Procedure:	Code Brown - Hazardous Chemical Spill		
Owner:	Director, Patient Relations, Security Services and Chief Privacy and Risk Officer		
Sponsor:	Vice President, Patient Care and Risk		
Approval by:	**Emergency Management Committee**		**Date: 2023-09-07**
Original Effective Date: 2019-01-18	**Reviewed Date(s):** 2023-09-07		**Revised Date(s):** 2023-09-07

This procedure applies to:
Or

- ☒ St. Joseph's Health Care London
- ☐ Mount Hope Centre for Long-Term Care
- ☐ Parkwood Institute Main Building
- ☐ Parkwood Institute Mental Health Care Building
- ☐ St. Joseph's Hospital
- ☐ Southwest Centre for Forensic Mental Health Care

(If this procedure applies to all sites, please check St. Joseph's Health Care London only.)

Former Corporate Policy: ☐ Yes ☒ No
If yes, Policy Name:
Date Changed to Procedure:

There is a similar/same procedure at LHSC: ☒ Yes ☐ No
If yes, Procedure Type: ☐ Department ☒ Corporate
Procedure Name: Code Brown – Hazardous Spill
Procedure Owner: Capital Redevelopment and Environmental Operations

PURPOSE

St. Joseph's Health Care London (St. Joseph's) is committed to the safety of its staff, patients, residents, visitors and affiliates and will activate a CODE BROWN – Hazardous Chemical Spill to ensure that an uncontrolled spill or a leak of a chemical, radioactive, bio-hazardous, or pharmaceutical substance is handled efficiently and safely. A CODE BROWN should also be activated for improper use of hazardous or flammable liquids that generates hazardous or toxic fumes. This ensures the protection of personal safety, property assets, and the environment.

It is important that staff/affiliates are aware of the characteristics of the chemicals used in their work area to determine if even a small spill of a hazardous material warrants the activation of a CODE BROWN. Should a CODE BROWN be initiated all emergency response procedures must be followed.

The following procedures are to be completed when there is a spillage or accidental release of any hazardous chemical material, with the exception of radioisotopes (Contact Radiation Safety Officer) or, cytotoxic materials (contact Pharmacy), anywhere on hospital/facility grounds or within a building.

In the event of a spill or leak of hazardous, potentially hazardous or unknown chemical substance, the person(s) involved or discovering the spill/leak shall:

S – Safely evacuate everyone from the immediate area and implement first aid procedures as required.
P – Prevent the spread of fumes by closing doors, if possible
I – Initiate emergency response by dialing 55555 and stating the exact location of the spill and the chemical name, if known.

L – Leave all electrical equipment, appliances, and switches alone. Do not turn them on or off (potential to ignite fumes and cause a fire).

L – Locate all information regarding the chemical spill from the Safety Data Sheet (SDS), if it is possible to do so safely. Do not re-enter spill area. Give this information to Security Services staff on their arrival.

PROCEDURE

A CODE BROWN should be called 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 person involved to clean-up (i.e. a mixture of chemicals on a shelf fall) **and/or,**
- The spill is flammable and could ignite **and/or,**
- The spill will impact other areas **and/or,**
- The hazardous chemical is generating hazardous or toxic fumes **and/or,**
- Someone has been injured or is trapped in the room with the spilled chemicals.

A CODE BROWN should not be called if staff have spill supplies, including all personal protective equipment (PPE) as required for the spilled product, SDS is available and are competent in cleaning up the spill. (Reference material: Control and Clean-Up of Hazardous Material Spills**)**

