Public Site - Annual Safety Training 2020 Contractors & Vendors

MONUMENT HEALTH

Completion
At the end of each section there is a confirmation number listed. Please record that number for verification.

Please Note
We are excited to officially transition to our new name and brand beginning January 17, 2020. As we are becoming Monument Health, you may see items (such as images, documents, policies, etc.) that say Regional Health within this training. All Regional Health branded items should be phased out by the end of the fiscal year (FY20).

- Workplace Violence
- Fire and Electrical Safety
- Emergency Preparedness
- Hazardous Communications

- Infection Control
- Hazardous Energy
- Personal Protective Equipment (PPE)
- MRI Suitability for Employees and Guests

Workplace Violence

There are two main categories of workplace violence. An **active killer** is where an individual or individuals are engaged in killing. An **aggressive individual** is anyone else that is threatening bodily harm or is being physically harmful.

Active Killer - Training Rationale

Healthcare facilities are entrusted with providing safe and secure environments for their patients, staff, and visitors.

Each facility is responsible for developing its own plan of action to address issues that may threaten the safety of its occupants. Among these safety issues is the threat of an active killer in the healthcare facility.

Active Killer events in healthcare settings are an increasingly serious problem. A study from the FBI from 2000 to 2018 revealed 277 active killer events in the US, of which 12 were in healthcare settings.

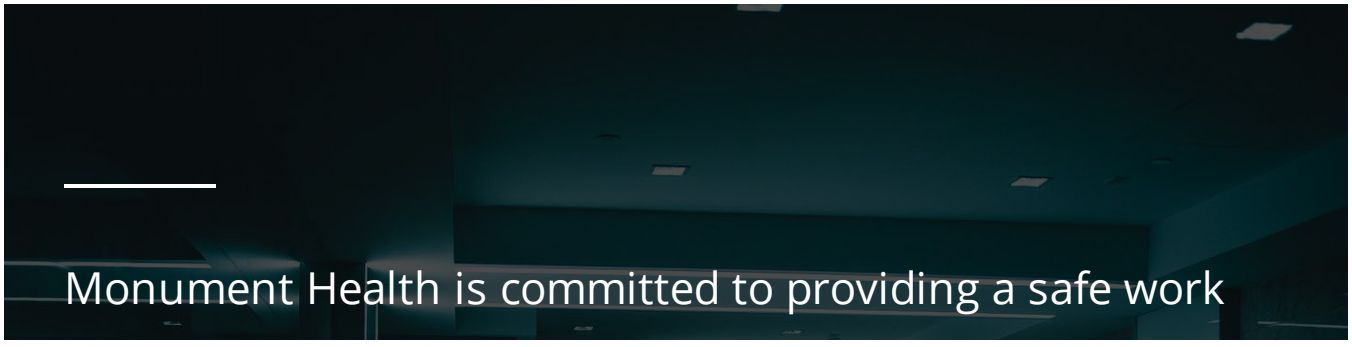
Although this issue is not a common occurrence, it could occur anywhere with little or no warning.

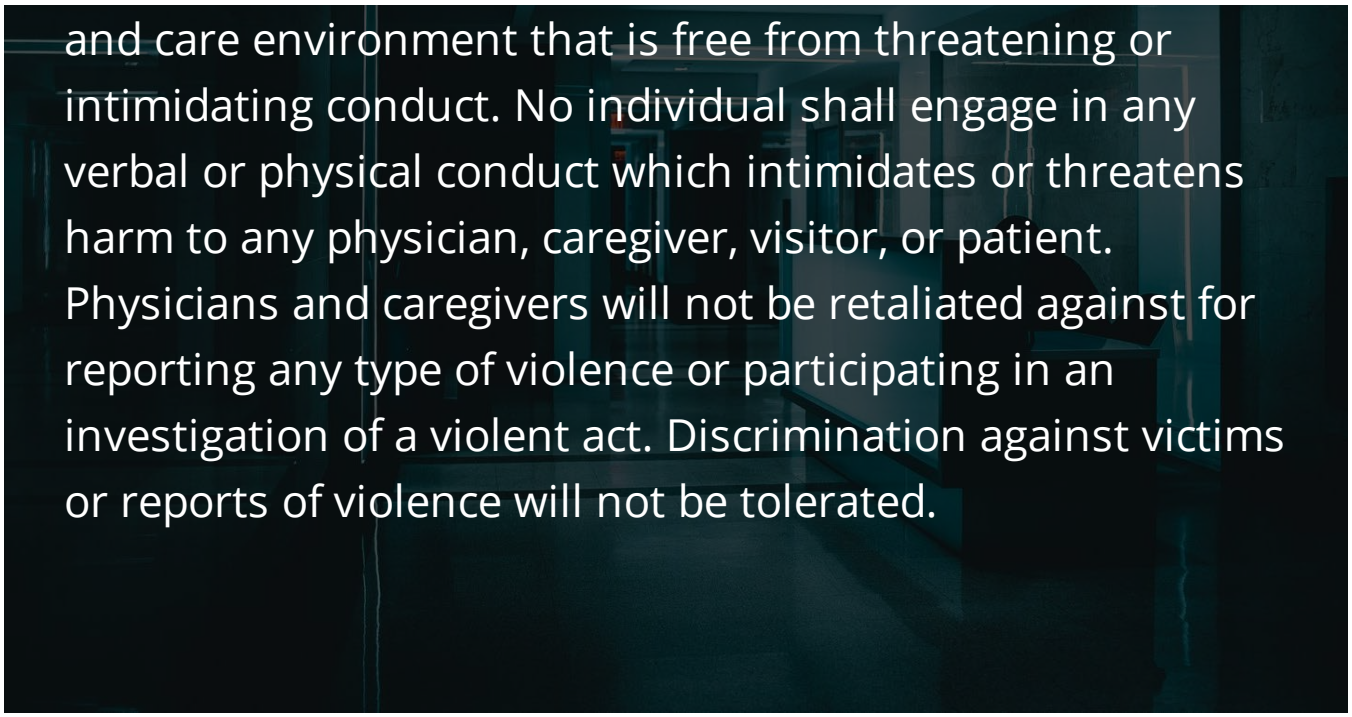
Having a plan of action could make the difference in what could be a life or death situation. See your department specific plan for details.

Response to an Active Killer


RUN HIDE FIGHT
BE PREPARED | ACTIVE SHOOTER RESPONSE
RUN
If a safe path is available, RUN
• Do not hesitate, get out
• Leave your belongings
• Do not attempt to move injured people
HIDE
If you cannot get out safely, HIDE
• Be quiet and silence your phone
• Block entrances and lock doors
• Stay out of the shooter's view
FIGHT
If your life is in danger, FIGHT
• Try to disable the shooter
• Use improvised weapons
• Fight like your life depends on it
FIGHT ONLY AS A LAST RESORT

Monument Health has a zero tolerance policy for workplace violence. All acts of violence or threats against any physician, caregiver, visitor, or patient are to be reported immediately. Monument Health commits to investigate violence, respond to incidents, and support victims of violent acts.





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Immediate Response

1. If you experience workplace violence, remove yourself from the situation to keep yourself safe.
2. Once you are safe and if you are on the Rapid City Hospital campus, dial 5-3111 to notify Security.
3. Once you are safe and if you are off the Rapid City Hospital campus, dial 911 to alert Law Enforcement and 755-3111 to alert Security, if necessary.
4. Alert your leadership of the incident and complete necessary documentation (Employee Event, Patient Event, Appendix B form).

Monument Health Support

Click on the arrows next to the image below to view more information.

Assaulted Physicians and Caregivers

• Monument Health will provide support to all caregivers who have been assaulted and/or battered.

• Each caregiver who is assaulted and/or battered will have access to treatment and services to manage the trauma.

Order for Protection

• Physicians and caregivers are strongly encouraged to disclose with their supervisor and Security if they have an order for protection.

Further information is available in the Monument Health Workplace Violence Prevention Plan and upon request from your leadership.

Workplace Violence Completion Code

Please record the following number for completion: 578621

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Fire and Electrical Safety

Fire Safety

Everyone has a role and responsibility in the event of a fire emergency, which may involve:

- relocating patients, residents, or visitors
- sounding the alarm
- calling the appropriate emergency response number

RACE

Click on the arrows next to the image below to view more information.

Fire emergency response is summarized by the acronym **RACE**.

R

The R in RACE means rescue. Move everyone out of the area of the fire. Next move people in rooms on either side of the fire and rooms across the hall and rooms above and below the fire.

A

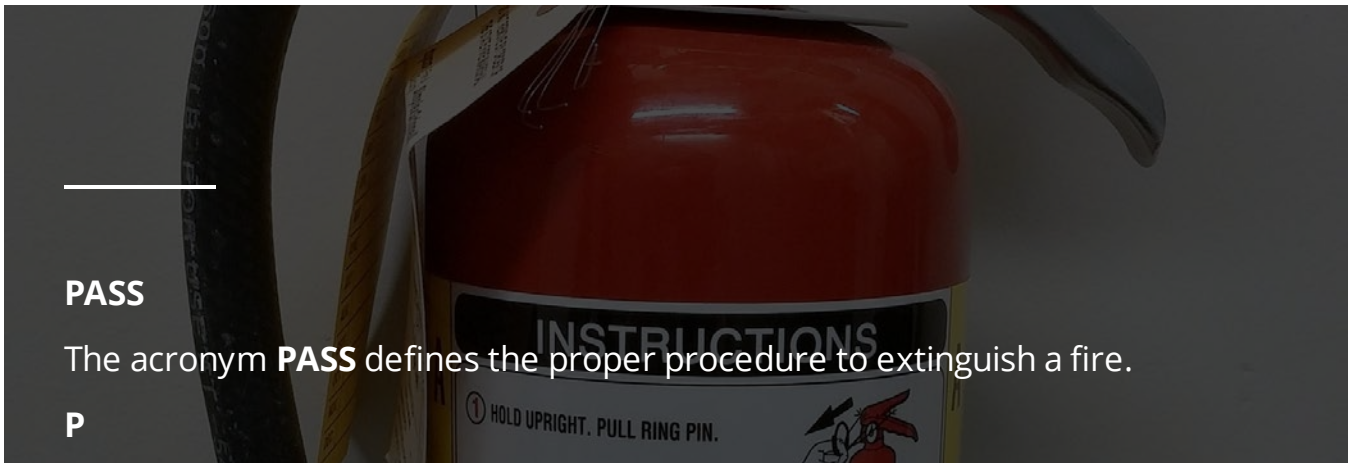
The A stands for alarm. Pull boxes/alarms are located throughout our healing environments at or near an exit. You should know where each pull box/alarm is located in your work area.

