UNIVERSITY
CHILDREN'S HOSPITAL
ZURICH
Children's Research Center CRC

Biosafety biological spill with contaminated person (KD01248494)

Time: **Time of Incident:** **Room number:**

Affected people:

Other people involved:

Immediately Leave the Area of the Incident

□ All persons present must leave the laboratory immediately. Avoid stepping into contaminated areas whenever possible.
□ Remove laboratory coats before leaving the laboratory and leave them inside the lab.

Allow Aerosols to Settle

□ Restrict access to the laboratory (assign personnel to prevent entry; later mark the area with a "Spill" sign; materials available in the spill kit).
□ Do not enter the laboratory for at least 30 minutes.

Notify the Biosafety Officer (BSO) Tel.: (044 249) **3010; First Aid Team F&L Tel.:** (044 249) **6800; Alarm Center Securitas Tel.:** (044 249) **3000.**

First Aid in Case of Injury or Contamination

If one or more persons have been injured or contaminated, provide first aid immediately. First aid materials are available in the corridors (Coffee Point each floor, First Aid room (LLF.B+6.004)
□ It is likely that the clothing of the person involved in the incident has become contaminated (e.g., through splashes). Therefore, trousers and shoes should be removed immediately outside the laboratory.
□ Was the spilled material infectious? ☐ Yes ☐ No
□ Type of material / pathogen involved:
□ Injuries (e.g., cuts or needlestick injuries) with possible contamination
    □ Thoroughly rinse bleeding wounds under running water.
    □ Disinfect afterwards using an appropriate disinfectant (e.g., Betadine).
□ Contamination of Skin or Mucous Membranes (Eyes, Mouth)
    □Immediately flush affected mucous membranes with water.
    □ Disinfect the affected skin area.
□ Airborne (Aerosol-Transmissible) Pathogens
    □ Seek immediate medical attention / emergency medical care.
Other Hazardous Substances Involved (e.g., radioisotopes, chemicals, etc.)
    Type:
□ Consult Occupational Medicine. Determine whether exposed individuals must report to Occupational Medicine in person following initial treatment.

If Possible, Assign Another Person in Parallel to:

□ Retrieve the spill kit.
□ Place contaminated clothing into a plastic bag (available in the spill kit) and seal it with a cable tie.
□ Organize replacement trousers and footwear for affected person(s) (e.g., Crocs, work clothing).
□ Record the names of all persons who were present in the laboratory at the time of the spill and instruct them to remain in the building until informed whether additional measures are required.

Managing the Bio-Spill / Laboratory Decontamination

□Select Personnel**,** designate one person to manage the spill.

(Ask who feels confident performing this task; if possible, do not assign the person who caused the spill.)
□ Designate a second person to provide support from outside the laboratory. This person should wear disposable gloves.

Prepare the Response Person

□ Outside the laboratory, the designated person must put on the following personal protective equipment (PPE):

- FFP3 respirator
- Safety goggles
- Protective coverall
- Medical disposable gloves (preferably cytotoxic-resistant)
- Shoe covers
- Chemical-resistant gloves (providing chemical, biological, and mechanical protection)

□ Pull the chemical-resistant gloves over the sleeves of the coverall and secure them with adhesive tape.

Prepare Equipment

□ Before entering the laboratory, ensure all necessary equipment is available:

- Glass fragments → use forceps and dustpan
- Liquids → use absorbent material
- Powders → use water and absorbent wipes

□ Transfer disinfectant into a squeeze bottle if necessary.

Inside the Laboratory

□ Cover the visible spill area with absorbent material (working from the outside toward the center).
□ Apply disinfectant to the absorbent material using the squeeze bottle (from the outside toward the center).
Important: The entire contaminated area must be thoroughly saturated with disinfectant.
□ Allow the disinfectant to act for 15 minutes.
□ During this time, use disinfectant-soaked wipes to disinfect the floor surrounding the covered spill area as well as lower sections of cabinets and furniture (to decontaminate potential invisible splashes).
□ Use forceps and/or a scoop to collect contaminated materials.
□ Dispose of collected materials in an appropriate waste container, e.g., a biological hazardous waste container.
□ After removing all contaminated materials, repeat disinfection: disinfect the spill area using a disinfectant-soaked cloth. Thoroughly wet the surface and allow sufficient contact time. Dispose of the cloth in the waste container.
□ Wipe the bottom of the waste container with a disinfectant-soaked cloth. Without placing the container down again, dispose of the cloth inside the container and hand the container to the person outside the laboratory.
□Exiting the Laboratory
□ The response person moves to the laboratory exit.
□ The person outside the laboratory puts on gloves and holds the waste container open.
□ Remove and dispose of PPE in the following order:

- Shoe covers (while stepping out of the laboratory)
- Chemical-resistant gloves
- Protective coverall
- Medical disposable gloves

□ The person outside provides hand disinfectant ->The person exiting disinfects their hands.

- Safety goggles

□ Remove the FFP3 respirator.

□ Seal the waste container tightly using the autoclave lid.

□ Both persons disinfect their hands again.

Decontamination of Personal Clothing

□ Use appropriate specialized detergents.

□ Alternatively, soak clothing in a water bath containing a suitable disinfectant (Sanosil)

Disposal of Used Materials

□ Autoclave materials and/or dispose of them as biological hazardous waste.

Release of the Area

□ Once qualified personnel determine that no further risk exists, release the area for normal use and remove all barriers and warning signs.

Documentation and Communication

□ Document the incident and all measures taken (CIRS notification)

□ Inform the direct supervisor in writing.

□ Notify Occupational Medicine using the Laboratory Incident Reporting Form.

□ Together with the responsible supervisor, determine whether additional persons or departments need to be informed.