



PROCEDURES FOR CLEANING UP HAZARDOUS DRUG SPILLS AND LEAKS

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PURPOSE

This technical information paper describes equipment and work practices that prevent hazardous drug (HD) spills and leaks and the procedures for cleaning them up should they occur. Workers can be unintentionally exposed to HDs by way of splashes onto the skin or eyes, contact with contaminated surfaces, inhalation of HD residues, and injection through needlesticks. Effective spill prevention and clean-up procedures are essential to prevent accidents, to reduce HD contamination in the work environment, and to protect workers from exposure to HDs.

Note: a spill or leak occurs when a HD liquid or particulate is not confined in its intended container.

POINTS OF MAJOR INTEREST AND FACTS

Standing Operating Procedures (SOPs)

Healthcare facilities should develop written SOPs that describe ways to prevent and thoroughly clean-up HD spills and leaks. Spill management is a required worker competency that must be initially trained to workers before independently handling HDs as well as annually assessed. The SOPs should address the following topics—

- Work practices and equipment that prevent spills and leaks
- Location, content, and upkeep of spill kits
- Worker education and training
- First-aid
- Personal protective equipment (PPE), including the use of respirators
- Spill containment and clean-up procedures
- Spill residue disposal procedures
- Spill reporting procedures
- Spill drills

Development of spill prevention and clean-up SOPs should include a review of the HD inventory and the corresponding safety data sheet (SDS) sections on emergency procedures and recommended PPE. The Hazardous Drug Officer (HDO) and work area supervisors should

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update the spill prevention and clean-up SOPs when new drugs are added to the HD inventory and train workers in the use of new equipment and procedures.

The HDO should review the spill prevention and clean-up SOPs for effectiveness at least annually. Effectiveness is a measure of how well the identified goals are achieved (e.g., a reduction in the number of HD spills and leaks, worker exposures, and HD contamination on work surfaces). The review should also consider whether workers consistently follow the procedures described in the HD spill prevention and clean-up SOPs.

Spill and Leak Prevention

According to the Oncology Nursing Society, spills and leaks occur most often when workers are attaching or detaching intravenous (IV) lines and injecting HDs into an IV line. Other causes of spills and leaks include bad connections, equipment malfunctions, excessive pressure in vials, and when workers draw up or expel HDs from a syringe. Most spills and leaks involve quantities of HDs less than 5 milliliters (mL).

Equipment and techniques that prevent HD spillage, aerosolization, and leakage include—

- Reconstituting and preparing HDs in a containment primary engineering control (C-PEC) such as a biological safety cabinet (BSC) or compounding aseptic containment isolator (CACI)
- Using a closed-system transfer device (CSTD) when reconstituting HDs
- Spiking intravenous (IV) bags in a C-PEC and adding HDs to the IV bags after spiking
- Priming the IV tubing with a nondrug solution to prevent the HDs from dripping from the end of the tubing
- Using Leur-locking connections to eliminate potential for disconnect associated with using needles
- Attaching a CSTD to the distal end of tubing to prevent the flow of HDs unless the tubing is connected to a Leur-locking device
- Placing HDs on a secondary set to flush the tubing with a nondrug solution when unspiking an IV bag containing HDs
- Discarding tubing with the IV bag attached to prevent aerosolization
- Attaching CSTDs to the end of the syringe when connecting and disconnecting intravenous pyelogram (IVP) syringes to prevent leakage before administration and during disconnect
- Purging air from syringes containing HDs inside a C-PEC
- Transporting all HDs in leak-proof bags or containers
- Containing excreta HDs (urine, feces, or sweat) and metabolites by using urinals with tight-fitting lids, educating staff regarding the handling of excreta, using PPE, and posting signs to alert workers of potential HD contamination for 48 hours after a patient receives a HD

Spill Kits

Clearly labeled spill kits should be readily available wherever HDs are received, stored, prepared, or administered. Additionally, spill kits should be located on the HD transport carts. Spill kits may be purchased off-the-shelf or assembled locally. Spill kits should contain the following items—

- Written instructions for use of the spill kit and a spill report form
- Hazard warning signs to alert others that a spill has occurred
- 2 disposable chemotherapy-resistant gowns with back closures
- 4 pairs of chemotherapy-resistant shoe covers
- 2 hair covers
- 2 pairs of chemical splash goggles and 2 plastic face shields
- Sufficient supplies to absorb a spill of about 1000 milliliter (mL) (volume of one IV bag or bottle). Absorbents should be incinerable.
- Low-linting wipes
- 1 disposable dustpan or a plastic scoop to collect glass fragments
- 1 puncture proof HD waste container to collect broken glass or sharps
- 2 large heavy-duty, sealable, disposable HD waste bags
- 2 HD waste labels if the bags are unlabeled
- A color-coded or otherwise specially identified linen bag to collect HD-contaminated linens and textiles