C

The C stands for contain. The first step in defending against the threat of the fire and smoke is containment. Closing all doors can prevent smoke from spreading, cut off the flow of oxygen to a fire, and save lives.

E

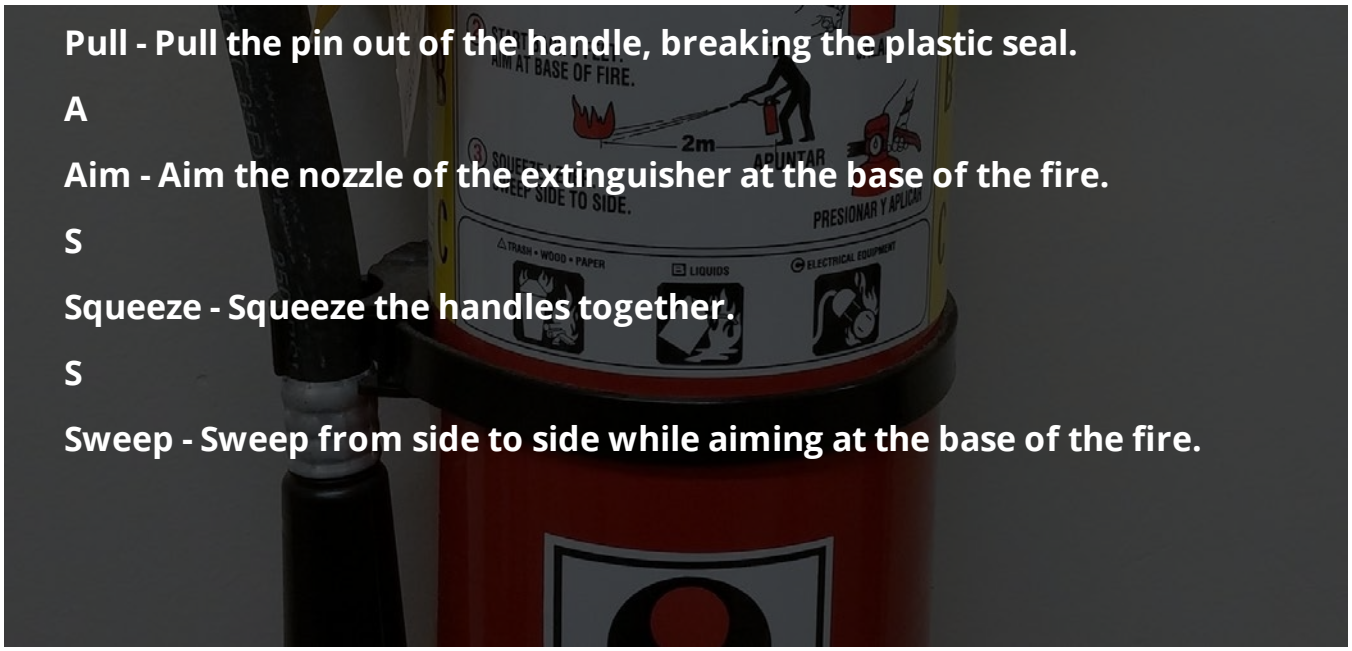
E stands for extinguish. Handheld fire extinguishers are located throughout the healing environments. You should only attempt to extinguish small, contained fires, where your safety is assured. You should also have an escape route behind you and a staff member or other healthcare worker available to assist you.



PASS

The acronym **PASS** defines the proper procedure to extinguish a fire.

P



Fire Safety Recap

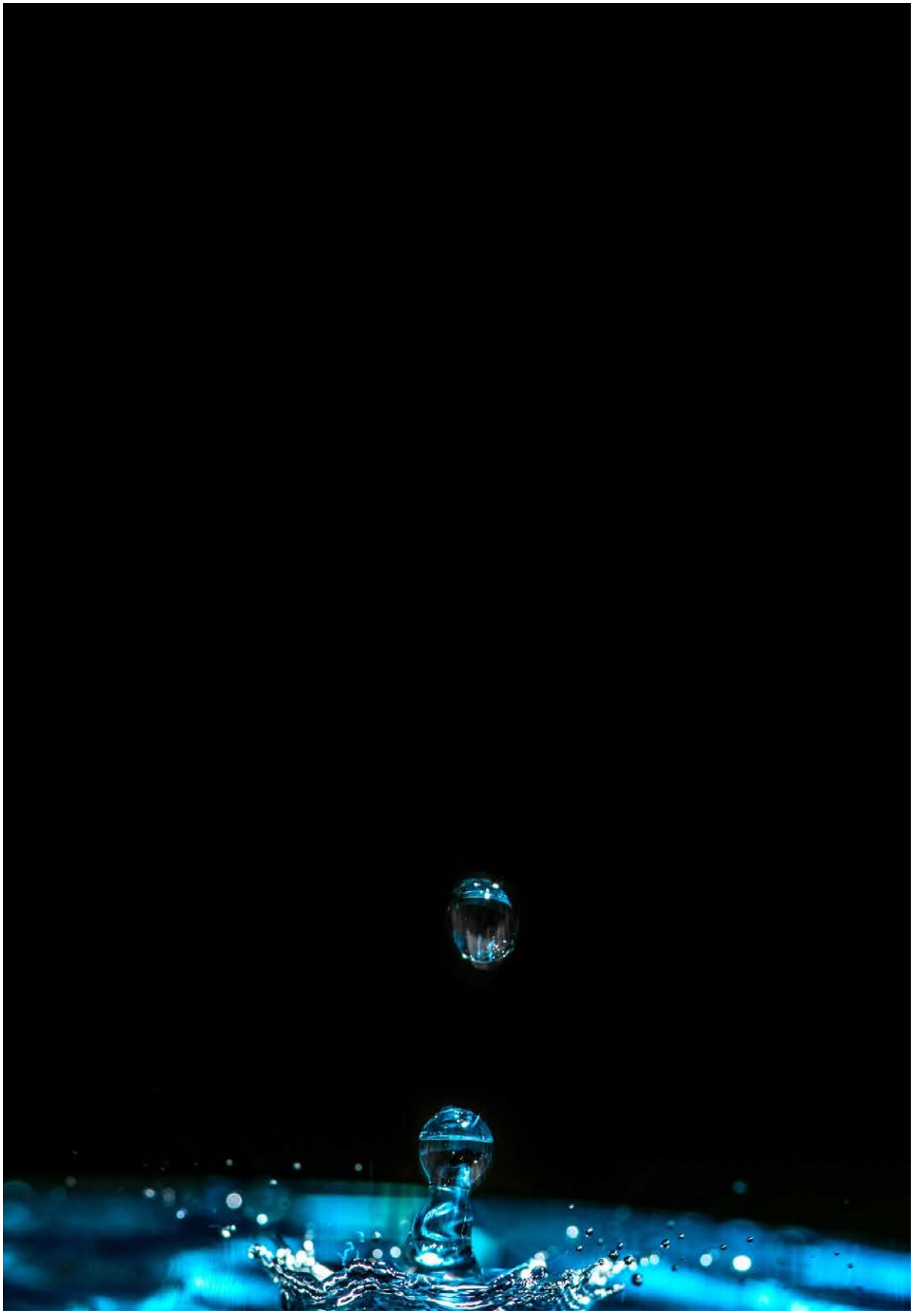
Each Monument Health healing environment has a fire plan and regular fire drills so that you know what to do in an emergency.

- Know the location of fire alarm pull-boxes in your work area.
- Know where fire extinguishers are located and how to use them.
- Know where the exits are.
- Take care to never block an exit.
- Know how to shut off oxygen in your facility.

Electrical Safety

Electricity is the flow of electric power or energy. Electricity occurs in nature, such as lightning for example. Electricity can be made and sent over long distances and requires a conductor and a closed circuit.

What Is a Conductor?



A material that can transmit electricity, and in which electric currents flow readily.

Examples of conductors include:

- ground/earth
- metals
- moist body tissue
- body fluids
- water

What Is an Insulator?

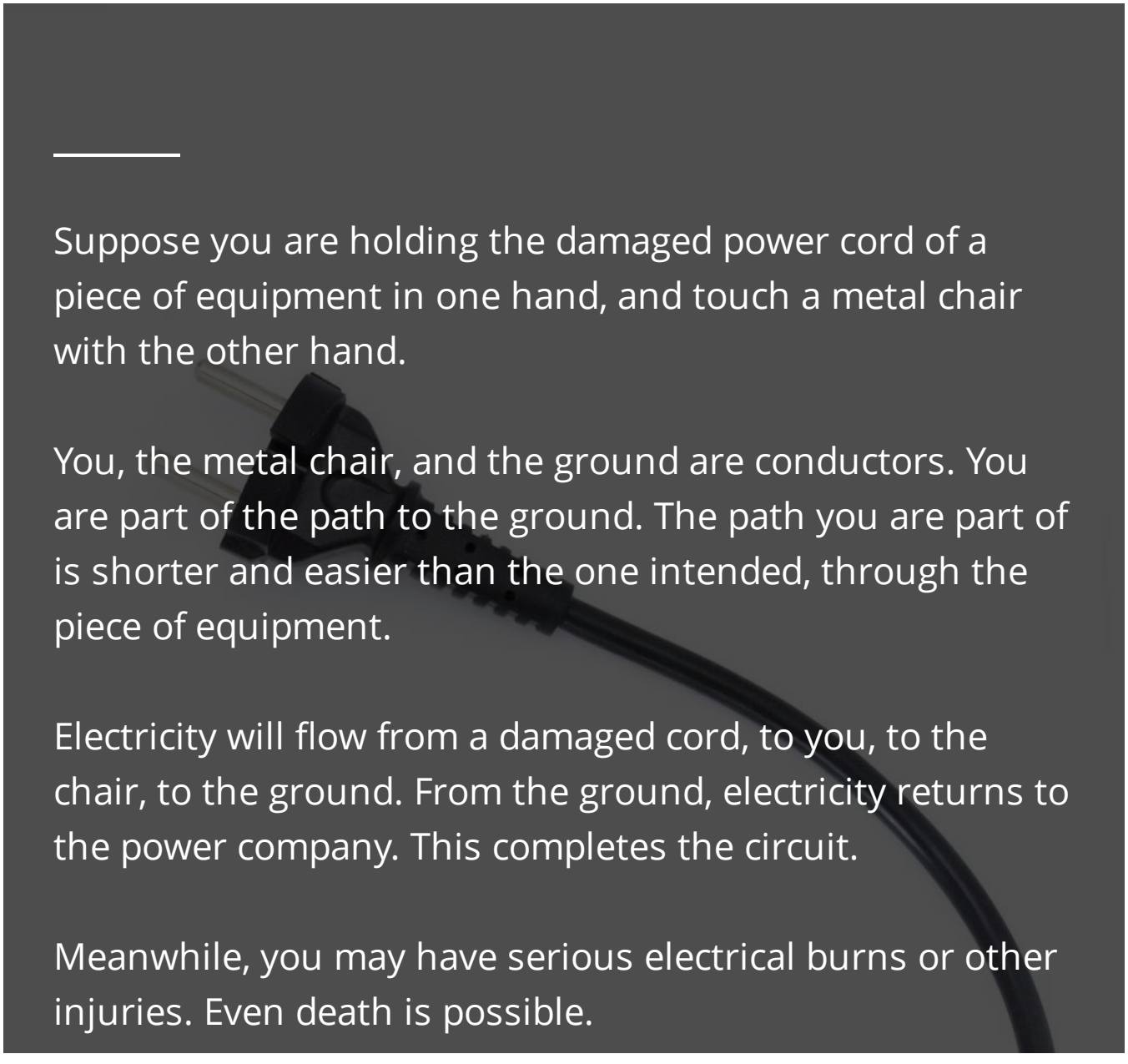
A material that can block the flow of electric current and force electricity to take a more difficult path.
Examples of insulators include:

- rubber
- plastic
- glass
- cloth
- wood

Circuits

Electricity travels in a loop (circuit). When you plug in a piece of equipment, electricity flows from the outlet to the equipment and then back to the outlet. Anything that conducts electricity can become part of the circuit. Because bodies conduct electricity, you become part of a circuit.

