

Diagnosis:
Ricin poisoning is diagnosed by laboratory testing performed at designated laboratories.

Role of the School Nurse:
Prevention
- Unintentional exposure to ricin is highly unlikely, except through the ingestion of castor beans.
- There is no vaccine licensed to prevent ricin poisoning.

Treatment Recommendations
- If symptoms are noted, notify law enforcement and seek medical attention immediately at a hospital.
- There is no specific treatment or antidote for ricin poisoning. Providers would treat the symptoms.

Exclusions
- There are no exclusions indicated.

Reporting Requirements
- Report immediately to 1-800-821-5821.

Resources:
Federal CDC Ricin website: http://emergency.cdc.gov/agent/ricin/