

Policy and Procedure

Department: Emergency Preparedness	Section: CODES	Subject: Code Brown - Internal Chemical Spill
Policy:	Original Date: 2004-01-01	Supersedes: 2016-08-22
Last Reviewed: 2025-11-13	Next Review Date: 2026-11-13	Approver: Angie Brunetti

POLICY STATEMENT

Code Brown is the designated term used to alert the hospital community of an **uncontrolled** spill or release of a harmful material that may endanger human health or the environment, including chemical, radioactive, bio-hazardous or pharmaceutical substances. The Code Brown procedure is also initiated in response to unusual or suspicious odors, the presence of gas or vapor, or the discovery of unknown substances—such as liquids or powders—that are **beyond the capacity of the initial observer** to safely manage or clean up.

The Code Brown policy is a risk management strategy used to ensure Espanola Regional Hospital and Health Centre (ERHHC) employees are able to react appropriately in a Code Brown situation, in order to ensure the safety and protection of staff, patients, residents and visitors.

The plan is reviewed, tested and evaluated annually by the Emergency Preparedness Committee (EPC). If a coordinated emergency response by several agencies is required, the Town of Espanola Emergency Response Plan will be consulted.

AUTHORITY TO DECLARE

The Code Brown process **should not be initiated** when staff have supplies to manage the spill, including PPE and SDS information, and are competent in cleaning up the spill. Even though a spill may be considered small, it may require a Code Brown response. Spill size should not be the determining factor in whether or not to initiate.

The **Code Brown** process **should be initiated** when hazardous chemicals have been spilled or improperly used **AND**:

- Additional spill control/clean up supplies are required and/or,
- The spill is too hazardous for the people involved to clean up and/or,
- The spill is flammable and could ignite and/or,
- The spill will impact other areas and/or,
- The spill is generating hazardous/toxic fumes and/or,
- Someone has been injured and is trapped in the room with hazardous chemicals

The staff member who discovers an **unknown or uncontrolled** spill on the ERHHC campus may initiate Code Brown by dialing ext. 7777.

DEFINITIONS

Hazard: A situation with a potential for harm to persons, property or the environment (CSA Z1600-17)

Safety Data Sheets (SDS): Summary documents that provide information about the hazards of a product and advice about safety precautions. SDS's tell users what the hazards of the product are, how to use the product safely, what to expect if the recommendations are not followed, how to recognize symptoms of exposure, and what to do if emergencies occur. (Adapted from CCOHS). A link to the ERHHC SDS e-binder is located on each employee's desktop.



Localized (in-facility) Response: Area response will be carried out by those staff working in the area/unit/department of the spill site using the appropriate spill kit and Personal Protective Equipment (PPE) in accordance with this procedure.

External Response: following localized response, the Incident Commander will activate Code Brown if it is determined that the situation:

- Presents a significant uncontrolled or uncontrollable health hazard
- Will or may create a serious adverse environmental effect or condition in the natural environment
- Cannot be safely handled by or is beyond the capacity of trained responders due to volume, chemical nature (including unknown substance), or location of spill
- Requires personal protective equipment and/or special clean up protocols or equipment unavailable (vacuum trucks, pressure washers, self-contained breathing apparatus (SCBA), full encapsulation chemical suits, etc.)

This may include contacting:

- External Spill Response Contractor (Ontario Spill Response)
- Espanola Fire Department in the event a Flammable Combustible liquid(s) or any Gas/Vapor release.

Responders: Persons identified as being responsible for minimizing the risk, loss, and damage resulting from an emergency. These persons may be employees of an organization directly affected by the emergency or be external to the organization (adapted from CSA Z1600-17)

Perimeter: A boundary surrounding the site of an emergency, established at the scene by the Incident Commander for safety reasons, to prevent unauthorized access to the site and, in some cases, to preserve evidence for investigation and follow-up (CSA Z1600-17)

Spill Kit: Spillkleen brand, Model GPSK30 30 Gallon Universal Spill kit (for fuel/generator room). Model CSK22U 25L Universal Spill Station for all other areas (acute, pharmacy, decontamination room, laundry, penthouse, lab).

The following definitions for spill size (SMALL vs LARGE) are provided as a guide (30-30 Rule) for staff to determine when to activate the local spill response and when to activate an overhead paged Code Brown. In some cases, due to the chemical nature/properties of the hazard, a smaller quantity of hazardous material may still require an overhead Code Brown activation.