Circuits and You



Suppose you are holding the damaged power cord of a piece of equipment in one hand, and touch a metal chair with the other hand.

You, the metal chair, and the ground are conductors. You are part of the path to the ground. The path you are part of is shorter and easier than the one intended, through the piece of equipment.

Electricity will flow from a damaged cord, to you, to the chair, to the ground. From the ground, electricity returns to the power company. This completes the circuit.

Meanwhile, you may have serious electrical burns or other injuries. Even death is possible.

Electrical Safety Recap

- Pay attention to warning signs.
- Electrical accidents often cause injuries, fires, and death.
- Electric shock happens when you become part of a circuit.
- Electric shock happens if a person touches a damaged device or an electrified object.

Fire and Electrical Safety Completion

Please record the following number for completion: 785123

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Emergency Preparedness

Disaster vs Emergency

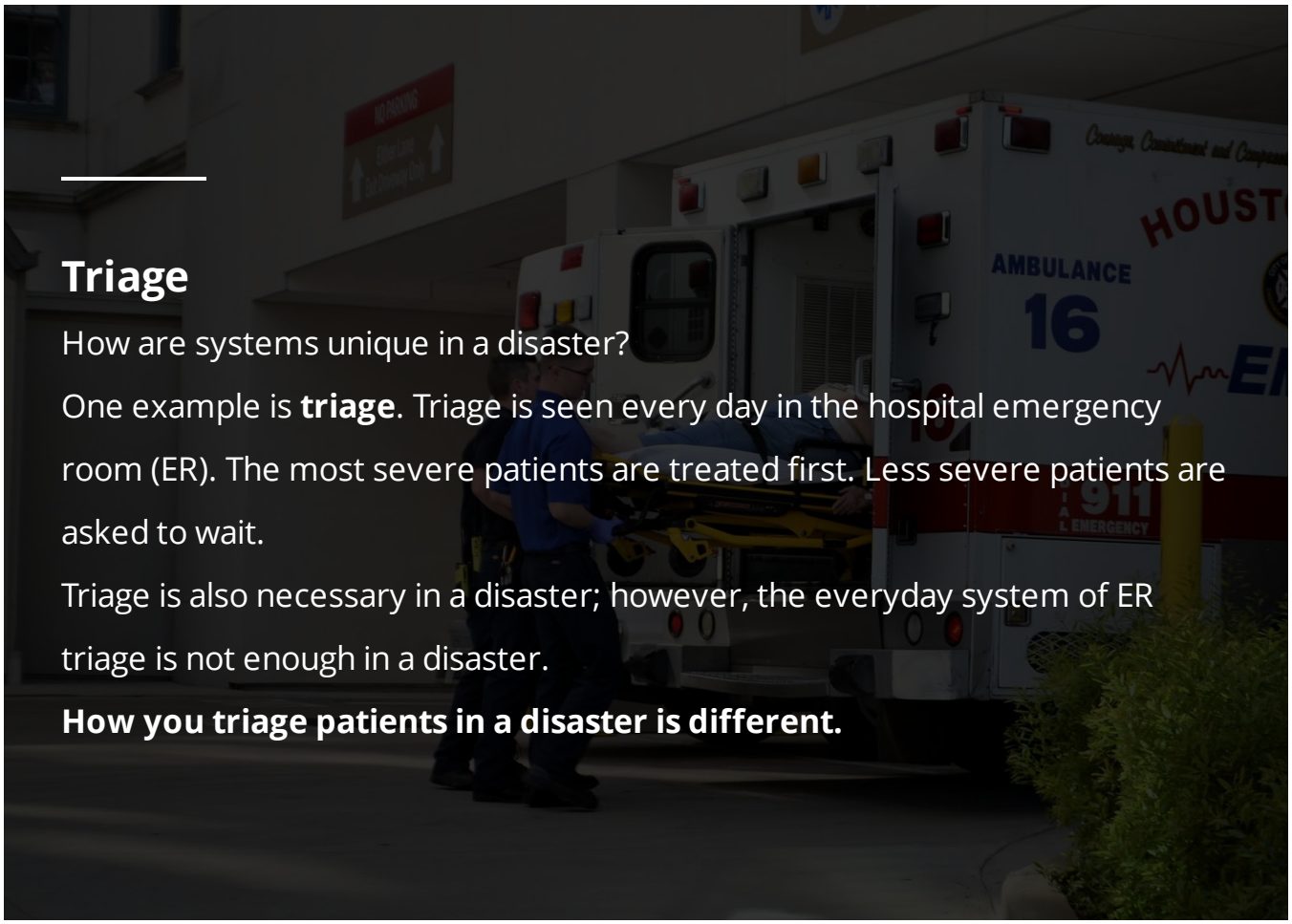
Some emergencies are small, others are large. Very large emergencies are known as **disasters**. Disasters are different from emergencies.

A few important differences include:

- A single organization or group can usually take care of an emergency.
- Disasters are too big for a single group to deal with.

Everyday systems are usually not enough to take care of a disaster. Systems and personnel may need to be used in creative ways.

For example, disasters have many victims. Hospital staff may need to take on unfamiliar tasks. This can help ensure that all of the victims get the medical care they need.



Triage

How are systems unique in a disaster?

One example is **triage**. Triage is seen every day in the hospital emergency room (ER). The most severe patients are treated first. Less severe patients are asked to wait.

Triage is also necessary in a disaster; however, the everyday system of ER triage is not enough in a disaster.

How you triage patients in a disaster is different.

Emergency Operations Plan

An Emergency Operations Plan (EOP) describes who will do what, when, with what resources, and by what authority – before, during, and immediately after the disaster.

An EOP ensures that disaster systems are:

- established ahead of time
- practiced
- evaluated and changed as necessary

With a proper EOP, your facility is prepared for disaster. Check to see if your facility has an EOP and become familiar with it.

The Role of Staff Members

All staff members must understand the EOP. They must know their role.

Staff members must know what to do when the disaster code or condition is activated. Many lives may depend on a quick response.

Disaster training helps ensure a quick and effective response.

Risk Identification

Coping with disasters is no easy task and often results in an emergency situation. There are four basic types of disasters to be aware of.

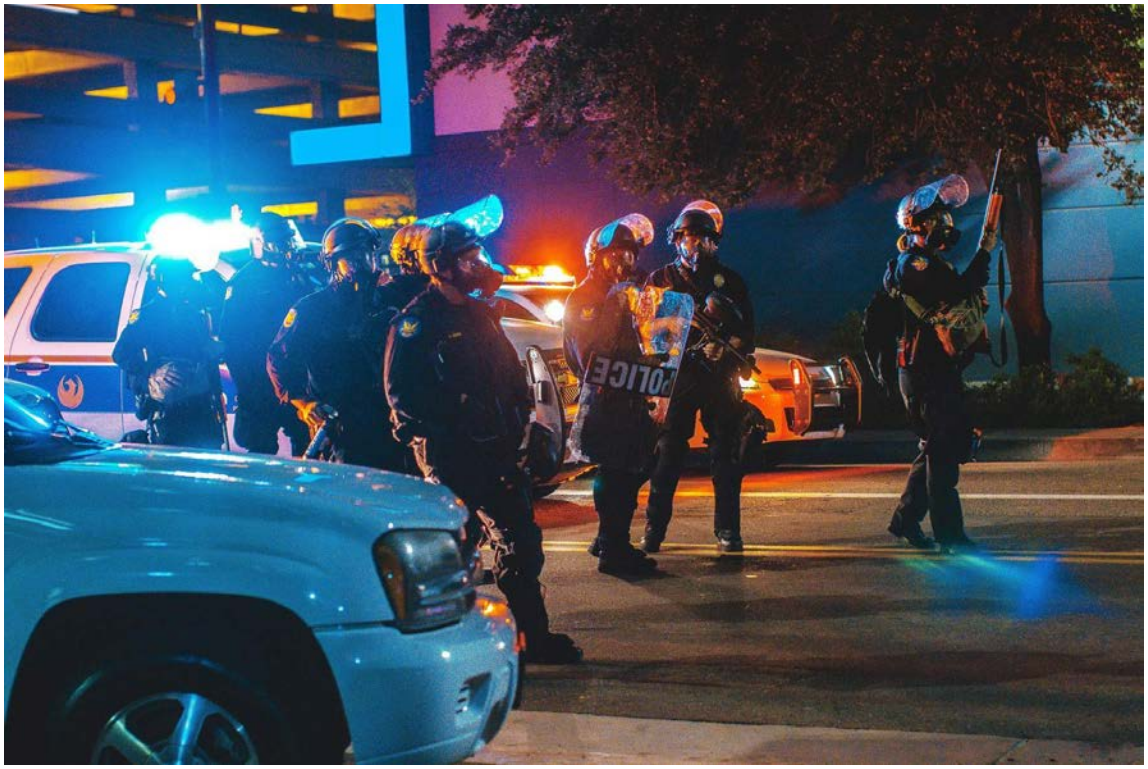
Click on each tab below to learn more.

NATURAL DISASTERS	HUMAN RELATED DISASTERS	TECHNOLOGICAL DISASTERS	HAZARDOUS MATERIAL DISASTERS

Some types of natural disasters are tornadoes, severe snow, ice storms, wild fires, etc.

NATURAL DISASTERS	HUMAN RELATED DISASTERS	TECHNOLOGICAL DISASTERS	HAZARDOUS MATERIAL DISASTERS

Some types of human related disasters include civil disturbance, mass casualty incident, workplace violence, etc.