1. **The staff/affiliate discovering the hazardous chemical spill and is not able to clean-up spill safely will:**
   1.1. Ensure your personal safety and the safety of others.
      1.1.1. Evacuate area of the spill and do not re-enter.
      1.1.2. Obtain and take the SDS with you.
      1.1.3. Keep out until Occupational Health and Safety Services (OHSS) or Fire Department, if contacted, has given the all clear.
      1.1.4. Ensure individuals exposed to the chemicals have access to appropriate medical assistance. Initiate Code Blue procedures if required.
   1.2. Initiate Emergency Code BROWN procedures.
      1.2.1. Locate the nearest phone and dial 55555 (may delegate).
         a. Provide information of the spill location (building/zone, level, room number, name of area/unit/department).
         b. Provide information of the type of spill (what the chemical is, if known, and the size of the spill).
         c. State if anyone is injured.
         d. Provide information on where you will meet Security.
   1.3. Lead initial response until relieved by the CODE BROWN responders
      1.3.1. Ensure you find and report to Security Services and/or OHSS until their arrival.
   1.4. Be available to provide any additional information to the CODE BROWN responders, answer questions and receive further instructions.
      1.4.1. Provide your room inventory sheets and room hazard identification card/poster, if available.
         a. This would include any safety signage on the area's door.
   1.5. Inform on-site area leadership, when it is safe to do so.
      1.5.1. If there is a critical injury to staff, notify Occupational Health and Safety Services (OHSS) and follow policy response procedures.
      1.5.2. Complete a Workplace Occurrence Report (WORS) and a Patient Safety Report (PSRS), when safe to do so.

2. **When notified of a hazardous chemical spill, Security Control Centre (SCC) will:**
   2.1. Obtain information from caller.
      2.1.1. Location of the spill.
      2.1.2. Type of spill. (Size, chemical name/characteristics, etc.)
      2.1.3. Caller's name and where Security will meet the person in charge of the spill.
      2.1.4. Ensure that the person reporting the spill understands that they and all persons in the spill area must immediately leave the area, if not done already.

   2.2. Activate the CODE BROWN (ENS1)
      2.2.1. Send out the CODE BROWN Emergency Notification System ENS1 page.
         a. The following information is relayed:
            i. CODE BROWN
            ii. Location of spill
   2.3. Advise Security Services via radio communication.
      2.3.1. Provide the name of the person reporting the spill.

2.3.2. Provide information on where to meet the person in charge for the spill.
2.4. Complete an overhead announcement.
    2.4.1. State "Attention please, CODE BROWN, (location)."
    2.4.2. Repeat 3 times.
2.5. Activate CODE BROWN ENS2, if requested by Security Services, OHSS or Emergency Management and Risk Specialist.
    2.5.1. Send out the CODE BROWN Emergency Notification System ENS2 page.
    2.5.2. Activate the ENS 2 Conference Bridge.
    2.5.3. Provide available information to the individuals calling the ENS2 Conference Bridge.
    2.5.4. Page additional people if requested by the Administrator on Call (AOC).
2.6. Notify local Fire Department, if required.
    2.6.1. Report location of spill.
        a. Site
        b. Building/Zone
        c. Floor level
    2.6.2. Provide information for nearest landing zone.
    2.6.3. Provide any additional information given by responding Security Guards or OHSS.
2.7. Send out the "All Clear" CODE BROWN ENS1 or ENS2 page, level of All Clear ENS page depends on which level has been activated.
    2.7.1. When sending out the "All Clear" page for an ENS2 add the following in the paging text box; "All Clear. Do Not Call In"
2.8. Keep a log of events.

3. When notified of CODE BROWN, Security Services will:
3.1. Respond to the meeting place of the reporting staff/affiliate.
3.2. Ensure area of spill is evacuated and the scene is secured.
    3.2.1. Set up a secure perimeter a safe distance from the spill area.
    3.2.2. Use natural features such as access doors, stairs, etc. to control area.
3.3. Interview person directly involved or in charge of the spill.
    3.3.1. Obtain all information applicable for internal and external responders.
3.4. Determine if the CODE BROWN needs to be elevated to a CODE BROWN ENS2.
    3.4.1. Elevate to a CODE BROWN ENS2 if any of the following apply:
        a. Life safety concern
        b. Actual or potential disruption to hospital operations
        c. External clean-up is required
3.5. Relay all additional information to the SCC.
    3.5.1. Additional information will be provided to external responding agencies.
3.6. If additional Security Guards are available, respond to the predetermined landing zone to meet/escort the arriving Fire Department personnel, if Fire Department/HAZMAT response is required.
    3.6.1. This task can be delegated to another CODE BROWN responder if additional guard is not available.
    3.6.2. Liaison with the Fire Department/HAZMAT upon their arrival.
        a. Provide access to all requested areas.
3.7. Organize and enforce scene/facility protection and traffic control.
    3.7.1. Provide direction to CODE BROWN responders.
    3.7.2. Delegate tasks as needed.
    3.7.3. Establish a communication network for responders.
        a. Provide radios if extras are available.
        b. Provide all updates related to the situation to the SCC.
        c. Relay "All Clear" message to the SCC.
            i. Fire Department or OHSS will provide Security Services the "All Clear".
3.8. Complete a detailed report for the incident.