1. **Small Spill:** A small spill is a spill that is less than 30 litres of liquid or 30 kilograms of solid. The spilled material is of a chemical nature, size, or quantity that the staff in the area can safely contain the spill and be quickly cleaned up by one or two individuals without evacuating adjacent space(s). The spill is of a known identity, presents little or no risk to staff/patients/visitors or property, and is within the scope of knowledge for the staff performing the cleanup.

2. **Large Spill:** A large spill is a spill that is greater than 30 litres of liquid or 30 kilograms of solid. The spilled material is of a size, quantity, or chemical nature that staff in the area need EXTERNAL Spill response assistance to safely contain the spill and facilitate remediation of the area. The substance may be of unknown identity, poses a threat to staff, patients, property, or requires PPE that is not available in the department. This type of spill may result in evacuation.

From the Ontario Environmental Protection Act:

Adverse Effects:

- Impairment of the quality of the natural environment for any use that can be made of it
- Injury or damage to property or to plant or animal life
- Harm or material discomfort to any person
- An adverse effect on the health of any person
- Impairment of the safety of any person
- Rendering any property or plant or animal life unfit for human use
- Loss of enjoyment of normal use of property
- Interference with the normal conduct of business

Natural Environment:

Means the air, land and water, or any combination or part thereof, of the Province of Ontario

ROLES AND RESPONSIBILITIES

➤ **Employees**

- Review the emergency plan annually and when changes are made, ensuring understanding of the roles and processes
- Know the location and use of PPE, spill kits, SDS program
- Know how to assess and handle a small versus large spill, including proper clean up and recognition of when to escalate to a “Code Brown”
- Report suspicious odors or unsafe conditions immediately
- Assist in patient/resident reassurance and evacuation (as required)
- Complete resident/patient census record (in patient/resident areas) (Appendices B-E)
- Participating in mock exercises, debriefs and educational programs as required
- Work in a manner as to prevent spills or release of hazardous chemicals

➤ **Managers:**

- Review the emergency plan upon new staff orientation, annually and when changes are made, ensuring understanding of the roles and processes, location of spill kits and SDS program
- Assess departmental areas to identify hazards and ensure safest chemicals are utilized.
- Participate in mock exercises and attend educational programs as required
- Ensure all employees review and can respond competently in an emergency situation
- Ensure employees attend scheduled education programs or training opportunities
- Be prepared to assist with the emergency as required
- Ensure the staff are aware of how to handle a small and large spill including cleanup, and escalation.
- Assume the role of Incident Commander if Incident Command is transferred from ED.
- Ensure PPE spill kits are available and current.

➤ **Emergency Preparedness Lead/Committee:**

- Review and update the policy annually

- Be available as a resource in the event of a spill/hazardous substance release
- Coordinate and conduct mock drills or tabletop discussions as needed
- Review of all Code Action reports for process improvement opportunities

➤ **Materials Management Department:**

- Maintenance and regular updating of the SDS Program as products are introduced to the facility

➤ **Laboratory Department:**

- Maintenance and regular updating of the SDSs specific to the laboratory

➤ **Maintenance Department:**

- May be required to shut down/isolate the ventilation system if required

➤ **Incident Commander (IC): ED Nurse, ED Ward Clerk or Senior Leader**

- Assume responsibility for initiating and cancelling the Code, communicating with involved staff/departments, escalation to Code Green (Evacuation) or Code Grey (Infrastructure Failure) if necessary
- Contact maintenance to shut down the ventilation system, isolate a specific area
- Notify outside agencies, if necessary (e.g. Fire Department, Ministry of Environment, etc.)

➤ **Environmental Services:**

- Complete a terminal clean of the area once notified by departmental staff or IC

NOTIFICATION PROCEDURE

In cases of an **uncontrollable spill** or hazardous substance release, a “Code Brown” will be initiated through the emergency activation system.

Dial 7777 from any hospital phone and provide Incident Command (IC) specific information as to where the Code Brown is located i.e., the department and specific room/location.

- E.g. Code Brown, Penthouse, etc.

RESPONSE PROCEDURE

If there is an immediate risk to health, or potential for fire, explosion or property damage, evacuate the area and call 911.

For a spill involving hazardous medication (cytotoxic or non-cytotoxic), refer to the ERHHC *Handling of Cytotoxic Materials-Bodily Fluids, Sharps, Non-Sharps, Other* policy.

