

Training & Education Center



# General Hospital Safety

2024

James Batus, Assistant Director Safety
Reviewed 2023/12, Reloaded



#### **OBJECTIVES**

- Describe the fire plan and fire extinguisher use.
- Review daily hallway maintenance related to fire safety.
- List emergency response procedures.
- Distinguish key points of disposal of regular and hazardous waste.
- Recall measures to take in the event of a utility failure.
- Explain safety measures related to oxygen and other medical gases
- Discuss Associate responsibility regarding equipment safety.
- Discuss hospital measures regarding security.
- Recognize and explain emergency codes.
- Recall 3 key points of MRI safety.
- Recognize light source dangers

# Before fighting a fire, consider:

- Whether the fire is small and not spreading.
- Confirming a safe exit path.
- Fire extinguisher as first defense.
- Assisting a person in immediate danger without risk to self.

### Class A

Wood, paper, cloth, trash, and other ordinary materials.



#### Class C

May be used on fires involving live electrical equipment without danger to the operator.



#### Class B

Gasoline, oil, paint and other flammable liquids.



#### Class D

Combustible metals and combustible metal alloys.



# **COMMON FIRE EXTINGUISHERS**



White or blue canisters

# **WATER APW MIST**

(Air Pressurized Water)

#### Water + Air

Filled with deionized water and pressurized air. Similar to a large squirt gun.

#### Class A + C

Designed to fight wood, paper, cloth, and electrical (disconnected from outlet) fires (i.e. Class A and C fires).

# Usage

4

? Used in operating rooms and labs.

#### **MRI Safe**

Only mist extinguishers labeled MRI safe may be used in MRI unit due to magnet in use.

# **COMMON FIRE EXTINGUISHERS**



ABC fire extinguisher of choice

# ABC

# Class ABC Fires



#### Location

Red ABC fire extinguishers are used in almost all areas throughout hospital.

# **FIRE PLAN**

Any associate who detects smoke and/or flames of any type must take immediate action.

R

Rescue/relocate all people in immediate danger from the fire.

A

Alert
Activate the nearest alarm.
Alert all people in the area.

C

Confine/Contain
Confine/contain fire and smoke.
Close all doors and windows. Shut
off oxygen (Nurse Manager,
Respiratory Supervisor or designee).

E

Extinguish/Evacuate
Extinguish the fire if possible.
Evacuate the are as instructed.
Escape the area.

#### **All Hospitals**

- Dial 22222
- Report alerting concerns
- State your name and fire location

#### **Outside Facilities**

- Dial 911
- State your name and fire location

# **Using the Extinguisher**

Stand 10 feet away and slowly walk toward fire sweeping side to side.

P

**Pull** pin. Allows discharge.



Aim at base of fire.

Hit the base, hit the fuel.

Don't aim at flames.



**Squeeze** handle. Release the pressure.



**Sweep** side to side. Side to side from 10 ft. away slowly moving forward.











# **FIRE SAFETY**

- Fire alarm pull stations are near located exits and stairwells.
- **Never** obstruct the view of fire alarm pulls or fire extinguishers.
- Be aware of your surrounding and remove any item blocking the view of fire alarms/fire extinguishers. Nothing can be adhered to a fire door.
- When a fire alarm pull station is activated:
  - ▼ The fire alarm will sound.
  - Fire doors will close. Do not block emergency/exit doors.
  - Strobe lights are activated.

#### **DAILY HALLWAY MAINTENANCE**



#### Keep hallways clear and safe

- •Do not leave things or store equipment in the hallways
- •They can block the way out in case of an emergency



#### Do not leave equipment alone for too long

•If you leave equipment for more than half an hour, it counts as storage



# Follow the rules for opening doors

- •You can only keep doors open with a magnet hold
- •Do not use door stops that go under the door



#### Be careful with wall decorations

- •They must not stick out more than **4 inches** from the wall
- •They must have approval before you put them up
- •They must use the **right method** to hang them







# **18 inch Clearance Rule**

- Storage clearance is for proper sprinkler functioning.
- Storage must be kept at least 18 inches below the bottom of the sprinkler head.
- Perimeter Shelving...items stored on the top shelf, can be stored slightly higher if:
  - Shelving is **fixed to the wall**, and there are no sprinkler heads located directly above the shelving.
  - Contact your Safety Officer if you have concerns or these directions are unclear. James.Batus@stelizabeth.com

#### **EVACUATION**

Know your department's evacuation plan prior to need.