4. When notified of CODE BROWN, Facilities Management staff will:
4.1. Report to the scene and meet with Security Services and/or a member of OHSS.
    4.1.1. Provide immediate assistance as required.
4.2. Prepare and if necessary make any changes to the buildings systems.
    4.2.1. HVAC system in spill area may need to be shut down, if possible.
4.3. Advise clinical care areas of any potential impacts caused by the shutting down of systems in the CODE BROWN area.

5. When notified of CODE BROWN, additional CODE BROWN responders will:

5.1. Respond to the scene and report to the Security Services and/or a member of OHSS.
    5.1.1. Provide immediate assistance as required.
5.2. Assist in completing delegated tasks.
5.3. Provide directions and information to other responders.

6. **When notified of CODE BROWN ENS2, Administrator on Call (AOC) will:**
    6.1. Call the ENS2 Conference Bridge.
        6.1.1. Extension will be provided in the Emergency Notification System ENS2 page.
    6.2. Request the SCC to have someone from the scene to call the conference bridge to provide details of the incident.
    6.3. Consult with other On-Call staff on the conference bridge.
        6.3.1. Additional ENS2 On-Call staff include:
            a. Clinical Leader on Call
            b. Communicator on Call
            c. Security Leadership on Call
            d. Patient Relations, Privacy and Risk Consultant on Call
            e. Facilities Management Leader on Call
    6.4. Request the SCC to contact additional people, as needed, to join the conference bridge.
    6.5. Request the SCC to page OHSS if there are questions regarding workplace safety.
        6.5.1. During hours outside of regular business hours the Director of OHSS may be contacted.
    6.6. Determine if larger evacuation is required.
        6.6.1. Refer to CODE GREEN procedures.
    6.7. Determine if the Emergency Operations Centre (EOC) needs to be activated.
        6.7.1. Notify the Incident Management Team, if the EOC is activated.
        6.7.2. Provide location of for the activated EOC.
    6.8. In conjunction with the Fire Department, Facilities Management, Patient Relations Privacy and Risk and/or OHSS, arrange for appropriate clean-up.
        6.8.1. This may require specialized outside contractors.

7. **When notified of CODE BROWN ENS2, Patient Relations, Privacy and Risk Consultant on Call will:**
    7.1. Call the ENS2 Conference Bridge.
        7.1.1. Extension will be provided in the Emergency Notification System ENS2 page.
    7.2. Gather information related to the incident.
    7.3. Determine appropriate control measures to eliminate or reduce the impact of hazards.
    7.4. Identify, evaluate and reduce losses associated with:
        7.4.1. Patient, employee or visitor injuries.
        7.4.2. Property loss or damage.
        7.4.3. Other sources of potential legal liability.
    7.5. Review areas of actual or potential sources of risk and/or liability involving patients, visitors, staff and property.
    7.6. Provide guidance on the release of information.

8. **When notified of CODE BROWN ENS2, Communicator on Call will:**
    8.1. Call the ENS2 Conference Bridge.
        8.1.1. Extension will be provided in the Emergency Notification System ENS2 page.
    8.2. Gather information related to the incident.
    8.3. Implement Emergency Communication Plan.
        8.3.1. Arrange media interviews.
        8.3.2. Send news releases, as required.
        8.3.3. Coordinate/support general internal communication for staff, patients, residents and visitors.
        8.3.4. Coordinate/support communication for surrounding neighborhood, where appropriate.
        8.3.5. Provide follow-up information to all communications, including after the incident is concluded.

9. **When notified of CODE BROWN ENS2, Clinical Leader on Call will:**
    9.1. Call the ENS2 Conference Bridge.
        9.1.1. Extension will be provided in the Emergency Notification System ENS2 page.
    9.2. Gather information related to the incident.
    9.3. Speak with clinical care areas impacted.
        9.3.1. Provide assistance as required.
    9.4. Determine if patient movement/transport should be suspended.
    9.5. Speak with leader of the impacted area, if appropriate.