In the spill is manageable (refer to criteria located under “Authority to Declare”)

- Consult the SDS information (located on all computer desktops) to confirm that the spill can be handled safely.
- Only those required for cleanup should attend the area. Evacuate others from the area and set up floor signs to restrict traffic.
- Contain the spill as much as possible. Stop materials from entering floor drains or the environment.
- Provide adequate ventilation.
- Avoid walking in spill, skin contact, or breathing vapor/aerosolized product.
- Notify the Departmental Manager.

- If skin or clothing becomes contaminated, immediately follow decontamination procedures appropriate to the product on the SDS and seek medical attention as required.
- Obtain the appropriate spill kit (Appendix A) from the following locations: lab, penthouse, generator/fuel room, decontamination room, acute care under the medication room, pharmacy, laundry. Don appropriate personal protective equipment including gloves, face shields and shoe covers. Follow the procedure in the spill kit to contain and clean up the substance.
- Place all contaminated materials and debris in a polyethylene waste container or bag (note: polyethylene biohazard/autoclave bags are chemically resistant). Dispose of as hazardous waste properly and safely.
- Contact EVS for terminal cleaning of the area once the spill has been cleaned up.
- Advise the appropriate manager of any used spill kits requiring replacement supplies.
- Complete incident report and notify Occupational Health and Safety Lead.

Upon discovering an **uncontrollable** chemical spill, remember: **S.P.I.L.L**

S: Safely evacuate everyone from the immediate area and implement first aid procedures as required

P: Prevent the spread of toxic fumes by closing doors and windows, if possible.

I: Initiate emergency response by calling 7777. State the location of the spill and substance, if known.

L: Leave all electrical equipment alone. DO NOT TURN ON OR OFF.

L: Locate any information regarding the chemical if possible (SDS) and provide it to responders.

When notified of a hazardous spill/chemical release ED WARD CLERK (700-2300) OR ED NURSE (2300-700) (at Incident Command) will:

1. Answer the 'Red Phone' to accept information regarding department and location of the uncontrollable hazardous chemical release. Note* Not all spills need to be announced as Code Brown.
2. Announce "Your Attention Please, Your Attention Please [Code Brown_____ (location and/or room number)]" x3
3. In collaboration with the department personnel in which the spill occurred, the Manager, Maintenance staff (if necessary) or Senior Leader, decide whether or not to notify external services (e.g. Fire Department) and to announce Code Green or Code Grey. The Ministry of the Environment may need to be notified as well, depending on the nature/location of the spill.
4. Once the Code Brown is under control, and upon direction from Incident Commander or Emergency Services personnel.
Announce "Your Attention Please, Your Attention Please [Code Brown All Clear]" x3

EDUCATION

All employees complete the online Code Brown policy review in Surge Learning upon orientation and annually. It is the responsibility of the department manager to ensure their staff review the document following any revision.

RECOVERY PROCEDURES

A debrief meeting will be organized by the Incident Commander, Emergency Preparedness Lead, Department Manager or most responsible person as soon as reasonably possible. All documentation for the event will be collected by the meeting leader to be reviewed with appropriate personnel. Immediate actions will focus on displaced residents, resuming patient services, and building infrastructure.

An action plan to resume operations, evaluate current processes, and identify improvement opportunities will be created as required.

Refer to ERHHC policy *Reporting to the Director* regarding the need to report to the Ministry of Health and Long-Term Care.

REFERENCES

Canadian Centre for Occupational Health and Safety (CCOHS) (2022). Material Safety Data Sheets (MSDS) (CCOHS.ca)

ERHHC. (2023). Handling of Cytotoxic Materials-Bodily Fluids, Sharps, Non-Sharps, Other

ERHHC. (2022). Reporting to the Director (Ministry)

Health Sciences North. (December 2021). Code Brown (Hazardous Spill/Release: Including Hazardous Drugs Natural Gas & Radioactive Material).

NorthShore Health Network (2021). Code Brown- Hazardous Material Spill

Occupational Health and Safety Act. R.S.O. 1990, c. O.1, Government of Ontario, <https://www.ontario.ca/laws/statute/90o01>.

Ontario Hospital Association. (2008). Emergency Management Toolkit. Ontario Hospital Association. [Emergency Management Toolkit.pdf \(oha.com\)](#)

Royal Mental Health Centre. (2019). Code Brown Procedure. ROHCG Emergency Management Manual.

St. Joseph's Health Care London. (2023) Code Brown-Hazardous Chemical Spill

Appendix A

SpilKleen Spill Kits

25 Gallon Universal Spill Kit



30 Gallon Universal Spill Kit