In addition, the following items should be kept close at hand—

- Powder-free chemotherapy gloves meeting American Society for Testing Materials D6978 standard (or its successor) in a variety of sizes
- A National Institute of Occupational Safety and Health (NIOSH)-approved respirator appropriate for the size of the spill and the agent spilled. Note: When cleaning up HD spills, workers should only wear the respirators that they have been medically qualified, fit-tested and trained to use. A complete respiratory protection program, including fit-testing, is required when workers wear respirators, including those contained in some spill kits. Note: surgical masks do not provide adequate respiratory protection.
- Decontamination agent (e.g., Environmental Protection Agency (EPA)-approved oxidizing agent/neutralizer intended for use with HDs, products recommended by the HD manufacturer, or other commercially available products)
- An EPA-approved germicidal detergent

Work area supervisors should inspect spill kits at least quarterly to verify that they are fully stocked, the contents are serviceable, and the expiration dates have not elapsed.

Worker Education and Training

All workers that handle and administer HDs must be trained in spill prevention. Workers must be trained in—

- Hazard communication (HAZCOM)
- The facility's emergency action plan
- First aid procedures
- Location and use of the spill kit
- Selecting, donning, adjusting, wearing, and doffing of PPE and respirators
- Limitations, degree of protection, proper care, maintenance, useful life, and disposal of PPE and respirators
- What to do should the PPE or respirator fail
- Procedures for cleaning up HD spills and leaks
- Disposal of spill residues and disposable PPE
- Decontamination and cleaning of reusable PPE
- Procedures for recording HD spills and leaks
- Contact information for the spill response team

Spill response training should occur upon hire and at least annually thereafter. Work area supervisors should evaluate workers' competency in spill prevention and clean-up procedures consistent with their job duties. Each worker's competency should be recorded.

In addition, members of spill response teams that respond to and clean-up large HD spills (the quantity of the HD spilled requires more than one spill kit to contain and clean-up the spill) must meet the Occupational Safety and Health Administration's (OSHA's) hazardous waste operations and emergency response (HAZWOPER) standard's hazardous materials technician training requirements, 29 CFR 1910.120(q)(6)(iii).

First Aid for Skin or Eye Contact

Workers should take immediate action when their clothing or skin has been contaminated with a HD—

- If needed, call for help and evacuate uninvolved workers and patients from the area
- Remove contaminated PPE and clothing, taking care not to spread the contamination
- Wash affected areas immediately with soap and water. Although evidence shows that dermal absorption is a significant concern, no specific recommendations exist for how long the skin should be cleansed.
- For splashes to the eye(s), rinse the affected eye(s) with tepid water for at least 15 minutes or until the pH of the conjunctival surface is neutral (7.0 to 7.3). Workers should be referred to an eye-care provider who can continue to rinse the eye(s) and test the pH to determine if the contaminants have been removed and the pH is within normal range.
- Refer to the manufacturer's SDS for additional emergency and first-aid procedures
- The exposed workers should follow up with the Occupational Health Clinic or go directly to the Emergency Department, especially for inhalation of HDs in powder form
- Document the exposure in the worker's medical record

Personal Protective Equipment

Before cleaning up a spill or leak, trained workers must don PPE. Depending on the size and location of the spill, workers should wear—

- 2 pairs of powder-free chemotherapy gloves (wear the inner glove under the gown cuff and the outer glove over the gown cuff)
- A disposable chemotherapy gown made of fabric that has low-permeability to the HDs in use, with back closures and cuffs
- 2 pairs of shoe covers, the outer pair of shoe covers should be fluid-resistant
- A hair cover
- Chemical splash goggles and a face shield when splashing is possible
- A NIOSH-approved N95 or P100 filtering facepiece respirator may be used for cleaning-up small spills involving particulates
- A NIOSH-approved, hooded powered air purifying respirator (PAPR) with replaceable P100/HEPA filters, or combination P100 filter/OV/AG chemical cartridges or a NIOSH-approved, tight-fitting, full facepiece, air-purifying respirator with replaceable P100 filters or combination P100 filters and organic vapor (OV)/acid gas (AG) cartridges when cleaning up large spills or when there is little known about the HD or if there is a risk of inhaling HD gases, vapors, or particulates

The volatility of the HD's physical form (e.g., solid, liquid, or powder) and spill location (e.g., inside or outside of the BSC or CACI) must be considered when determining the best course of action and PPE for spill response and clean-up. Some examples of volatile HDs are carmustine, cisplatin, cyclophosphamide, etoposide, and fluorouracil. Also, the PPE selection may differ where alternate controls and work practices have been adopted for non-antineoplastic and reproductive HDs.

