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| **BIOHAZARDOUS SPILLS**  |
| **Purpose** | This procedure provides instructions for handling biohazardous spills. |
| **Principle and Clinical Significance** | Management of accidental biohazardous spills depends on the infectious agent, the quantity of the material spilled, and whether an aerosol was generated. A tuberculocidal disinfectant is appropriate for most spills. |
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| **Materials** | **1. Disinfectant-Sani-Cloth Bleach (orange) germicidal disposable cloths-**bactericidal, fungicidal, tuberculocidal, and virucidal in 4 minutes.  |
|  | **2. Disinfectant-Super-Sani-Cloth (purple) germicidal disposable cloths** |
|  | **3. 10% household bleach*** Prepare fresh daily
* Add one part household bleach to nine parts tap water
* Record the date prepared on the bottle
* After 24 h, pour unused bleach down the drain and flush with water to prevent corrosion of pipes.
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| **Procedure**  | **Refer to the Lab Procedure Manual:** [**Safety SA10.08**](http://khan.childrensmn.org/Manuals/Lab/SOP/Gen/Safety/SA/208314.pdf) |
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| 1. Evacuate the area or room, taking care not to breathe in aerosolized material.
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| 1. Close the doors to affected area.
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|  **Cleanup of major spills (possible aerosol formation)** | 1. After 30 min, when the aerosols have settled, enter into the area to clean.
* Cleanup should be performed by the individual who committed the spill or assigned personnel.
* PPE should include gloves, disposable booties (located in supermarket, top shelf above safety glasses, long sleeved gowns, and face masks.
* N95 masks are located in the supermarket, top shelf in the micro area.
* For high-risk agents, a full faced HEPA-filtered mask should also be used. PAPR masks are available from respiratory therapy.
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|  | 1. Remove and discard any broken glass or other objects.
* **Do not** allow contact with hands.
* Use rigid cardboard and dust pan.
* Discard in biohazardous-waste container.
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|  | 1. Cover the spill with paper towels.
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|  | 1. After absorption of the liquid, discard paper towels in a biohazardous-waste container.
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|  | 1. Place disinfectant such as Super Sani-Cloth or Sani-Cloth Bleach on the spill site and allow to remain on the site for 20 min. To be effective, the disinfect cloths must remain wet entire time. Add more disinfect as necessary.
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|  | 1. Rinse the spill site with water and dry the area to prevent slipping.
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|  | 1. Discard all paper towels, gloves, and other disposable items in biohazardous-waste container.
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|  | 1. Place gowns in laundry after the cleanup process are complete.
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|  | 1. Wash hands with antiseptic soap.
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| **Clean up of Minor spills** | 1. PPE should include gloves and gown.
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|  | 1. Wipe up contaminated or spilled material with Super Sani-Cloths or Sani-Cloths Bleach.
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|  | 1. Rinse with water.
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|  | 1. Discard all materials in biohazardous-waste container.
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|  | 1. Wash hands with antiseptic soap.
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| **Cleanup of spills in BSC** | 1. Do not turn off the biosafety cabinet.
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|  | 1. Place disinfectant cloths such as Super Sani-Cloth or Sani-Cloth Bleach over the spill.
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|  | 1. Allow disinfectant to remain on site for 20 min. To be effective, the disinfect cloths must remain wet entire time. Add more disinfect as necessary.
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|  | 1. Discard cloths in a biohazardous-waste container.
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|  | 1. Using disinfectant cloths, wipe down all cabinet surfaces and equipment as needed.
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|  | 1. If spill leaks through the grate, remove and clean the gutter area with disinfectant.
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|  | 1. Allow cabinet blower to run 10 min before resuming activity.
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|  | 1. For major spills of potentially infectious materials, contact a technical service consultant for decontamination.
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| **Limitations** | 1. **Do not** pour bleach onto pools of urine, blood or feces because irritating gases may be produced.
2. **Do not** use low-level disinfectants, such as quaternary ammonium compounds, for disinfecting spills.
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| **Spill Report**  | 1. Notify supervisor.
2. Complete a Laboratory Safety Report and submit to the Laboratory Safety Officer for quality assurance.
3. Submit a copy of the report to the supervisor.
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| **References** | 1. Isenberg, Henry D., *Essential Procedures for Clinical Microbiology,* 1998, ASM Press, Washington, D.C., pg. 778-780.
2. Leber, Amy L. (Editor) *Clinical Microbiology Procedures Handbook* 2016, ASM Press, Washington, D.C., 15.2.4
3. NCCLS. 2001. *Protection for the Laboratory Workers from occupationally Acquired Infections.* Document M29-A2. NCCLS, Wayne, PA.
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| **Historical Record** |  |  |  |  |
|  | **Version** | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** |
| 1 | Pat Ackerman | 10/87 | Initial Version |
|  | Pat Ackerman | 9/15/99 |  |
|  | Pat Ackerman | 8/29/03  |  |
|  |  | Pat Ackerman | 7/12/04  |  |  |  |
| 1.4 | Becky Carlson | 6/16/2010 | Added reference to Lab Safety Manual |
| 1.5 | Tina Gronquist | 1/6/2014 | Reformatted into online format |
| 2 | Becky Carlson | 4/3/2015  | Re-numbered from MC 204 |
| 3 | Susan DeMeyere | 11/17/2017 | Removed Zorbicide and added Super Sani-Cloth and Sani-Cloth Bleach |
| **Archived by:** |  | **Archived Date:** |  |