



UCSD Exposure Control Plan (ECP)

University of California, San Diego
Environment, Health and Safety, 0920
Phone: (858) 534-3660
FAX#: (858) 534-7982

Name: Cholera Toxin

BSL: 2

1. Mode of Transmission to Humans (e.g. inhalation, inoculation, mucous membrane exposure, etc.):

Biosafety Approved Version
Inhalation, inoculation, mucous membrane exposure, and ingestion

2. Description of the Human Disease associated with this agent or vector (including instances of laboratory acquired infections):

Watery diarrhea.
The LD50 in mice is 250 ug/kg when given intravenously. There is no LD50 information for humans; however it is believed that humans are more susceptible than animals. An LD50 for the average 70 kg person is estimated to be 17.5 milligrams.

3. Personnel Protection Required (minimum requirement):

	Laboratory	Vivarium		Laboratory	Vivarium
Safety Glasses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Shoe Covers	<input type="checkbox"/>	<input type="checkbox"/>
Lab Coat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Face Shield	<input type="checkbox"/>	<input type="checkbox"/>
Gloves	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cap/Head Cover	<input type="checkbox"/>	<input type="checkbox"/>
Goggles	<input type="checkbox"/>	<input type="checkbox"/>	Mask	<input type="checkbox"/>	<input type="checkbox"/>
Disposable Gowns	<input type="checkbox"/>	<input type="checkbox"/>	Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other - Describe:	<i>Additional requirements may apply when used in a vivarium</i>				

4. Engineering Controls (minimum requirement):

	Laboratory	Vivarium		Laboratory	Vivarium
Autoclave	<input type="checkbox"/>	<input type="checkbox"/>	Engineered Sharps Protection	<input type="checkbox"/>	<input type="checkbox"/>
BioSafety Cabinets	<input type="checkbox"/>	<input type="checkbox"/>	Sharps Containers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Closed Centrifuge Rotors	<input type="checkbox"/>	<input type="checkbox"/>	Closed Centrifuge Tubes	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>			
Other - Describe:	<i>Weigh powder form in a BSC or fume hood. Do not weigh powder on open bench.</i>				

5. Disposal Procedures:

Liquids: add bleach to a final concentration of 10% bleach solution (Clorox or other bleach with Cal EPA registration number), let sit for 30 minutes, dispose of in sink (best while running water). Aspirator flasks: bleach is added to aspirator flasks initially so that the final concentration will be 10%. These must be emptied at least weekly.
Solids: disposed of in labeled, double red biohazard bags held in labeled, rigid, covered containers. Transport to biohazard collection area in a closed rigid container for final disposal by EH&S. These must be emptied at least weekly.

6. Disinfection Procedures:

Surface: 10% household bleach solution made up fresh daily (Clorox or other bleach with Cal EPA registration number) allowing 5-minutes contact time.
OR
Surface: 75 ppm of CA EPA approved iodophor (e.g. Wescodyne) allowing 5-minutes contact time.

7. Recommended/Required Vaccinations or other Medical Surveillance:

NONE

8. Employee Exposures- first aid procedures:

- a. Eye exposure from splash or aerosols - rinse a minimum of 15 minutes in eye wash or flush area with water.
- b. Skin exposure - wash area with soap and water for 15 minutes
- c. Needle stick and/or sharps exposure - wash wound area with soap and water for 15 minutes
- d. Contamination of clothing - remove the contaminated clothing and place in biohazard bag, shower with the emergency douse shower, and put on clean clothes.
- e. Spill or release - Monday through Friday, 8a - 4:30p call EH&S at (858-534-3660); after hours call UCSD Police (858-534-4357)

9. Employee Exposure - seek medical follow-up from the following medical providers: (TAKE THIS ECP WITH YOU)

Monday - Friday, 8a - 4:30p:
UCSD Occupational & Environmental Medicine, (619) 471-9210
24-hour walk-in service:
Thornton Hospital Emergency Room, (858) 657-7600
UCSD Medical Center (Hillcrest) Emergency Room, (619) 543-6400

10. Report All Injuries, Illnesses, and Exposures to EH&S:

Complete the information found on "What to Do if a Work-Related Injury, Illness, or Exposure Occurs" (http://blink.ucsd.edu/Blink/External/Topics/How_To/0,1260,4295,00.html)

11. Required Biosafety Training:

Laboratory specific training on hazards, exposure evaluations, and the required precautions for experimental procedures used with this agent - provided by Principal Investigator

12. Lab specific instructions:

Procedure listed in protocol S02174M. Proper safety precautions include the use of latex gloves, goggles or face shield, lab coat is used when moving animal. Administration of this agent is to be performed by research staff. The preparation of this agent is done in a chemical fume hood.