# Types

- ▶ Lateral Evacuation through smoke/fire barrier doors to a safe area on the same floor
- Vertical Evacuation of all occupants on a floor to another safe floor

#### Order

- Evacuate patients nearest the fire first. If leaving the floor, evacuate patients in the following order:

  - ▼ Wheelchair patients
  - ▼ Bedfast patients

#### **Initial Procedure**

In the event of a fire is to shelter in place until given *all clear* signal.

#### **Ordered Evacuation**

Evacuation will be ordered if fire cannot be controlled, or patients, visitors, and associates are in immediate danger.

#### HAZARDOUS WASTE DISPOSAL

Also referred to as **Infectious waste.** Costs more than 10x that of general waste.

#### **SDS Instructions**

Review SDS for instructions on how to dispose of any chemical/chemical containers.

#### Still unclear?

If not clearly outlined on the SDS, contact your supervisor and/or Safety Officer to insure proper disposal.



#### **Universal Precautions | Blue bag**

All soiled linens are handled with universal precautions.

- Patient linens
- All visibly soiled linen
  - blood
  - stoo

# Blood and Body Fluids | Red bag

Saturated with blood/OPIM that may drip or release contents when held vertical, squeezed or compacted.

- Containers of blood/OPIM body fluids that cannot be safely emptied or are not designed to be emptied (*i.e. chest drainage systems*).
- Blood bags & tubing
- Dialysis waste containing blood/OPIM
- Unfixed human tissue or organs
- Laboratory biological waste

#### **Description**

Biohazard symbol indicates item contains and/or is soiled with blood or body fluids.

#### **Exposure**

- Contact your supervisor and Employee Health immediately.
- Infection Control Manual is in **PolicyStat** under Infection Control Manuals.

#### **CHEMO Waste Only | Yellow bag**

Yellow bags are used for CHEMO waste only.

- Gowns
- Glove
- Googles
- Wipes
- Empty IVs & tubing
- Linen contaminated with CHEMO waste



# **GENERAL WASTE DISPOSAL**

vs. BIOHAZARD

- Paper, plastic, glass
- Food
- Blue pads
- Items such as diapers containing urine, feces, gastric contents
- Sanitary napkins
- ▶ Emptied urinary drainage bags
- Vials of saline/sterile water
- ▶ Emptied and rinsed containers that held any body fluids

# **Waste Stream Management**







Con:



#### **UTILITY FAILURE**

#### **Oxygen/Other Medical Gases**

- ▶ Supplied from central locations/warehouse.
- ▶ Know where the shut offs are in your area.
  - → Must not be blocked
  - Must be accessible
  - ▼ Usually near nurses station
  - ✓ It is the responsibility of the Nurse Manager,
     Respiratory supervisor or designee to see shut
     off valve is turned off in a fire situation.
- Contact Plant Engineering if failure occurs.

## **Oxygen Cylinder Safety**

- Should be safely stored with valves closed, in a carrier or rack (No more than 12 full cylinders in a smoke compartment).
- Damaged tank can act like a rocket or missile
   O2 cylinders on wheelchairs or stretchers are
   considers working stock.
  - O2 cylinders must be stored in racks, not lying on
- floor, beds or hanging from hook.

#### **CLINICAL ENGINEERING LABELS**

Clinical Engineering Department QA/PM Inspection Completed Expires:

If expired, contact Clinical Engineering

Scheduled QA/PM not required.

For service, contact Clinical Engineering

Items that are not inspected on a regular basis

If the date on the label is expired discontinue use and contact Clinical Engineering.

Maintains an inventory of all

medical equipment.

**Electrical Safety** 

**Testing Passed** 

Indicates confirmation testing and should not be removed until the equipment has left the medical center.

Clinical Engineering confirms the operational & electrical safety of all medical equipment (demo, loaner, rental).

# **Emergency Codes**

In the event of an emergency, do you know what to do?

Most emergency codes and directives are listed on associate badge attachment.