NATURAL DISASTERS	HUMAN RELATED DISASTERS	TECHNOLOGICAL DISASTERS	HAZARDOUS MATERIAL DISASTERS

Some types of technology disasters are electrical failure, HVAC failure, generator failure, etc.

NATURAL DISASTERS	HUMAN RELATED DISASTERS	TECHNOLOGICAL DISASTERS	HAZARDOUS MATERIAL DISASTERS

Some types of hazardous material disasters are terrorism involving chemicals, radiological or nuclear, etc.

Know Your Emergency Codes and Conditions

These codes are our healthcare system's standardized emergency and disaster codes and conditions. It is your responsibility to review and know each of the codes and conditions listed below that impact you and your facility.

- Capacity Plan/Status Updates
- Condition Hazmat
- Standby D/Major D
- Condition Evac
- Condition Snow
- Condition Tornado
- Condition X – Bomb Threat Condition Red

- Condition E – Elopement
- Condition Pink
- Condition TOV
- Condition U – Utility Impact Condition
- Active Killer
- DR. BERT

Capacity Plan
"Capacity Plan/Status Update" informs caregivers of the current capacity status of the inpatient tower and ED using colors, and based on the department, provides guidelines for actions to take.

Standby D or Major D
"Standby D"
Caregivers on duty are warned that a disaster may occur. This will allow time for planning, gathering resources, etc. Should the disaster occur, a "Major D" would be declared.

"Major D"
Caregivers are informed that a

disaster has occurred. More resources will be needed to handle the expected influx of patients. The entire facility, and in some disasters the entire system, will then function on a disaster level. This is also used in case of a bioterrorist attack.

Please click on the arrows next to the image below to view more information.

Condition Snow
Caregivers are warned that winter weather may cause a problem in staffing and supplies related to their facility.

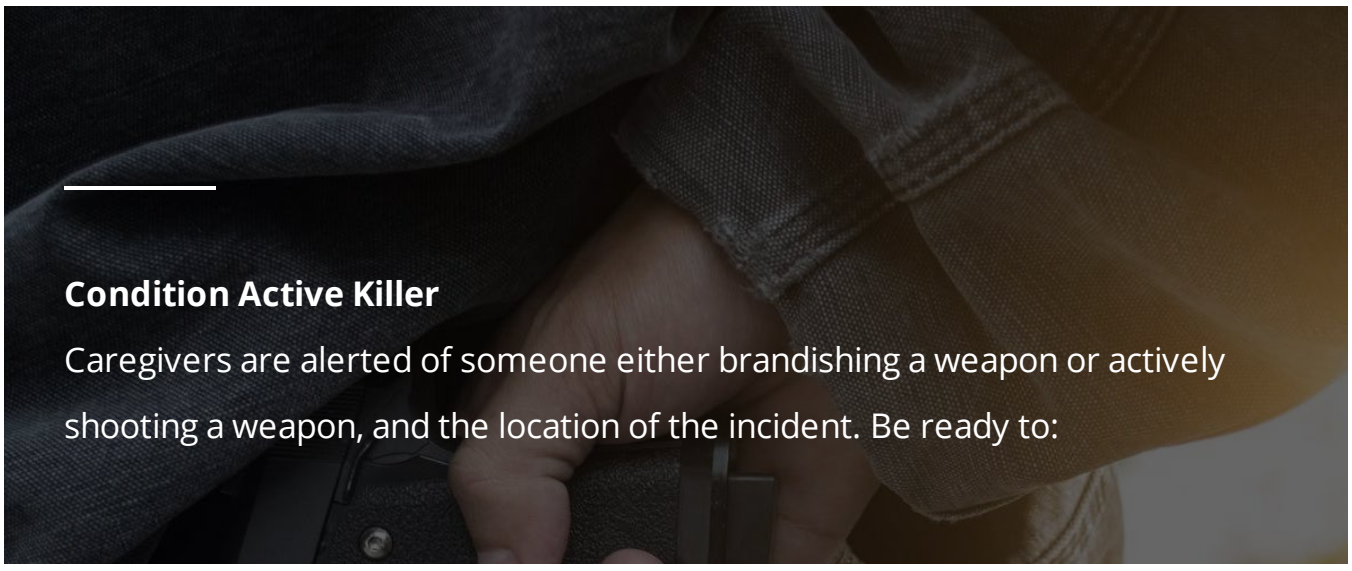
Condition Tornado
Caregivers are warned that the National Weather Service has issued a Tornado Watch for the area. Below is an explanation regarding the difference between a Tornado Watch and Tornado Warning.
Tornado Watch: Be Prepared!
Tornadoes are possible in and near the watch area. Review and discuss your emergency plans and check supplies. Be ready to act quickly if a warning is issued or if you suspect a tornado is approaching. The Watch area is typically large, covering numerous counties or even states.
Tornado Warning: Take Action!
A tornado has been sighted or indicated by weather radar. There

is imminent danger to life and property. Move to an interior room on the lowest floor of a sturdy building where possible. Avoid windows. Warnings typically encompass a much smaller area (around the size of a city or small town).

Condition Red
Caregivers are warned that smoke, fire, or sparks have been observed. The fire alarm system has been triggered.

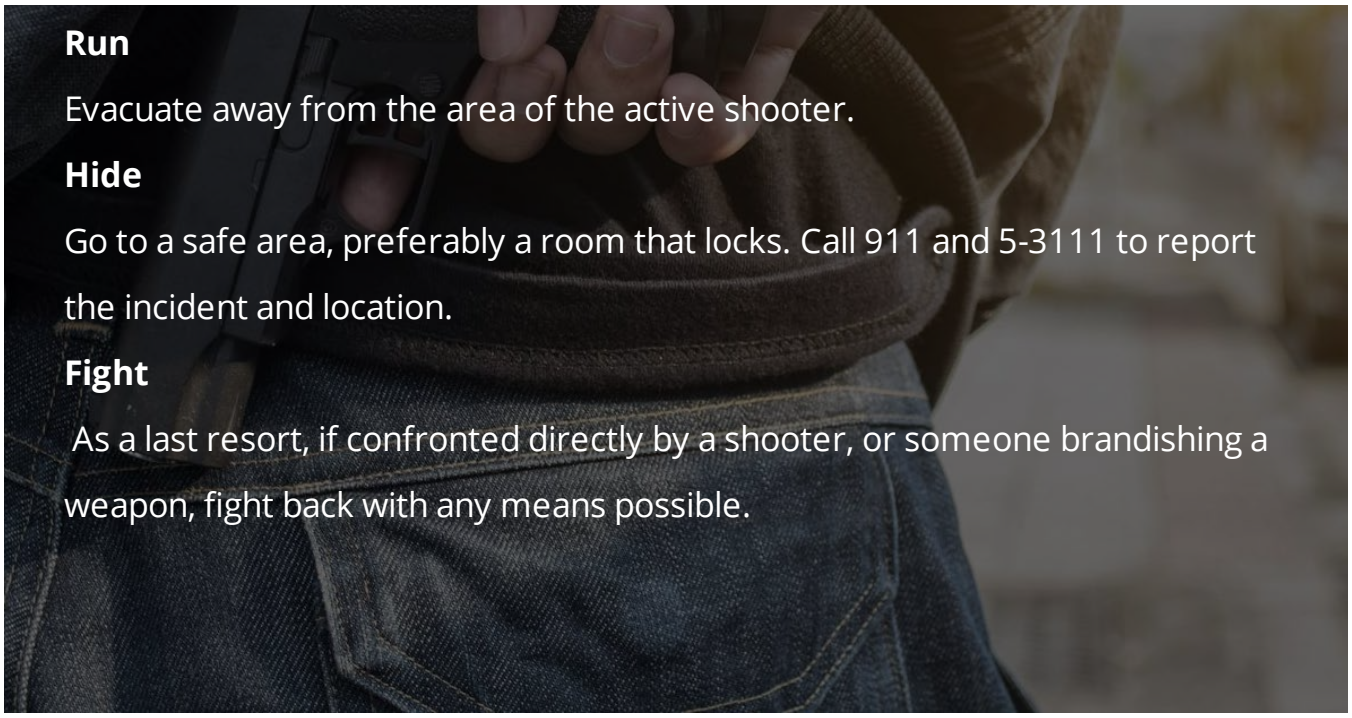
Condition Pink

Caregivers are alerted that an infant or child has possibly been abducted from some area of the hospital. Caregivers shall follow “Condition Pink” duties outlined for their facility or work area.



Condition Active Killer

Caregivers are alerted of someone either brandishing a weapon or actively shooting a weapon, and the location of the incident. Be ready to:



Run

Evacuate away from the area of the active shooter.

Hide

Go to a safe area, preferably a room that locks. Call 911 and 5-3111 to report the incident and location.

Fight

As a last resort, if confronted directly by a shooter, or someone brandishing a weapon, fight back with any means possible.

Condition Hazmat

Caregivers are warned of an accident involving hazardous materials. The location and possible evacuation instructions will also be announced. If you are in the facility or program

Condition Evac

Caregivers are alerted of the need to evacuate all or portions of the facilities as directed by either internal or external authorities. If the need arises to evacuate the entire building, the plan

area affected, follow your specific hazardous material spill procedures.	established by your local Emergency Management Agency will be followed and may include evacuating to a nearby building.

DR. BERT

Caregivers are alerted that a hostage or workplace violence situation may be occurring.

Condition X

Caregivers are informed that a bomb threat has been received, or that a bomb or suspicious item has been detected.

Condition E

Caregivers are alerted of a missing patient or resident from their normal location who is unaccounted for. If a patient/resident is not located quickly, contact your local law enforcement. If you are unsure of your role in this situation, speak with your immediate supervisor.