Workers must remove and dispose of their contaminated PPE carefully to prevent cross-contamination of themselves and the surrounding surfaces. Workers should inspect their PPE for visible contamination, cuts, or tears in a designated area before removing it in the following order—

- Remove the outer gloves by—
 - Holding the wrist so that the thumb points up, pinch the glove and lift at the wrist, then roll it down until the glove is completely off the hand in a ball in the palm of the other hand
 - Sliding a finger down and inside the outer glove on the other hand and pull it off until it's balled around the first glove
 - Avoiding contaminating the inner glove during the removal process
 - Discarding gloves in a HD waste container
- Remove the face shield and goggles from the back by lifting the head band or ear pieces and discard them in a HD waste container. If these items are reusable, place them in a designated receptacle for decontamination and cleaning.

- Remove the outer shoe covers one at a time with a gloved hand by rolling the outer shoe covers inside out, taking care not to contaminate underlying clothing, and then stepping each foot onto a clean surface. Discard the shoe covers in a HD waste container.
- Remove the gown, preventing the outside of the gown from touching the skin, underlying clothing, and surrounding surfaces. Pull on back ties to loosen or tear them and then pull on the front of the gown so that the sleeves will become inside-out. Roll the gown so that the outside of the gown is enclosed by the inside of the gown. Discard the gown in a HD waste container.
- Remove the respirator by tilting the head slightly forward, grasping first the bottom tie or elastic strap, then the top tie or elastic strap, and remove it without touching the front of the respirator. Discard disposable N95 respirators and the filters and cartridges from the reusable respirators in the HD waste container. Place reusable respirators in a designated receptacle for decontamination and cleaning.
- With a gloved hand, remove the hair cover by rolling it inside out, avoiding contact between the outside of the hair cover and the hair and face. Discard the hair cover in a HD waste container.
- Remove the inner shoe covers in the same manner used to remove the outer shoe covers. Discard the shoe covers in a HD waste container.
- Remove the inner gloves in same manner used to remove the outer gloves. Discard the inner gloves in a HD waste container.
- Wash hands with soap and water
- Inspect underlying clothing and skin for visible contamination. If contamination is identified, workers should carefully remove the contaminated clothing, shower immediately, and then report to the Occupational Health Clinic or the Emergency Room for follow-up.

Reusable PPE (e.g., chemical splash goggles, face shields, and respirators) must be decontaminated and cleaned after each use. Trained workers wearing appropriate PPE should wash the equipment three times with a mild detergent solution and then rinse with water. The PPE should be stored in a manner that will maintain its cleanliness and functionality.

Decontaminating and Cleaning

Selection of appropriate deactivation, decontamination, cleaning, and disinfection agents used to decontaminate and clean environmental surfaces following a spill or leak is an essential part of the clean-up process. Facilities should select one decontamination agent, one cleaning agent (a germicidal detergent), and one disinfectant. Agents used for deactivation, decontamination, and cleaning should be applied through the use of wetted wipes to avoid aerosolizing and spreading HD residues.

Deactivation renders a compound inert or inactive. While there is no single agent that will deactivate all HDs, a few HD manufacturers have identified specific deactivators for their drug products. This information can be found on the HD's SDS. Where the HD manufacturer has not identified a specific deactivator, products that have known deactivation properties (e.g.,

EPA-registered oxidizing agents that are appropriate for the intended use) should be used. The residue from deactivation must be removed by decontaminating the surface.

Decontamination is the use of physical and chemical means to render a surface or item safe for handling, use, or disposal. The ultimate goal is complete surface decontamination.

Decontamination incorporates aspects of chemical deactivation (when possible) and the physical removal of HD residues by transferring the residues from non-disposable surfaces to absorbent, disposable materials (e.g., low-linting wipes, pads, or towels). When choosing among various products available for decontaminating HDs, consideration should be given to the HDs present, surface compatibility, and work area requirements. It is vital to follow the manufacturer's application and handling instructions. Because of the growing number of assays available for HDs, additional surface wipe sampling is now possible and should be carried out to document the effectiveness of any agent used for decontamination of HD residue from work surfaces.

