Clinical procedure - hazardous drug spill management

The following clinical procedure provides information on how to safely manage a hazardous drug spill. Only health care professionals who have attained competency as per institutional guidelines on the safe handling and waste management of hazardous drugs should perform this procedure.

### Equipment

**Spill kit:**
- instruction sheet
- cytotoxic/hazardous drug spill sign(s)
- personal protective equipment (PPE):
  - single use chemoprotectant gloves x 2
  - impermeable chemotherapy gown
  - protective eyewear
  - P2 or N95 mask
  - overshoes
  - hairnet
- absorbent materials such as:
  - chemical absorbent spill pillow
  - chemical absorbent mat(s)
  - chemical absorbent granules
- a small scoop or scraper to collect any glass fragments
- hazardous/cytotoxic waste bag(s) and bin.

**For a BCG live vaccine spill:**
- absorb spill with absorbent material as above
- clean area with locally approved tuberculocidal disinfectant.

### Procedure

1. Alert people in immediate vicinity that a hazardous spill has occurred; direct them to stay clear. Call for assistance if required.
2. Open the spill kit.
3. Display hazard sign(s) around perimeter of spill.
4. Empty contents of kit within easy reach of spill.
5. Contain spill (if liquid) by placing absorbent cloths around perimeter.
6. Don PPE in the following order:
   1. mask
   2. eyewear
   3. hairnet
   4. 1st pair of gloves
   5. impermeable gown (ensure cuff of gown is over the gloves)
   6. overshoes
7. 2nd pair of gloves (ensure gloves are over cuff of gown).

7. Open two cytotoxic waste bags placing one inside the other.
   A. **For a liquid spill**: cover spill with absorbent granules, spill pillow or mat. Take care not to generate any splashes or aerosols.
   B. **For a powder spill e.g. tablets** carefully place an absorbent chemical mat over the powder ensuring minimal dust production. Saturate the mat with water (without flooding) to enable the powder to be dissolved and absorbed.

8. Using the scoop and scraper, gather the absorbed material, being careful to collect and contain any broken glass.

9. Place waste into the inner waste bag.

10. Wash area several times with water and detergent, working from the outer aspect of the spill inwards. Place used cloths into the inner waste bag. Continue until area is completely cleaned.

11. Rinse area thoroughly with water.

12. **For a BCG live vaccine spill** A second clean is required with a locally approved tuberculocidal disinfectant to prevent transmission of BCG infection.

13. Dry the affected area with absorbent towels or other suitable materials and dispose of all items into inner waste bag.

14. Remove outer gloves and place into the inner waste bag. Seal bag.

15. Remove additional PPE placing into the outer waste bag in the following order:
   1. overshoes
   2. gown
   3. protective eyewear
   4. hairnet
   5. mask
   6. inner pair of gloves.

16. Seal outer waste bag and discard into appropriate waste bin.

17. **Perform hand hygiene.**

   **Note:** For cytotoxic spills use soap and water only. For spills that pose a biohazard risk e.g. live BCG vaccine wash hands with an alcohol based antibacterial solution.

18. **Replace spill kit.**

**Documentation**

Complete an incident report as per institutional requirements covering:
- full details of the incident
- immediate first aid provided e.g. washing and removal of contaminated clothing
- details of PPE worn
- the full name of the drug involved and the individual components including diluents
- health surveillance of workers involved in the incident.

### History

<table>
<thead>
<tr>
<th>Version 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Date not recorded.</td>
</tr>
<tr>
<td>09/05/2009</td>
</tr>
<tr>
<td>25/01/2011</td>
</tr>
<tr>
<td>10/02/2011</td>
</tr>
<tr>
<td>31/05/2011</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>15/2/2013</td>
</tr>
<tr>
<td>23/2/2015</td>
</tr>
<tr>
<td>9/7/2015</td>
</tr>
<tr>
<td>31/05/2017</td>
</tr>
</tbody>
</table>

This document reflects what is currently regarded as safe practice. While every effort has been made to ensure the accuracy of the content at the time of publication, the Cancer Institute NSW does not accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceuticals and/or medical products as examples does not imply endorsement of any of these products. Use is subject to eviQ’s disclaimer available at [www.eviQ.org.au](http://www.eviQ.org.au)

**First approved:** 9 May 2009  
**Last reviewed:** 15 February 2013  
**Review due:** 31 May 2017

*The currency of this information is guaranteed only up until the date of printing, for any updates please check:*


16 Oct 2019