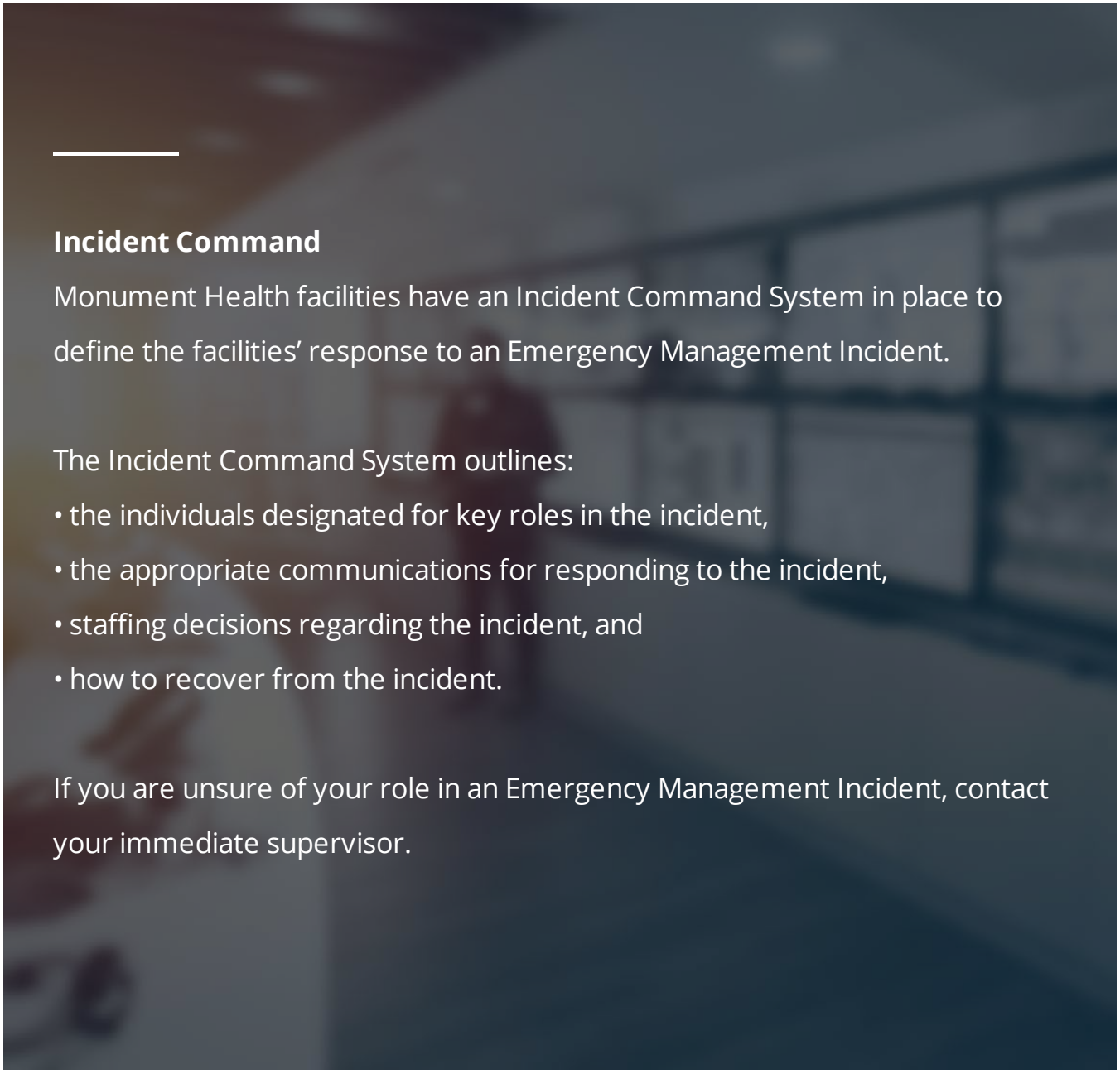
Condition TOV

Alert that a hostage or workplace violence situation may be occurring.

Condition U

Caregivers are alerted to one or more of the following system failures:

- water
- computer
- electricity
- oxygen
- medical vacuum
- medical air
- telephone
- heating fuel (natural gas, oil, propane, etc.)



Incident Command

Monument Health facilities have an Incident Command System in place to define the facilities' response to an Emergency Management Incident.

The Incident Command System outlines:

- the individuals designated for key roles in the incident,
- the appropriate communications for responding to the incident,
- staffing decisions regarding the incident, and
- how to recover from the incident.

If you are unsure of your role in an Emergency Management Incident, contact your immediate supervisor.

Caregivers are often asked to respond to emergency situations in our communities and our facilities.

Each Monument Health facility maintains an Emergency Operations Plan, which contains plans for responding to incidents that may overtax or threaten to overtax the capacities of a facility.

The disaster incident may be external or a combination of incidents. Within the plan are the procedures and guidelines to follow in the event of an emergency. This plan, as well as other emergency

management plans, can be reviewed via the Intranet.
(MH Corporate Services Hub > All Site Content > Plans)

Emergency Operations Plan

The EOP contains plans for responding to incidents that may overtax the capabilities of the healing environment and it contains procedures and guidelines to follow in an emergency. The EOP can be reviewed via the intranet under *Facilities* > *Corp Services* > *Documents* > *Plans* > *Specific Facility*.

Summary

Caregivers must know how to respond to each of these Emergency Management Incidents. Make sure that you understand your responsibilities.

Emergency Preparedness Completion

Please record the following number for completion: 453124

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Hazardous Communications

Chemical Hazards

A chemical is hazardous if it is likely to cause harm.

Physical Hazards
Related to the way that a chemical interacts with other substances or the environment.
These hazards harm by:
• exploding
• igniting
• reacting violently with other substances

Health Hazards
Health hazards are related to the way that a chemical interacts with your body.
If exposed, one can suffer:
• death
• long-term damage
• short-term injury or illness

Routes of Exposure

You must be exposed to a chemical for it to harm you. Below are some ways you can be exposed to chemicals.

Click on the arrows next to the image below to view more information.

Eyes - Causes burning and irritation.

Skin - Can burn and cause entrance into the bloodstream.

Inhalation - Route that most chemical exposures occur.

Ingestion - Can be ingested while smoking, eating, and drinking.


SHARPS
DROP, DON'T FORCE SHARPS INTO CONTAINER. FORCING COULD CAUSE PUNCTURE.
INFECTIOUS WASTE
SINGLE USE ONLY
BIOHAZARD
SAGE

Injection - A cut from an instrument contaminated with a chemical.

Types of Hazardous Chemicals

Solids

Certain forms of solids can be highly hazardous because they are readily absorbed into the body. Examples include:

- dust
- fumes
- fibers

Liquids

Many hazardous chemicals are liquids at normal temperatures and pressures. Hazardous liquids may:

- damage the skin
- enter the body through skin
- evaporate and form toxic gasses

Gasses

Hazardous gasses can be difficult to detect and many gasses do not have a distinctive odor.

Safety Data Sheets Include:

- **Identification**
    - identifies chemical name and supplier
    - supplier information
    - ways to identify
    - use of chemical
    - what not to do with the chemical

- **Hazard identification**

    - hazard class and category
    - signal word
    - hazard statement symbol
    - precautionary statement
    - outline ingredients of unknown toxicity
    - includes unclassified hazards

- **Composition/Ingredient information**
    - chemical/common name
    - chemical abstract service number
    - European commission number
    - impurities/stabilizing additives
    - trade secrets

- **First-aid measures**
    - what to do if exposed
    - means of exposure
    - symptoms from exposure
    - treatment required

- **Fire-fighting measures**
    - potential hazards
    - extinguisher types
    - personal protective equipment
    - precautions

- **Accidental release measures**
    - steps to take in case of a spill
    - personal precautions

    - protective equipment
    - methods/materials needed for cleanup

- **Handling and storage**
    - how to handle and store chemicals

- **Exposure control and personal protection**
    - permissible limits
    - engineering controls
    - personal protective equipment

- **Physical and chemical properties**
    - describes chemical:
        - color
        - odor
        - pH
        - state
        - flammability
        - melting
        - freezing and boiling points

- **Stability and reactivity**
    - possible reactions
    - conditions to avoid
    - what occurs during storage, heating, decomposition, and mixing

- **Disposal information**
    - safe disposal of chemical, waste products, or packaging

- **Transport information**

    - United Nation (UN) number
    - shipping ID
    - transportation hazard class
    - bulk/special transportation information
    - environmental hazard information

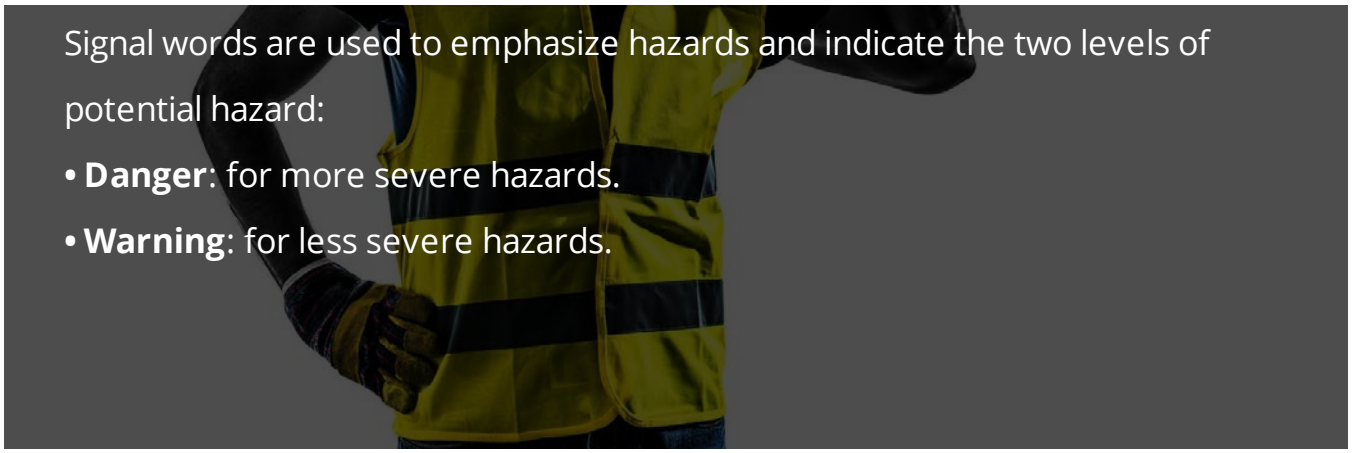
- **Regulatory information**
    - government information regarding safety, health, and environmental regulations

- **Toxicological information**
    - level of toxicity
    - medical symptoms with exposure
    - data about effects

- **Ecological information**
    - effects of chemical on the environment

- **Other information**
    - any other information
    - date SDS was prepared
    - date the data was last updated

Signal Words



Pictograms

Every hazardous chemical label outlines specific information to help prevent injuries. The information on the Global Harmonization Symbol (GHS) hazardous chemical label is organized into six parts:

1. Product Identifier

- Common name
- Chemical name
- Ingredients

2. Signal Word

- Danger = Severe
- Warning = Less Severe

3. Hazard Statement

- Describes the kind and degree of hazard:
    - physical
    - health
    - environmental