Cleaning is a mechanical process using a germicidal detergent and water to remove dirt, debris, HD residues, and microbes. Cleaning agents used on compounding equipment should not introduce microbial contamination. To avoid contamination of the compounded non-sterile and sterile preparations, no cleaning steps may be performed when compounding activities are occurring.

Disinfection is a process of inhibiting or destroying nearly all pathogenic microorganisms, except for bacterial spores on inanimate objects. Before disinfection can be adequately performed, surfaces must be cleaned. Disinfection must be done for areas intended to be sterile, including the sterile compounding areas.

Industrial hygiene air sampling is required to characterize personal exposures to workers handling deactivation, decontamination, cleaning, and disinfection agents to determine the effectiveness of the controls and the appropriate level of respiratory protection required during routine housekeeping and spill clean-up operations.

Table 1. Decontamination, Cleaning and Disinfection Agents

Cleaning Step	Purpose	Example Agents
Deactivation	Renders a HD inert or inactive	As listed in the HD labeling or SDS or other agents such as Environmental Protection Agency (EPA)-registered oxidizers (e.g., peroxide formulations and sodium hypochlorite.)
Decontamination	Removes HD residues by transferring it to a disposable material (e.g., low lint wipe)	<p>EPA-approved oxidizing agents intended for use with HDs</p> <ul style="list-style-type: none"> • Chlorine-based products such as a 2% bleach concentration (1 part 5.25% bleach to 2 parts water) followed by sodium thiosulfate to neutralize the bleach • Products containing 10 mM Sodium Lauryl Sulfate 80% and Isopropyl Alcohol 20% • Peracetic Acid and Hydrogen Peroxide containing products • Hydrogen Peroxide (various concentrations) • Commercially available products such as PeridoxRTU® Sporicidal Disinfectant and Cleaner (registered trademark of Contec® Healthcare)
Cleaning	Removes organic and inorganic materials	<p>EPA-registered germicidal detergents</p> <ul style="list-style-type: none"> • Quaternary Ammonium compounds • Hydrogen Peroxide-based products • Peracetic Acid and Hydrogen Peroxide combination products
Disinfection (for sterile manipulations)	Destroys microorganisms	<p>EPA-registered disinfectants and/or sterile alcohol as appropriate for use</p> <ul style="list-style-type: none"> • Sterile 70% Isopropyl Alcohol

Spill and Leak Clean-Up Procedures

All HD spills should be cleaned up immediately by trained workers wearing the appropriate PPE.

