

SOP KD00887804

Biological spill clean up procedures for BSL 1 and BSL 2 labs

1. General

The following procedures concern the remediation of spills involving infectious biological agents. Prevention of personnel exposure is the primary goal in the containment and cleanup of a spill involving infectious agents.

A spill kit is available in the disposal room on each floor. If assistance is needed, contact your group's Biosafety Officer (Sub-BSO) or the Biosafety Officer/Deputy Biosafety Officer of the building F&L.

Major spills, accidents or release of microorganisms must be reported to the Biosafety Officer of the building F&L biosicherheit@kispi.uzh.ch or 044 249 30 10. Small spills which you can remove by yourself can be reported on the Biosafety: Report sheet for laboratory incidents (KD00986557), this is as well available in every lab as hand out or in the CIRS system [meldecenter - Kinderspital Zürich](#).

1.1 Standard procedure : Biosafety Level 1 and 2 (BSL 1 and 2) Spills

➔ **Follow the instruction on the [Spill Checklist](#)**

General information

- Avoid inhaling airborne material while quickly leaving the room. Notify others to leave. Close the door and post a warning sign.
▲ **Caution:** Room should not be re-entered for at least 30 minutes to allow aerosols to disperse.
- Remove contaminated clothing, turn exposed areas inward and place in a biohazard bag.
- Wash all exposed skin with disinfectant.
- Inform your Sub-BSO of your Group, and, if assistance is needed, the Biosafety Officer/Deputy Biosafety Officer of the building F&L.
- Collect Spill Kit.

Clean up

- Allow aerosols to disperse for at least 30 minutes before re-entering the laboratory. Assemble cleanup materials.
- Put on PPE.
- Cover the area with towels and then pour disinfectant around the spill. Allow at least 20 minutes of contact time.
- Handle any sharp objects with forceps and discard in a sharp container (yellow).

- Wipe surrounding areas where the spill may have splashed with disinfectant.
- Place the cleaning materials into a biohazard bag.
- Spray the area with disinfectant again and allow 10 minutes contact time. Afterwards, wipe down with disinfectant-soaked towels.
- Remove PPE.
- Wash hands and exposed skin areas with disinfectant or antiseptic soap and water.

For more detailed information: Checklist Spill [english](#) and [german](#)

1.2 Special case: Biosafety Level 2 (BSL 2) spill INSIDE of a Biosafety Cabinet (BSC)

- Keep BSC operational.
- Immediately cover the spill with absorbent pads or paper towels.
- Flood cover spill with disinfectant appropriate for the biological agent in the spill.
▲ **Caution:** Minimize generation of aerosols while assuring adequate contact of disinfectant with the spill.
- Utilize additional absorbent material and more disinfectant as needed.
- Allow disinfectant appropriate contact time.
- Remove contaminated personal protective equipment (PPE; gloves and/or lab coat) and place in biohazard bag for autoclaving. Separate the non-reusable material (e.g., gloves) and reusable (e.g., lab coat) in separate bags for autoclaving.
- Wash hands and arms thoroughly as needed, then put on new PPE to finish the cleanup.
- Collect disinfectant absorbent material and place in biohazard bag
- Wipe up spill area with paper towels soaked in disinfectant.
- Wipe down walls, work surfaces, and equipment within the BSC with the disinfectant.
- Check to see if any material has leaked through the grille of the cabinet. If so, a more extensive decontamination procedure is necessary:
 - Wipe down all the items within the cabinet and remove them from the cabinet.
 - Ensure that the drain valve was closed and flood the tray top, drain pans and catch basins with an appropriate disinfectant.
 - Allow disinfectant to sit for an appropriate contact time.
 - Lift out tray and remove.
 - Clean top and bottom surfaces with sponge/cloth soaked in decontaminating solution.
 - Replace tray
 - Drain disinfectant solution from cabinet into a collection vessel.
- Place all the waste materials into a biohazard bag and send them for autoclaving. If the lab coat was contaminated, this needs to be autoclaved separately.
- Remove PPE, thoroughly wash hands and exit following standard protocol.

1.3 Special case: Clean up blood spills

For blood or other material with a high organic content and low concentration of infectious microorganism.

- Wear gloves, eye protection and a lab coat
- Absorb blood with disinfectant-soaked papers and place in a biohazard bag.
- Collect any sharp objects with forceps or other mechanical device and place in a sharp container.
- Using a detergent solution, clean the spill site of all visible blood.
- Spray the spill site with disinfectant and allow to dry for 15 minutes.
- After a 15 minute contact time, wipe down the area with disinfectant-soaked paper towels. Discard all disposable materials use to decontaminate the spill and any contaminated personal protective equipment into a biohazard bag. Decontaminate any reusable items with disinfectant.
- Wash your hands with disinfectant or antiseptic soap and water.