4. Hazard Pictogram

- Symbols that represent one or more of the nine hazard classes

5. Precautionary Statements

- Recommends measures to minimize or prevent effects from exposure

6. Supplier Identification

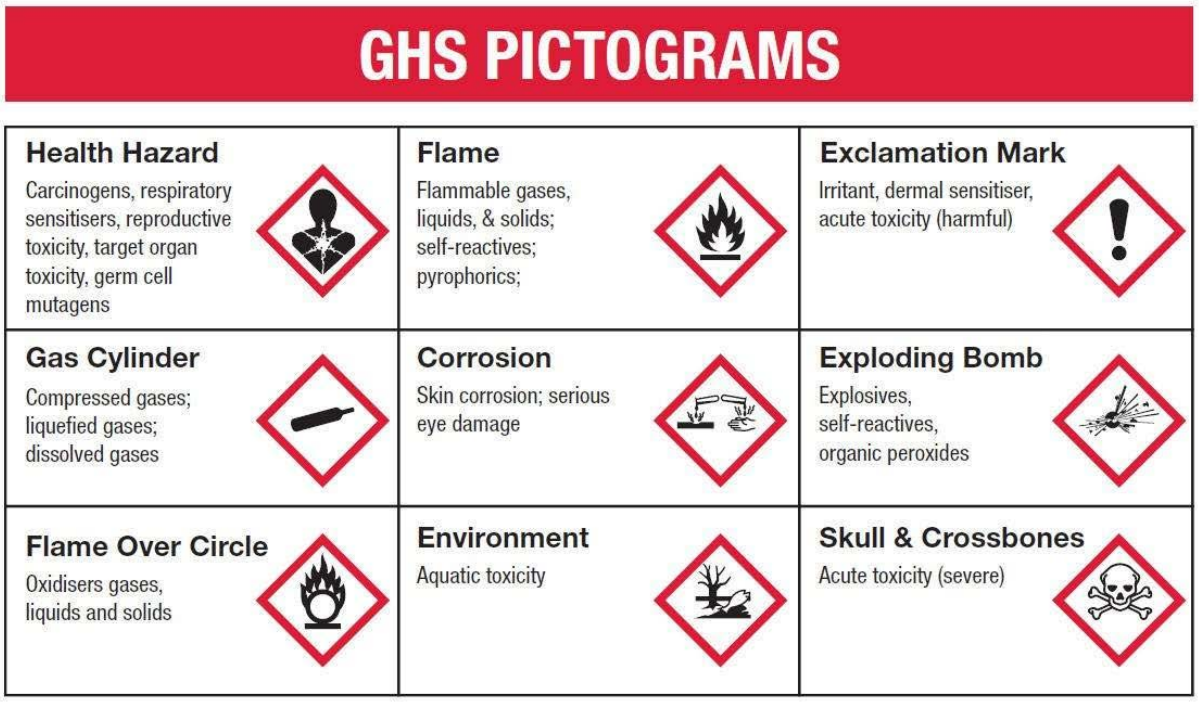
- Distributor contact information

Portable Containers

Products falling into the scope of the GHS will carry the label at the point they are supplied by the manufacturer or the distributor to our workplace. Caregivers do not have to label small containers into which they pour materials for use on that shift as long as they are the ones pouring and controlling the container throughout its use. However, if more than one person will use the container, it will be used

for more than one shift, or it's not under the continuous control of the caregiver who poured it, then the caregiver must label the secondary container with product identification and hazard.

Hazardous Pictograms



Who can you contact with questions?

If you have any questions, please reach out to your supervisor, Health and Safety Representative, Safety Officer, or any member of management.

Hazardous Communication Completion

Please record the following number for completion: 432854.

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Infection Control

Personal Protective Equipment (PPE)

PPE is specialized clothing or equipment worn by a caregiver for protection against a hazard. Remember that PPE is one of the methods to reduce exposure to infectious agents. PPE is the last line of defense in preventing your exposure to infectious agents.

Examples include, but not limited to:

- eye protection
- face masks or shields
- gowns/laboratory coats (fluid resistant)
- gloves
- ressuscitation and ventilation devices

Gloves

You are required to wear gloves when:

- there may be contact with blood, body fluid, mucous membranes, and non-intact skin
- performing vascular access procedures (for example, drawing blood or inserting an IV)
- handling, touching, or cleaning contaminated items or surfaces

Replace contaminated, torn, or punctured gloves as soon as practical. If there is any doubt that a glove's ability to function as a barrier is compromised, the gloves should be replaced.

Glove Removal

*Please watch the video by clicking here. Note: This video does **not** contain audio.*

Masks, Eye Protection, Face Shields

*Please watch the video by clicking here. Note: This video **does** contain audio.*

Personal Protective Equipment

Donning Personal Protective Equipment

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet, or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

*Please watch the Donning video by clicking here. Note: This video **does** contain audio.*

Personal Protective Equipment Work Practices

1. Remove any garment penetrated by blood or body fluid as soon as possible.
2. Remove all PPE prior to leaving your work area or point of use.
3. Place removed PPE in a designated area or container for washing, decontamination, or disposal.
4. Wash hands with soap and water or hand antiseptic as soon as possible after removing gloves or other protective clothing, or after direct contact with blood or body fluid.
5. Keep hands away from face.
6. Change gloves when torn or heavily contaminated.
7. Perform hand hygiene.

Doffing Personal Protective Equipment

Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door.

Perform hand hygiene between steps if hands become contaminated and immediately after removing all PPE.

*Please watch the doffing video by clicking here. Note: This video **does** contain audio.*

Hand Hygiene

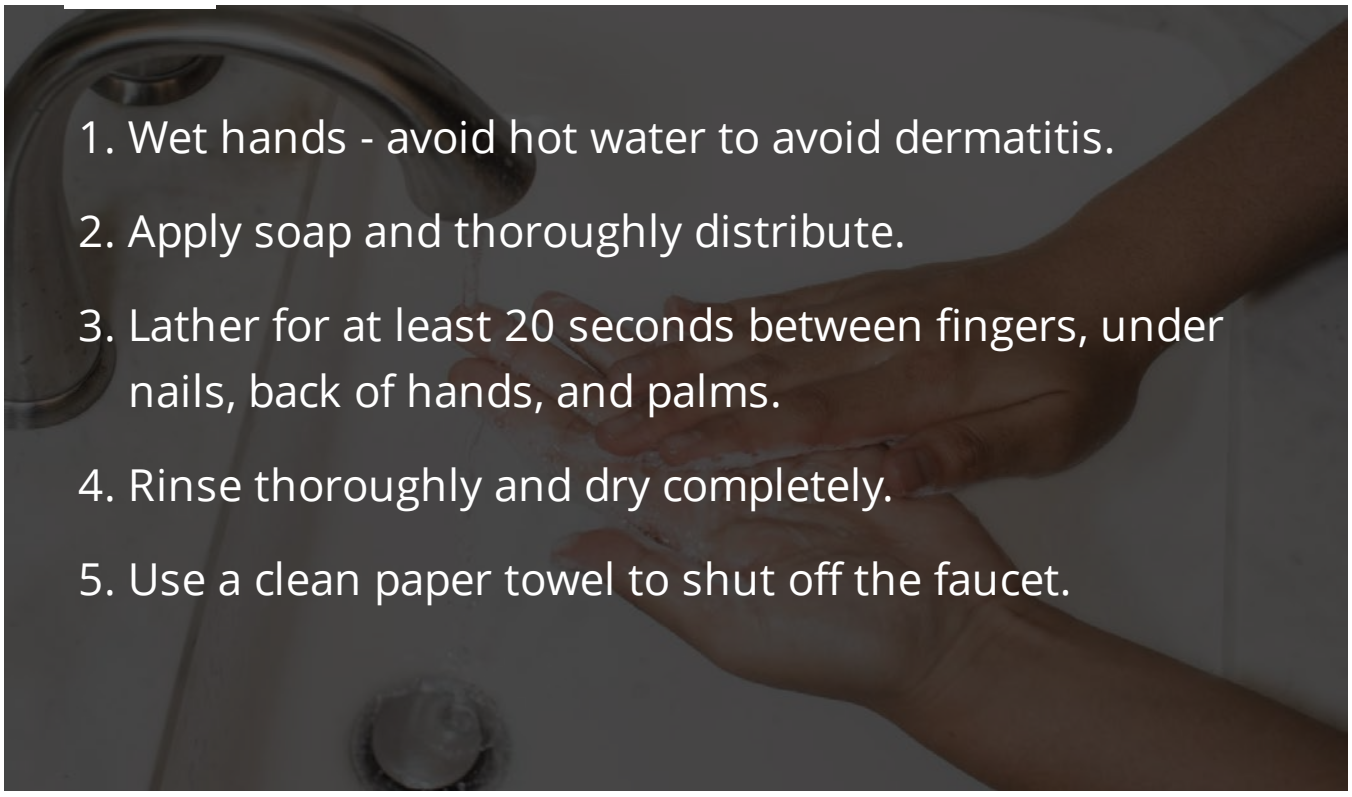
Hand hygiene is a general term that applies to either handwashing, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis.

Cleaning your hands before and after patient/resident contact is one of the most important measures for preventing the spread of infections.



Handwashing Steps

Use soap and water when hands are visibly soiled.



Note: Certain situations call for hand hygiene with soap and water, such as after caring for a patient suspected of or diagnosed with Clostridium difficile (C. diff), Norovirus, or Enterovirus D-68.

Steps to Using Alcohol-Based Hand Rubs (Foam, Gel, etc.)


ALCARE PLUS®
Antiseptic Handrub
with Emollients
Place fingers under
spout & pull forward
STERIS

- Apply product to palm of hand.
- Rub hands together covering all surfaces of hands and fingers.
- Rub until dry. **DO NOT** dry your hands with a towel.
- Be sure to use the volume of product recommended by manufacturer.
- Non-surgical applications:
- Steris - Allcare Plus (purple label): **Golf ball-sized**.
- Do wash your hands with soap and water after using foam 5-10 times. The emollients in the foam will build up and need to be rinsed off.

Which is better, hand washing or alcohol-based hand products?

Belief

Alcohol-based hand rub/rinses/gels dry hands out more than soap and water.

Reality

Alcohol-based rinses or gels containing emollients caused substantially less skin irritation and dryness than the soaps or antimicrobial detergents tested.

Source: CDC MMWR, Guideline for Hand Hygiene in Health-Care Settings, October 25, 2002. Vol. 51, No. RR-16. (p. 13)

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds

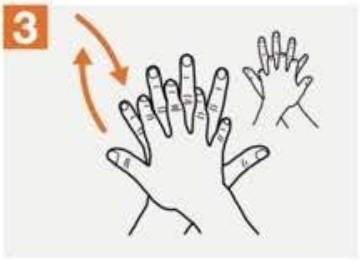
1a 1b

Apply a palmful of the product in a cupped hand, covering all surfaces;

2

Rub hands palm to palm;

3



Right palm over left dorsum with interlaced fingers and vice versa;

4

Palm to palm with fingers interlaced;

5

Backs of fingers to opposing palms with fingers interlocked;

6

Rotational rubbing of left thumb clasped in right palm and vice versa;

7

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8

Once dry, your hands are safe.