Table 2. Spill and Leak Clean-Up Procedures

Response	Actions
First Aid	<ul style="list-style-type: none"> • Call for help, if needed • Determine if clothing or skin has been exposed to the hazardous drug • Immediately remove contaminated personal protective equipment (PPE) and clothing, taking care not to spread the contamination • Wash the affected areas of the skin immediately with soap and water. Flush eyes with water. • Seek medical treatment
Assess, Warn, & Protect	<ul style="list-style-type: none"> • Determine the HD and the amount of the HD spilled (small HD spills involve quantities that can be contained/cleaned-up with a single spill kit) • Call a trained spill response team to clean up HD spills whenever the size and scope of the spill exceeds the worker's capability to safely clean up the spill or one spill kit • Immediately remove everyone from the room or spill location and close the door • Post a warning sign "CAUTION HAZARDOUS DRUG SPILL SPECIAL HANDLING, SPECIAL DISPOSAL REQUIRED" • Locate the spill kit and respirator, if needed • Don PPE
Contain & Begin Clean-Up	<ul style="list-style-type: none"> • Carefully remove broken glass with the push tool and dustpan. Place glass fragments into a puncture resistant HD waste container. • Absorb liquids with spill pads or toweling; absorb powder with damp disposable pads or soft toweling • Clean-up progressively from areas of lesser to greater contamination
Decontaminate & Clean	<p>Spills Occurring Outside a C-PEC</p> <ul style="list-style-type: none"> • Check for splashing. Evaluate the extent of these droplets by moving away from the spill and checking under beds, carts, tables, chairs while using a good light source to ensure the entire spill is cleaned. • Wash the spill area with sodium hypochlorite solution and a neutralizer or use a deactivating agent recommended by the drug manufacturer • Wash the area with a germicidal detergent (rinsing with water is optional based on the detergent used) • Perform a three-time wash of the area following established housekeeping procedures
Deactivate, Decontaminate, Clean & Disinfect	<p>Spills Occurring Inside a C-PEC (The C-PEC must be decontaminated following a spill)</p> <ul style="list-style-type: none"> • Stop compounding and notify others working in the area to exit • Cover the spill with chemo prep pad(s) • Follow all steps for cleaning a spill outside of a C-PEC with the following exceptions— <ul style="list-style-type: none"> ○ Remove any macro spill elements and decontaminate on the surface of the compounding deck ○ Remove any macro spill elements and decontaminate under the surface of the compounding deck. To do this, the biological safety cabinet (BSC) or compounding aseptic containment isolator (CACI) must be opened so a fit-tested, full-face, dual chamber respirator must be worn. ○ Once the spill has been cleaned, the authorized sterile compounding pharmacy staff must perform a three time clean to the inside of the CACI or BSC ○ If the High Efficiency Particulate Air (HEPA) filter has been splashed with HD liquid or if a powdered drug contaminates any portion of the HEPA filter, do not put the C-PEC back into service until it can be serviced by a certified professional. The HEPA filter may require a replacement. ○ If the C-PEC is taken out of service, place a sign in front of the device indicating that it may not be used until it is repaired, but do not turn the device off
Decontaminate & Clean	<p>Spills on Carpeting</p> <ul style="list-style-type: none"> • Use an absorbent powder such as Green Z® Spill Control Solidifier (registered trademark of Safetec of America, Inc.) to absorb spill • Use a small, dedicated vacuum cleaner that is equipped with a HEPA filter to remove the dried powder • Wash the carpet following established housekeeping procedures
Dispose, Report, & Restock	<ul style="list-style-type: none"> • Dispose of the spill residue in a HD waste container • Carefully remove and place disposable PPE in a HD waste container • Decontaminate and clean reusable PPE • Report the spill or leak • Restock the spill kit

Spill Residue and Waste Disposal

Place the following items in a HD waste container for disposal—

- All disposable PPE worn during the clean-up
- Spill residues and materials used to clean up all HD spills and leaks, except for spills and leaks involving Arsenic Trioxide. Arsenic Trioxide is a P-listed waste, and it must be collected separately as a hazardous waste and disposed through Disposition Services.
- The N95/P100 respirators and respirator cartridges and filters. Potentially HD contaminated respirators, cartridges, and filters should not be reused.
- Contaminated filters from the biological safety cabinets, compounding aseptic containment isolators, and dedicated vacuums. Note: before reuse, servicing, or disposal, workers wearing appropriate PPE must decontaminate and clean the dedicated vacuums used to clean up HD spills.

Spill Reporting

Follow the healthcare facility's accident reporting procedures, and provide the Hazardous Drug Officer (HDO) a copy of the spill report. The HDO should review the spill reports for trends and root causes and propose new measures (e.g., procuring safer equipment, revising procedures, and conducting training) to reduce or eliminate future spills and leaks. Also, the periodic exposure and incident reports submitted to facility's Environment of Care/Safety Committee should include a summary of any HD spills that occurred during the reporting time frame. A sample spill report is provided in Appendix A.

Spill Drills

Conducting periodic HD spill drills is necessary to ensure correct and thorough clean-up in a real emergency and to determine whether the spill SOPs are adequate. Spill drills should be carried out in work areas where HD spill kits are present (e.g., pharmacy, administration areas, and transfer carts) under conditions that would be encountered during an actual spill. Ideally, mock spills should be planned annually and documented as an in-service training event. Work area supervisors should choose one or two workers to clean-up the spill each time a drill occurs and engage other workers to observe and critique the clean-up process. The work area supervisor or the HDO should oversee the process and stop clean-up activities for correction if improper clean-up methods are detected.

Creating a mock spill using a fluorescent dye or spray is a safe method to assess competency. The benefit of using fluorescent dye is that it is simple to use black light to show if the spill has been cleaned-up properly. Even after cleaning is completed, it is not uncommon for the black light to illuminate residual contamination. Accordingly, this exercise is highly effective in reinforcing the importance of thorough HD spill clean-up.

Finally, the HDO or work area supervisors should evaluate the contents of the spill kits during drills. A real emergency is not the time to discover that the contents of the spill kit are lacking or expired.

