

RICIN TOXIN

Utah Department of Health Laboratory
(801) 584-8400 (business hours)
(888) EPI-UTAH (after hours, weekends, holidays)

What is Ricin?

- Ricin is a poison that can be made from the waste 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

Symptoms of Ricin

- Ricin toxin can be inhaled, ingested or injected.
- Death from ricin poisoning could take place within 36 to 72 hours of exposure, depending on route of exposure and the dose received.
- **Inhalation** symptoms:
 - difficulty breathing
 - cough
 - chest tightness
 - blue skin
 - fever
 - nausea
 - heavy sweating
- **Ingestion** symptoms:
 - vomiting
 - severe dehydration
 - other symptoms may include hallucinations, seizures, and blood in the urine
 - diarrhea
 - low blood pressure
- **Injection** symptoms:
 - muscle & lymph node death (injection site)
 - massive bleeding from stomach & intestines
- **Skin and mucous membrane exposure** symptoms:
 - redness and pain of eyes and skin

HUMAN (Clinical) Laboratory Specimens

- The UDOH Laboratory DOES NOT do testing on human (clinical) specimens.
- Because of the rapid time frame to severe symptoms and death (36 to 72 hours), laboratory testing may not be an effective tool in the diagnosis of the initial case(s) of Ricin toxin poisoning.

ENVIRONMENTAL Laboratory specimens

- The Utah Department of Health Laboratory can test **ENVIRONMENTAL** specimens only.
- The following are acceptable specimen types for testing at the UDOH Lab:
 - Plant material in envelope
 - Powder
 - Swabs (cotton, polyester, Dacron, rayon or foam)
 - Wipes (non-cotton gauze, polyester blend, Handi-Wipes)
 - Soil
 - Drink
 - Paper
 - Water
 - Food
- Triple-bag samples for safety, making sure the outer bag is free of contamination.
- **PLEASE CONTACT THE UDOH LABORATORY PRIOR TO SUBMITTING ANY SPECIMENS**

There is low likelihood that Utah is a target for an attack with Ricin toxin. If you think you have a Ricin toxin event, please contact your local law enforcement or the FBI.

For more information on Ricin toxin, go to www.bt.cdc.gov/agent/ricin/facts.asp.

Excerpt from MICROBIOLOGY CLIENT SERVICES MANUAL
State of Utah Public Health Laboratory

LAB TEST – Bioterrorism

TEST	Ricin toxin
METHOD	N/A
AVAILABLE	Ordered by Epidemiology, Local Health, Local Law, or FBI
PATIENT PREP	N/A
SPECIMEN	Environmental samples
COLLECT IN	Original container or sterile container
PROCESSING	Use universal precautions – all manipulations under a Biosafety Cabinet
TRANSPORT	Refer to Safe Handling, Packaging and Shipping Guidelines
TIME CRITICAL	Should be received in our laboratory as soon as possible
LABEL	Identification, sample description, date of collection
REQUISITION	Bioterrorism Test Request Form
TEST COMPLETE	24 hours
RESULTS	Detected or not detected
REPORTED	Phone, fax, or email, as established with provider
NOTE	N/A
CONTACT	(801) 584-8449: June Pounder or Kim Christensen

BIOTERRORISM TEST REQUEST FORM STATE OF UTAH PUBLIC HEALTH LABORATORY 46 NORTH MEDICAL DRIVE SALT LAKE CITY, UTAH 84113-1105 TELEPHONE: (801) 584-8400 FAX: (801) 584-8486	FOR LABORATORY USE ONLY LAB#: DATE STAMP:
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TESTING WILL NOT BE PERFORMED UNLESS SLIP IS COMPLETELY FILLED OUT. PLEASE PRINT CLEARLY FOR ACCURACY.

PATIENT INFORMATION:			
Patient Name (Last, First): _____			
Patient ID #:	DATE OF BIRTH (mm/dd/yy) ____/____/____	AGE: _____	SEX: M F

PROVIDER INFORMATION:	Physician: _____	SPECIMEN COLLECTION DATE
Provider Code:	Provider Phone: _____	(MM/DD/YY)
	Provider Email: _____	____/____/____
	Secure Fax #: _____	

SPECIMEN SOURCE/SITE:

Blood

Serum

Urine

CSF

Skin

Bronchial Wash

Tissue (specify): _____

Fluid (specify): _____

Feces

Wound/Abscess

Throat

Swab (specify): _____

Sputum

Lesion

Scab

Isolate (source): _____

Environmental (specify): _____

Food (specify): _____

Other (specify): _____

TEST ORDERED:

Bacillus anthracis

Burkholderia spp.

Brucella spp.

Clostridium botulinum culture & toxin

Coxiella burnetii

Francisella tularensis

Orthopox virus

Ricin toxin (non-clinical)

Staphylococcus Enterotoxin B (non-clinical)

Vaccinia virus

Varicella zoster virus

Variola virus

Yersinia pestis

Other (specify): _____

STATE OF ORIGIN OF PATIENT/SAMPLE

ADDITIONAL INFORMATION

(List pertinent information including presumptive ID)
