

# Procedures for Handling Chemical Spills and Leaks

## Chemical Spills and Leaks

Chemical spills and leaks can be broken down into two basic types: simple spills, which you can clean up yourself, and complicated spills, which require outside assistance.

**If your spill meets ANY of the following conditions, it is a COMPLICATED SPILL.**

- A person is injured; or
- The identity of the chemical is unknown; or
- Multiple chemicals are involved; or
- The chemical is highly toxic, flammable or reactive; or
- The spill/leak occurs in a "public space" such as corridors; or
- The spill/leak has the potential to spread to other parts of the building such as through the ventilation system; or
- The clean up procedures are not known or appropriate materials are not readily available; or
- The clean up requires a respirator (including cartridge respirators) to be worn and no personnel have been trained and fit-tested in accordance to the campus Respiratory Protection Program; or
- The spill/leak may endanger the environment by reaching waterways or outside ground, or by going down a drain

If none of the above conditions are met, the spill is defined as a simple spill. You may clean up simple spills in accordance with Chapter 6 of the [Chemical Safety Guide](#). For consultative assistance, call Division of Research Safety (DRS) at 333-2755.

## What should be done when a Complicated Spill occurs?

1. Evacuate the area, alerting others in the area to follow.
2. If possible, confine the spill area by closing doors and windows.
3. **From a safe location, call 9-911 immediately.**
4. Secure the area so no one will enter until the emergency responders arrive.
5. Send someone with knowledge of the chemical spilled to meet the fire department at your building's main entrance. If a Material Safety Data Sheet (MSDS) is readily available, the contact should take a copy to provide to the responders.

## When reporting a Complicated Spill, what information should be relayed?

- What is the name of the chemical spilled?
- What quantity of the chemical is spilled?
- Where is the spill? (Give building name and location in the building, i.e. room, hallway, etc.)
- Has anyone been injured or splashed with the chemical? If so, how many people?
- Is a fire or explosion involved in the spill?
- What is your name and phone number?



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## What will need to be done after the responders leave?

Emergency responders will only stabilize the spill. They will not complete the clean-up. It will need to be packaged in accordance with Chapter 8 [Chemical Waste Management Guide](#). A request for pick-up must be submitted to DRS. In most cases you will be able to do this yourself; in other cases an outside party may be required. If personnel from DRS are not present to advise you during the emergency response, call 333-2755. After hours, request DRS assistance through the Division of Public Safety by calling 333-1216.

## Simple Spills

If the spill does not meet any of the conditions for a complicated spill, the spill is defined as simple. You may clean up simple spills as described below.

### Follow These Steps to Respond to a SIMPLE Chemical Spill:

1. If possible, close doors and windows to prevent the spread of fumes and vapors.
2. Turn off all potential sources of ignition (Bunsen burners, pumps, mechanical equipment not designed to be spark-proof, etc) if the spilled material is flammable (it may be necessary to turn off power from a remote circuit breaker).
3. Put on gloves, lab coat, apron, eye protection, and other PPE, as necessary.
4. Absorb liquids using appropriate absorbent material (such as spill pads, spill pillows, or loose sorbents)
  - Do not attempt to neutralize acids or bases - absorb each liquid spill as is.
  - Do not use silica products to clean up hydrofluoric acid.
  - Do not use combustible materials to clean up oxidizers. For instance, do not use paper towels for nitric acid spills.
5. Carefully sweep powder spills to avoid contaminating the air with chemical dust.
6. Collect and contain clean-up materials in a plastic container or thick plastic bag and affix descriptive labels.
7. Decontaminate the affected area and equipment (soap and water can be used to clean most surfaces) and ventilate the area, if necessary.
8. Follow the Procedures for Requesting Chemical Waste Disposal in Chapter [Chemical Waste Management Guide](#). If you have questions, contact the DRS Chemical Safety Section [via e-mail](#) at [css@illinois.edu](mailto:css@illinois.edu) or call 333-2755.

## Where can I go for more information on spill preparedness and cleanup?

Chapter 6 of the [Chemical Safety Guide](#) lists detailed instructions on preparing for and handling chemical spills.

## Questions?

Contact the Division of Research Safety, Chemical Safety Section 333-2755 or [via e-mail](#) at [css@illinois.edu](mailto:css@illinois.edu)) or visit our web site: <http://www.drs.illinois.edu/css/>.

Other Chemical Safety Fact Sheets are available from the Chemical Safety Section at our web site: <http://www.drs.illinois.edu/css/factsheets/>.

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*Trim and post near your phone for quick reference.*

## How to Report a Complicated Spill

1. Evacuate to a safe location, and alert others to evacuate.
2. Dial 9-911 from a campus phone.
3. Tell the operator you are calling to report a chemical spill at the University of Illinois.
4. Have the following information ready.
  - Name of chemical
  - Quantity spilled
  - Location of spill (Full building name and room number)
  - Number of people injured or splashed
  - If applicable, the occurrence of a fire or explosion
  - Your name and phone number
5. Have someone knowledgeable about the chemical spilled meet the fire department at the main entrance to your building. Take an MSDS of the chemical, if it is readily available.