DEFINITIONS

Administrator on Call (AOC) – A member of the Senior Leadership Team responsible for leadership and decision making after regular hospital hours, including weekends and statutory holidays, as well as during emergencies and other situations.

Affiliates – Individuals who are not employed by the organization but perform specific tasks at or for the organization, including appointed professionals (e.g., physicians, dentists), students, volunteers, researchers, contractors or contracted staff who may be members of a third-party contract or under direct contract to the organization and individuals working at the organization but funded through an external source (e.g., research employees funded by Western).

Emergency Notification System – The Emergency Notification System is an in house, proprietary automated system which is operated from the Security Control Centre (SCC). This system is utilized when a caller dials 55555 to report an emergency, or the SCC is notified of through the Community. The ENS system is also activated when an internal monitoring system (i.e., Fire Alarm System) indicates an emergency.

The ENS System is based upon two levels of notification. The first notification is for assigned first responders. The second level of notification is an escalated notification for leadership (on-call) to respond to provide additional support.

ENS1:
- Upon notification, the SCC notifies "first responders" by radio, pager and overhead announcement to respond and assess, mitigate or prevent the emergency from escalating and conduct response activities. Depending on the situation, the SCC will also notify key external responders (i.e. local fire, police, and ambulance) as required.
- Responders at the scene determine if the incident can be maintained safely. As well, responders determine if the emergency has reached thresholds of risk where additional leadership is required.

ENS2:
- ENS 2 means that an emergency has reached thresholds of risk where leadership must be notified to ensure a consistent and organized action planning.
- ENS 2 is immediately activated for Code Green, Code Black, Code Grey, Code Orange, Code Purple and Critical Incident.
- In an emergency which meets the criteria of an ENS 2 emergency, leaders are paged, and a telephone conference call occurs. A person from the emergency scene will be asked to provide a briefing to this telephone conference call.
- Dependent on the scope, intensity and duration of the emergency, the Administrator on Call (AOC) or another senior leader or official may activate the opening of an Emergency Operations Centre (EOC)

ENS2 Conference Bridge – A teleconference extension which is activated by the Security Control Centre when an emergency is elevated to ENS2. This teleconference is used for predetermined On-Call staff to gather information related to an emergency and to discuss an action plan to resolve the emergency with minimal impact.

Emergency Operation Centre (EOC) – The role of the Emergency Operations Centre is to gather all known information regarding emergency situations. Locations of the EOC's are listed in the Fire Safety Plans at each site. The primary responsibilities of the Emergency Operations Centre are:
- Provide direction, coordination and control of the emergency response and recovery
- Establish short term and long team priorities
- Collect, evaluate and communicate information
- Manage resources
- Liaise with other agencies

Emergency Operation Centre Locations:
- Primary - St. Joseph's Hospital
- Secondary - Parkwood Institute Mental Health Building

Hazardous Chemical Spill – A spill or an improper use of a substance (chemical, biological, radiological or pharmaceutical) which results in a hazardous situation for patients, visitors, staff and/or affiliates or may result in an increased risk of fire. These substances include but are not limited to dangerous chemicals, radiation, biohazard materials, oil and gas, propane, flammable materials, industrial products, mixed waste and products producing hazardous fumes.

Incident Management System (IMS) – IMS was developed to standardize organizational structures, functions, processes and terminology for use at all levels of emergency response in Ontario. IMS addresses the need for coordinated responses

to all types of incidents and has been developed with input from more than 30 emergency response organizations from Ontario.

Incident Management Team (IMT) – The Incident Management Team is responsible for central command and control of the incident and assists the critical processes in implementing their recovery plans. Activation of the IMT is determined by the AOC, as well as position assignments within the IMS structure. The St. Joseph's Health Care London Incident Management Team structure can be found on the intranet

Safety Data Sheet (SDS) – A document that provides safety and other information about a hazardous material.

Staff – An individual who is hired and paid by the organization.

REFERENCES

Legislation
Government of Ontario (1990) Occupational Health and Safety Act, 1990
Government of Ontario (1990) Occupational Health and Safety Act, Regulation 860: Workplace Hazardous Materials Information System (WHMIS)

Other Resources
Ministry of the Solicitor General Incident Management System (IMS)