Code BLUE - Medical emergency Call 22222

CODE RED- Fire Follow R.A.C.E. Call: Grant 78900,

other Hospitals 22222, outside facilities call 9911

CODE PINK- Infant/Child abduction call 12270

CODE YELLOW- Disaster in community, Initiate recall

TORNADO WATCH- Conditions favorable for tornado.

TORNADO WARNING- Tornado sighted in area.

CODE ARMSTRONG/BART- Staff assistance call 22222

CODE SILVER- Armed person, call security at 12270

#### **Code Pink**

#### Infant/Child Abduction

- . St. Elizabeth has installed an infant alarm system to prevent infant/child abductions.
- Should a confirmed abduction occur, a code pink announcement will be made over the PA system.
- . During code pink, all available staff need to secure doors to exits and stairways and stay alert.
- Staff will follow the department plan as specified in their department section of the disaster plan.
- Non-critical departments should have staff report any suspicious person/persons with infants/children or suspicious activity to security (12270) immediately.

#### Code Red

An announcement that indicates a **possible fire, smoke** or **condition** exist that requires *immediate action*.

- · Dial 22222 Report code red. The location is announced with the code.
  - Grant dial 78900
  - Outside facilities dial 9911
- · When a fire alarm is activated, this signals the switchboard & the Fire Department dispatcher.
- · Follow R.A.C.E.

#### Code Blue

#### **Medical Emergency**

Cardiac or Respiratory Arrest (adult/child).

- · Somewhere within hospital.
- · Dial 22222 activate Code Blue button.
- · The location is sent via pager and phone message the code team. Code not announced.
- The code management is addressed under Clinical Skills (formerly called Mosby Skills) Code management.
- · Assist the code team.
- In non-hospital sites call 911.

#### **Code Orange**

Describes a hazardous spill of known or unknown substance.

- · Each product that is hazardous must have a SDS supplied by the manufacturer.
- . Should a spill occur, the SPIL plan should be followed:
  - > 5 Secure the Area.
  - > P Protect those in the immediate area from exposure.
  - > I Dial 22222 Inform others of the spill.
  - > L Leave the clean-up to trained personnel.
- The department using the spilled substance will clean it up. SEH handles spills under 5 gallon.
   Over 5 gallon, call the FD Hazmat team.

#### Code Yellow

#### A large influx of casualties from community.

- · Security verifies information by contacting official agencies of the area.
- A Control Center for coordination of activity within the facilities will be activated which includes:
  - > Contact with other area hospitals/community agencies within the disaster site if possible.
- All personnel should respond to their assigned hospital. Nursing staff may be recalled/called in as needed.
- · Cancellation announced by PBX operator as all clear.

#### **Code Armstrong**

Staff is needed to respond to a hostile situation.

- Dial 22222 activated in any area needing assistance.
- A security officer and other assigned staff will respond to the area and provide needed support.
- · Only security and trained personnel will respond.
- Non-trained associates should not respond to a Code Armstrong should not attempt to intervene. This could escalate the situation and cause harm to self & others.
- When situation is under control an all clear will be announced.

#### Code Silver

#### Armed persons have been sighted.

- · Employees identifying the situation should immediately go to a safe area.
- Do not attempt or approach to disarm contact security 12270.
- · Follow instructions provided by Security.
- If Code Silver is inside Hospital, security will instruct operator to announce location of incident.
- If evacuation of patients and visitors can be done safely by using the fire evacuation route, then every attempt should be made to do so.
- If patients & visitors cannot be safely evacuated, it will be necessary for staff to lock or close doors and shelter in place. ( Remember Run-Hide-Fight).
- · Employees not in the immediate area shall shelter in place.
- · When police arrive, staff will assist under their direction.
- · If a patient requires movement, notify police.

#### **Code BART**

Staff is needed to respond to provide support and assist associates in de-escalating (before Code Armstrong needed) and providing stabilization in situations involving patients or visitors that are experiencing inappropriate sexual behavior, or disruptive emotional, verbal, nonverbal, or physical behaviors.

- Dial 22222 activated in any area needing assistance.
- BART Trained Members will respond to the area and provide necessary support (this includes the Nursing Supervisor, Security, Pastoral Care, and a BART Trained RN).
- · Non-BART trained staff should not respond to a CODE BART in attempts to intervene.
- BART member will assist in completing required documentation and follow-up within 4 hours of BART resolution.
- · All other members will return to normal duties when CODE BART is complete.
- If Code Armstrong is required, 1 BART trained RN will respond to provide de-escalation, BART reporting, and follow-up to evaluate effectiveness and assess risk of future events.