CONCLUSION

Workers can reduce HD contamination on work surfaces and prevent exposure to HDs when they respond to HD spills and leaks promptly and follow their facility's HD spill prevention and clean-up SOPs. Facilities should consider all of the following when developing and updating their spill prevention and clean-up SOPs—

- The HDs present in the facility and the work areas where they are handled
- The regulations and established guidelines that define HD spill clean-up procedures
- Equipment and safe work practices that prevent HD spills and leaks
- Equipment and supplies that must be readily available to respond to spills and leaks (e.g., spill kits; PPE; agents used to decontaminate, clean and disinfect work surfaces; and waste disposal supplies)
- Training requirements for all workers that handle HDs and respond to HD spills and leaks
- Performance measures to assess the effectiveness of the spill prevention and clean-up SOPs (e.g., reduction in spills and leaks, reduction in HD contamination on work surfaces, and worker response during spill drills)
- Ways to continuously improve worker safety and prevent exposure to HDs in the workplace

POINT OF CONTACT FOR FURTHER INFORMATION

For more information, contact the U.S. Army Public Health Center, Industrial Hygiene Program Management at commercial 410-436-2439 or DSN 584-2439.

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**Appendix A
Sample Hazardous Drug Spill Report**

Hazardous Drug Spill Report	
Date/Time of Spill:	Location of Spill:
Name of Drug Spilled:	Safety Data Sheet Available: <input type="checkbox"/> Yes <input type="checkbox"/> No
Nature of spill: <input type="checkbox"/> Powder <input type="checkbox"/> Concentrated Liquid <input type="checkbox"/> Diluted Liquid	
Volume of liquid spill: <input type="checkbox"/> <5 mL <input type="checkbox"/> 5-10 mL <input type="checkbox"/> 11-30 mL <input type="checkbox"/> 31-50 mL <input type="checkbox"/> >51 mL	
Number of spill kits used: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> more than 2	
Spill Occurred During: <input type="checkbox"/> Receiving <input type="checkbox"/> Stocking <input type="checkbox"/> Transport <input type="checkbox"/> Staging before compounding <input type="checkbox"/> During compounding <input type="checkbox"/> During labeling <input type="checkbox"/> During CSP transport <input type="checkbox"/> During administration Other (describe):	
Name of worker manipulating the drug during the spill: Check the PPE the worker was wearing at the time of the spill: <input type="checkbox"/> None <input type="checkbox"/> Chemo Gloves <input type="checkbox"/> Chemo Gown <input type="checkbox"/> Safety Goggles <input type="checkbox"/> Face Shield <input type="checkbox"/> Shoe Covers <input type="checkbox"/> Hair Cover <input type="checkbox"/> Respirator <input type="checkbox"/> Other:	
Worker took action to contain the spill: <input type="checkbox"/> Yes <input type="checkbox"/> No Actions worker took: <input type="checkbox"/> Covered spill <input type="checkbox"/> Cleared area <input type="checkbox"/> Secured area <input type="checkbox"/> Placed sign <input type="checkbox"/> Other (describe): If no action was taken, why not:	

Cause of the spill:	
Spill Response Team Called: <input type="checkbox"/> Yes <input type="checkbox"/> No Time called: Arrival time:	
Name of worker(s) who cleaned the spill:	
Spill cleaned per policy <input type="checkbox"/> Yes <input type="checkbox"/> No If no, why not: Actions taken to clean the spill: <input type="checkbox"/> Gross spill clean-up <input type="checkbox"/> Wiped area with sterile water <input type="checkbox"/> Wiped area with tap water <input type="checkbox"/> Decontaminated with agent <input type="checkbox"/> Cleansed area with germicidal detergent <input type="checkbox"/> Waste disposed of properly <input type="checkbox"/> Spill kit replenished <input type="checkbox"/> Reusable PPE cleaned and decontaminated Agents used to decontaminate and clean the spill area (list):	
Persons exposed to the spill: <input type="checkbox"/> Yes <input type="checkbox"/> No Actions taken: <input type="checkbox"/> Contaminated PPE/clothing removed <input type="checkbox"/> Skin washed with soap and water <input type="checkbox"/> Eye(s) with water or isotonic eye wash for 15 minutes <input type="checkbox"/> Medical treatment provided Additional actions (describe):	
Follow-up Action(s): <input type="checkbox"/> None <input type="checkbox"/> Actions Required (describe):	
Signature of Person Performing Spill Clean-up	Date
Signature of Hazardous Drug Officer	Date