World Health Organization | Patient Safety — A World Alliance for Safer Health Care | **SAVE LIVES** Clean **Your** Hands

WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

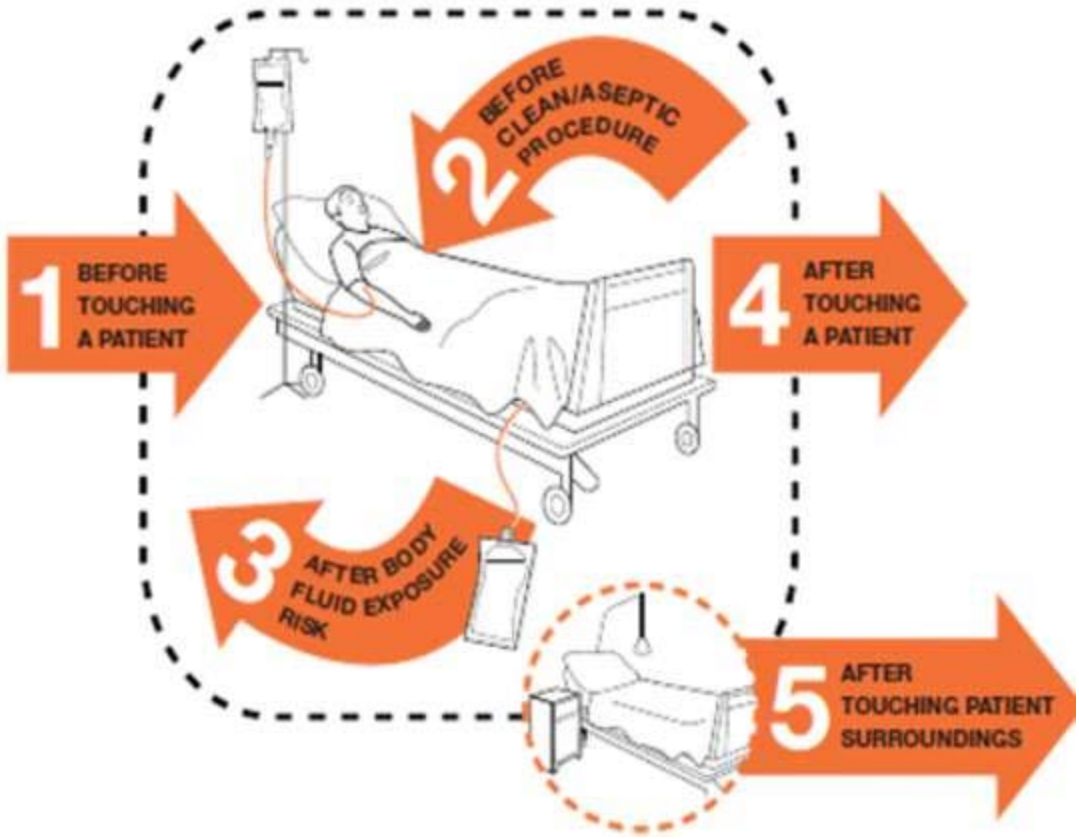
May 2009

Foam In/Foam Out

Monument Health has a catch phrase to remind everyone to "foam in" when going into a patient's/resident's room or patient area and to "foam out" upon leaving the patient/resident room or patient/resident area.

Alcohol-based hand rubs are very efficient cleansers when there is no visible contamination. Alcohol-based foam or gel has been placed outside almost every patient room and in many areas throughout the healing environment.

*Please watch the video by clicking here. Note: This video **does** contain audio.*



Airborne Infections and Communicable Diseases

Tuberculosis (TB)

If you see the signs and symptoms of TB (fever, night sweats, persistent cough, weight loss, loss of appetite, or coughing blood) you need to initiate airborne isolation and discuss TB concerns with the provider.

Isolation Precautions

Monument Health provides facilities and services for isolation procedures necessary to help prevent transmission of infections and communicable diseases among patients, residents, caregivers, and visitors.

Remember that Standard Precautions will be used with all patients at all times. Patients will be placed in appropriate precautions for known or suspected infectious diseases.

Below is a list of precautions that could be used at Monument Health. The colored square corresponds to the colored sign used for each precaution.

Isolation Precautions

Click on the arrows next to the image below to view more information.

Droplet Precautions

- Mumps
- Whooping Cough
- Influenza

Airborne Precautions

• Chickenpox & Measles

• Suspected or confirmed cases of Laryngeal or Pulmonary Tuberculosis

Bleach Contact Precautions

• C. difficle

• Norovirus

Wash Hands with soap and water

Contact Precautions

- Multi-Drug Resistant Organisms
- MRSA, VRE, ESBL, CRE, KPC
- Rotavirus

Special Pathogen Precautions

- SARS
- Smallpox
- Ebola
- MERS

Call Infection Control Immediately

PPE for Isolation Situations

PPE must be d**ON**ned AFTER performing hand hygiene outside of an isolation room.
PPE must be d**OFF**ed at the room threshold and disposed of in the isolation room.
Hand hygiene should be performed outside of an isolation room, after removing PPE.

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*Please watch the video by clicking here. Note: This video **does** contain audio.*

Infection Control Completion

Please record the following number for completion: 324985.

CONTINUE

Hazardous Energy

Different energy control procedures are required for different types of equipment depending on:

- type of energy used
- how much energy is used

Energy Control Procedures

Click on each square below.

PREPARE

Equipment for Shutdown

SHUTDOWN	Shutdown Equipment Properly
SHUTDOWN	From Energy Source
USE DEVICES	To LOCKOUT or TAGOUT Energy

DISSIPATE

Stored Energy

CHECK

For Energy Re-Accumulation

VERIFY

ALL Energy has been Removed from Equipment

Exception to Energy Control Procedures

Energy control procedures may not be required during minor servicing activities; routine, repetitive, and basic parts of the work; or if activity occurs during normal production operation.

- Lubrication
- Un-jamming
- Minor tool changes
- Cleaning
- Minor adjustments

When must energy control procedures be used?

- New construction
- Installation
- Setup
- Adjustment
- Inspection

- Modification
- Maintenance/service work

Types of Hazardous Energy

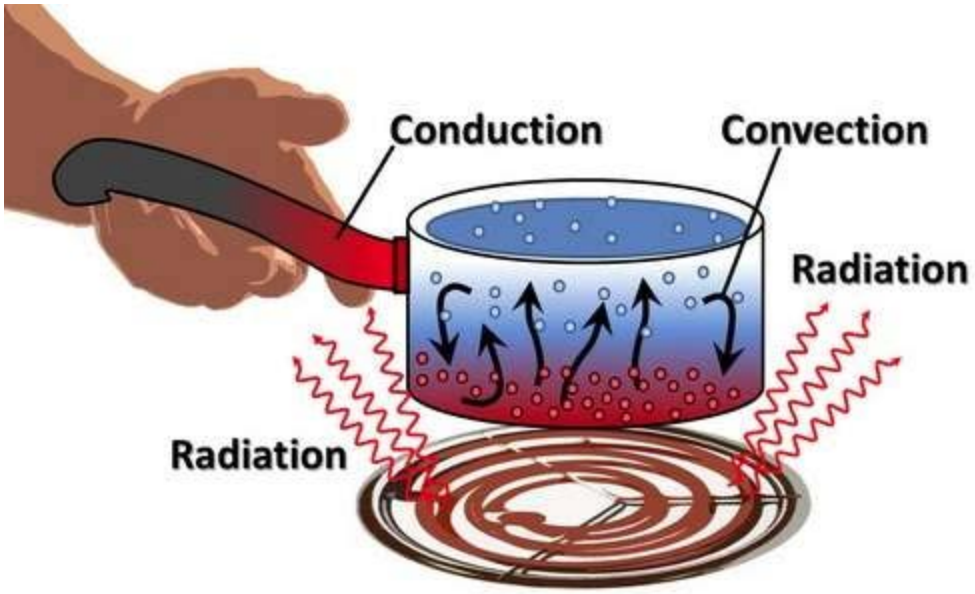
Click on the arrows next to the image below to view more information.

Electrical Energy

Energy control procedures are required for any equipment powered by electrical energy, except if:
Exposure can be completely controlled by unplugging the equipment from an electrical outlet AND service workers have sole control of the equipment plug during service activities.

Kinetic Energy
Can be released from:

- springs
- rotating objects
- elevated objects



Thermal Energy

Thermal energy is released from:

- mechanical work
- radiation
- chemical reactions
- electrical resistance
- quick release of compressed gasses

Chemical Energy
Chemicals present in many systems may react with local materials, including the air, to produce:

- fires
- skin burns
- harmful gasses/fumes

Pressure Energy
Uncontrolled release of pressure may cause equipment to move or even the ejection of system parts. Hazardous pressure energy may be found in:

- pressure vessels
- gas cylinders or tanks

- hydraulic or pneumatic systems

Medical Gasses

Governing agencies have outlined protective measures for handling, transporting, and storing medical gasses.

The goal is to prevent potential hazards which can arise with medical gas usage.

Transporting Medical Gasses

Cylinders are pressurized.

A cylinder that falls or is dropped may cause a rapid release of pressure and launch the cylinder across the room (similar to a missile).

Cylinders must be secured for safe transport. When transporting single cylinders use a cart, bed rack, or wheelchair rack. For multiple cylinders, use a cart with separate compartments for each cylinder.

Storing Medical Gasses

1. Cylinders must be segregated and stored appropriately.
2. Storage must be clearly labeled and visible.
3. General supply rooms can have no more than 12 E size cylinders.
4. All cylinders must be stored in a rack or cart. Never leave cylinders free standing.

5 No other objects can be hung or attached to the storage racks.

Full Tanks: Black Storage Rack

Unopened

(2000+ PSI)

Empty or Partially Full Tanks: Red Storage Rack

Empty Partially Full

(500-1999 PSI)

Any Open Cylinder

Energy Isolation

Remember, the first two steps in any energy control procedure are:

1. getting the equipment ready for shutdown, and
2. shutting down the equipment.

The equipment could re-energize if:

- there is a short circuit
- someone accidentally turns the equipment back on

This could injure or kill the maintenance worker.

Step Three: Disconnect or isolate the equipment from its energy source.

Hazardous Energy Completion

Please record the following number for completion: 857962.

CONTINUE

Personal Protective Equipment (PPE)

Workplace Hazards and OSHA

Hazards are present in many work environments. Those hazards include:

- biological hazards, such as infectious materials
- hazardous drugs
- chemical hazards, such as cleaning and disinfecting supplies
- other hazards

OSHA is the governing agency that works to protect employees from job hazards.

When a workplace hazard is present, OSHA requires the employer to put safeguards in place.