#### **External Disaster**



An external event involves an incident beyo immediate boundaries of the hospital. **Eme Operations Plan** located in *Compliance360* 

- · Sudden arrival of a large number of casu
- Contaminated or contagious victims seek emergency treatment.
- External emergencies (i.e. snowstorms, u outages, and tornadoes) that may not im hospital directly, but the facility.

#### 1) Tornado Watch

National weather service and/or local TV station information indicates conditions in Kenton, Campbell, Boone or Grant County are capable of producing a tornado.

- Security will notify operator to make the announcement to activate the tornado water pop-up notification on all SEH desktop computers will alert to the weather condit
- · Monitor weather conditions for updates.
- Keep patients and visitors updated.
- · Remain calm & alert for
- · further information.

#### 2) Tornado Warning

National weather service and/or local TV station information *indicates conditions in Kenton, Campbell, Boone or Grant County.* **A tornado has been sighted.** 

- · Return to your department.
- · Close blinds and drapes for protection.
- · Cover patient with blankets/Turn bed away from windows.
- Instruct ambulatory patients and visitors to take shelter in the bathroom.
- · Close all fire doors and unit doors.
- · If visitors-seek shelter in lower level hallway, keep them away from windows.
- · For personal safety, seek cover in areas such as med rooms, kitchen or interior spaces.
- Do not transport patients to other areas during a tornado warning.
- Speech traits
- Location of device
- Detonation time & type
- · Background noises if discernible
- Look at display and write down phone number on screen/ask for help to retrieve phone number when caller hangs up.

#### Notification

Person receiving the threat **informs the security department** who notifies operator to call the following:

Call 22222. Offsite call 911.

# **Bomb Threat**

Information received from any source that an explosive device may be/or is placed in a facility.

#### Information Gathering

Person receiving the threat should record as much data as possible:

- · Exact words of caller & time
- · Sex of caller
- Speech traits
- · Location of device
- · Detonation time & type
- · Background noises if discernible
- Look at display and write down phone number on screen/ask for help to retrieve phone number when caller hangs up.

#### Notification

Person receiving the threat **informs the security department** who notifies operator to call the following:

- Call 22222. Offsite call 911.
- Local police & fire, administrator on call, Director of Plant Engineering.
- Other administrative personnel.

# Security

Notifies Nursing Supervisor who notifies all nursing units.

This information is not announced over the public address system, nor is any information given to an unauthorized person.

# **All Clear**

- All Clear is announced to notify staff the emergency is over.
- · All Clear announcements are not utilized for code blue.

# Light Source Safety

- Light sources used for laparoscopic or arthroscopic procedures have the potential to cause burns.
- Burns from these types of light sources can go unnoticed by the surgical team because they typically do not produce smoke or charring.
- Greater than 50% of fires/burns sentinel events reported to The Joint Commission since
   2019 were associated with surgical or invasive procedures, and nearly 15% of those were related to light sources.



- Any of the heat minimizing devices fail within the light source.
- The light source or light cable is defective.
- Different connectors or components are used. For example, if a 10 mm cable is used with a 5 mm scope, or a 5 mm connection is used instead of the required 10 mm one.
- Detached light cables resting against surgical drapes Even momentary proximity between a light source/cable and a surgical drape can cause a full-thickness burn to the patient's skin without generating any smoke or fire.

# **Potential Burn Causes**

# PREVENTION MEASURES



- Label light sources with the following: "Warning: High-intensity light sources and cables can ignite drapes and other materials. Complete all cable connections before activating the light source." (All light sources in the operating rooms at St. Elizabeth Healthcare are labeled)
- Do not turn on the light source before the cable is connected to the scope.
- If the cable is disconnected from the scope during surgery, hold the cable end away from the drapes or place it on a moist towel.
- Keep illuminated light cords away from drapes, patient's skin, personnel's skin, and any flammable material.
- Inspect all instruments and equipment before use to ensure the equipment is in good working order.

# **Attestation Statement**

I have read this module and agree to abide by the expectations of this module.