These safeguards include:

- elimination of the workplace hazards
- administrative controls
- engineering controls
- personal protective equipment (PPE)

Hand Protection

The use of personal protective equipment for your hands includes a wide variety of gloves. They can protect you against cuts, punctures, scrapes, chemicals, burns, or electrical hazards.

Click on the arrows next to the image below to view more information.

Fabric and Coated
Protects against minor abrasions and cuts.

Leather, Canvas, Metal Mesh
Protects against rough surfaces, cutting, and welding activities.

Insulated
Protects against minor electrical hazards, burns, and vibrations.

Chemical & Liquid Resistant
Usually vinyl, neoprene, or rubber protect against chemicals or liquids.

Check Yourself

Ask yourself:

- Am I wearing the right glove for the job?
- Do my gloves fit snugly?
- Have I removed rings, watches, and bracelets that could puncture my gloves?

Eye Protection

Most eye injuries are the direct result of caregivers and physicians simply not using eye protection.

Safety glasses, goggles, or face shields should be worn when you are exposed to the following:

- flying objects
- wood chips or metal shavings
- splashes from hot liquids or chemicals
- fumes or gasses
- intense light

Click on the arrows next to the image below to view more information.

Safety Goggles

Face Shield

Welding Shield

Safety Spectacles

Laser Safety Goggles

Check Yourself

Ask yourself:

- Do I have access to the appropriate eye protection for the work I do and the exposure I have?
- Does my eye protection fit properly and is it reasonably comfortable to wear?

Hearing Protection

Hearing loss is progressive and permanent. It is also completely preventable.

Excessive noises can be sporadic, but prolonged exposure to loud noises causes hearing loss.

Factors to consider:

- loudness of the noise measured in decibels (dB)
- duration of your exposure
- moving between work areas with different noise levels

Click on the arrows next to the image below to view more information.

Single-Use Earplugs

Earmuffs

Pre-formed/Molded Earplugs

Check Yourself

Ask yourself:

- Do I have access to the appropriate hearing protection for the work I do and the exposure I have?
- Does my hearing protection fit properly and is it reasonably comfortable to wear?

Respiratory Protection

Respiratory protection must be worn whenever you are working in a hazardous atmosphere.

The appropriate respirator will depend on the contaminant you are exposed to, and the protection factor required.

Click on the arrows next to the image below to view more information.

Single Strap Dust Mask

• Not to be used in hazardous atmospheres.
• Can be used in providing comfort from allergens.

Approved Filtering Mask

• Can be used for dust, mist, or welding fumes.
• Does not provide protection against gases or vapors.
• Cannot be used for asbestos or lead abatement.

Powered Air Purifying Respirators

• Can be used for high risk aerosol generating procedures.
• Typically seen in the healthcare environment.

Half-Face Respirators

• Can be used against most vapors and acid gases.
• Filters must match containment.

Full-Face Respirators

• Can be used against most vapors, fumes, gases, and dust.

• More protective as it includes a face shield to protect eyes and face from irritants.

Check Yourself

Ask yourself:

- Do I have access to the appropriate respiratory protection for the work I do and the exposure I have?
- Do I check the fit and seal on my respirator every time I put it on?

Personal Protective Equipment (PPE) Completion

Please record the following number for completion: 478548.

CONTINUE

MRI Suitability for Employees and Guests

Objectives

By the end of this lesson, learners will be able to recognize the importance of MRI safety. During the lesson learners will:

- identify what an MRI scanner is
- identify what the missile affect in MRI is
- identify ways to prevent the missile effect
- recognize MRI safety zones
- recognize employee MRI screening

What Is MRI?

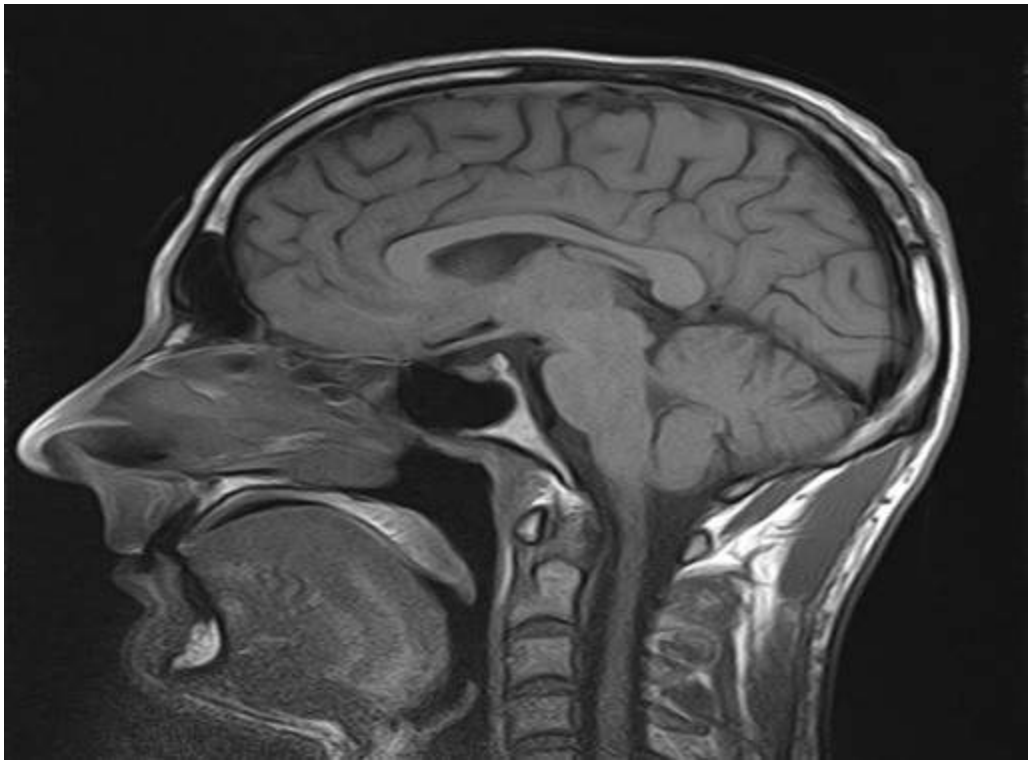


Image of an MRI

MRI stands for **Magnetic Resonance Imaging**.

MRI machine

An MRI machine takes images of the body using a powerful magnet and radiofrequency.

Hidden Danger

What are the hazards in the MRI?

The powerful MRI magnet is **always** on!

Click on each of the + markers in the image below to learn more.

Danger

Any metallic object, including medical devices, present a danger!

Danger

Dangers arise when a metallic item is brought into the MRI scanner. The item becomes a projectile that flies to the center of the MRI scanner with deadly force!

Why Is the MRI so Dangerous?

The MRI scanners at Rapid City Hospital are 1.5 tesla in strength.

A 1.0 tesla strength crane is strong enough to pick up junk cars.

Left Image - MRI scanner; Right Image - Crane lifting car

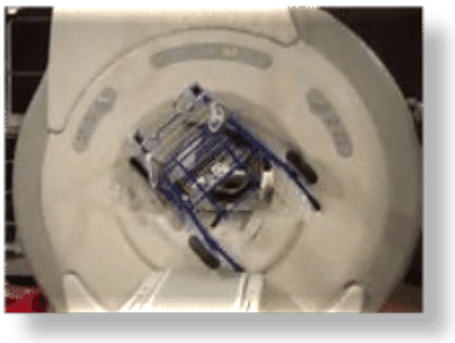
The MRI scanner magnet is stronger than a crane.

The Magnet Is Always On

Accidents happen when people assume the magnet is off and bring a metal item into the room, or when they are unaware of metal being brought into the room, such as metal items in someone's pockets.

The magnet in MRI scanners is **ALWAYS ON**; whether it be day, night, weekend, holiday etc.

The Missile Effect

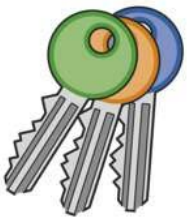


Metal object in MRI scanner

The closer a metal object comes to the magnet, the more powerful the force is.

The metal object becomes a projectile that may fly through the air at 45 MPH with deadly force, harming anyone in its path.

A few examples of items that may become deadly projectiles in the MRI scanner are shown below.



Cell phone, keys, wheelchair, oxygen tank, stethoscope, scissors, IV pole

Patient bed stuck in MRI scanner

Don’t let this happen to you!

Steps You Can Take to Prevent the Harmful Missile Effect

- Increase your awareness of the dangers in MRI.
- Control access to the MRI area.
- Follow clearance before entrance procedures.

- Screen for metallic implants, metallic foreign body, pregnancy, pacemaker, ICD, and electronically magnetically activated devices.
- Remove all personal metal items such as pagers, cell phones, jewelry, credit cards, keys, etc.

Identifying MRI Safe Items

Items that are safe to go into MRI scanner are items that are nonferrous and not attracted to the powerful magnet used in MRI. The definition of nonferrous is a metal other than iron and alloys that do not contain appreciable amount of iron.

MRI compatible wheelchairs, monitors, and patient gurneys are safe to enter the MRI room.

MRI Safe items are marked with a green **MRI SAFE** label.

Clearly labeled MRI SAFE items

Screening Process

To keep our patients and employees safe, MRI staff will screen everyone by asking questions about metal items. Click the link below to view, print and complete the employee screening form.

http://regionalhealth/rh/university/Resources/Clinical%20Development/MRI%20Suitability%20for%20Employee%20or%20Guest%20004147-20160120.pdf

The form will ask about these items which are not safe in MRI area.

- Pacemaker/pacing wires
- Cardiac defibrillator
- Aneurysm clip
- Middle ear implants
- Resolution clip or swallowed GI pillcam
- Magnetic dental work
- History of metal in your eyes
- Currently pregnant

Turn in all completed forms to MRI Supervisor!

MRI Zones

Our accrediting agencies recommend progressive signage and clearance standards.

Zone 1 – Where general public is

Zone 2 – Where screening process occurs

Zone 3 – MRI Control area where you must have clearance from MRI staff to enter this area

Zone 4 – Where the MRI Scanner is

MRI Access

If you need access to zones 2, 3, or 4, contact the MRI Supervisor. The MRI Supervisor will verify that you have completed the quiz at the end of this training and you will be given the door code which provides access to the MRI.

Summary

- Remember the MRI Scanner is **ALWAYS ON**!
- Increase your awareness of the dangers, such as the missile effect.
- Control access to the MRI area.
- Follow clearance before entrance procedures.
- Screen for metallic implants, metallic foreign body, pregnancy, pacemaker, ICD, and electronically magnetically activated devices.
- Remove all personal metal items such as pagers, cell phones, jewelry, credit cards, etc.

MRI Suitability for Employees and Guests

Please record the following number for completion: 745621.

CONTINUE