Course Information

Description
This course will provide an overview of system-wide practices for patient and team member safety. It will take approximately 25-45 minutes to complete the course, depending on which path you take.

Instructions
- This course is tested and guaranteed to function on an Advocate Aurora network PC
- [How to navigate](#) this course
- This course includes a video that does have sound. Please complete it at a computer with speakers or use a headset.

Technical Contact
For technical questions contact:
- Illinois facilities: HR Direct – [online](#) or 847-685-1447 (Tie Line 23-1447)
- Wisconsin facilities: 414-647-3520 in Milwaukee or 1-800-889-9677

Content Contact
Please refer to your leader

Created 11/2019
Updated: 12/2020
Learning Objectives

This course is mandatory for all Advocate Aurora team members.

After completing this program, you will be able to:
• Respond appropriately during emergency conditions
• Follow standard precaution guidelines and the use of personal protective equipment
• Use principles of safety to protect yourself, co-workers and patients
Safety is Everyone’s Responsibility

- Freely speak up if you see something that may negatively affect patient care
- Handover effectively to assure that issues don’t “fall between the cracks” and information is shared safely across work areas
- Learn from mistakes and comfortably communicate your “lesson learned” to others

Improving patient safety means improving our quality. It creates an exceptional patient experience where patients are confident in the care they receive and the way they receive it.
Concerns About Safety

Advocate Aurora team members should feel free to bring potential concerns forward to their leaders, to management, or directly to the Compliance and Integrity Department. The Compliance Hotline is 888-847-6331 or online at Advocate Aurora Health Compliance & Integrity.

Team members can also report concerns to:
• DNV Healthcare – email or call 866.496.9647
• Joint Commission – report a complaint

Disciplinary action will not be taken against any team member for reporting their concerns.
About this Course

The course is organized into six sections:

• Section 1 – Patient Safety
• Section 2 – Employee Health
• Section 3 – Infection Prevention
• Section 4 – Physical Environment
• Section 5 – Emergency Management
• Section 6 – Other Safety Considerations
Section 1 - Patient Safety
Advocate Aurora Patient Safety Goals

- We are committed to the highest quality of care and safest environment for patients and team members.

- Advocate Aurora Health's true north goal is **ZERO** events of preventable patient harm.

- Patient safety is everyone’s job. We **ALL** contribute to the care and safety of our patients.
Patient Safety – Why is it Important?

- Depending on the study you read, the number of patients affected by medical error each year varies. What doesn’t vary is the fact that patients are continuing to be harmed. One widely respected study states medical error may be the 3rd leading cause of death in the US.

- In addition, the costs for preventable harm are in the billions, taxing an already fragile healthcare system.
Improve the Accuracy of Patient Identification

Hover over each marker to find out more information.
Improve Communication

Hover over each marker to find out more information.
Patient Safety Organizations (PSO)

Hover over each marker to find out more information.

1

2

3

For more information refer to AAH's Patient Safety Evaluation System Policy
Patient Safety Event Reporting

When involved in a patient safety event, such as near misses or encountering unsafe conditions, it’s important to know the procedures to document such events. Events are read by your patient safety and risk leaders everyday.

For instructions on how to enter a patient safety event, consult your leader.
Section 2 – Employee Health
Flu Information

- Many of our patients are elderly or severely ill, and due to their medical condition often have suppressed immune systems. In such situations, succumbing to the flu can be serious or deadly.
- Past flu outbreaks have been credited for many documented deaths involving the elderly.
- Unvaccinated health care workers are thought to be a key cause of flu outbreaks in health care settings.
- Vaccination of health care workers has been linked to a significant reduction in patient mortality.
- The types of flu that the vaccines protect against are those that have debilitating respiratory ailments that take days to recover from.
Flu Information

Why is the influenza vaccination important?
• Only half of those infected by the flu virus have symptoms. A person can easily pass the virus to others without knowing it.

What are some facts about influenza?
• Infected people can pass the virus to others two to three days before their own symptoms appear.
• The virus can stay alive on hard surfaces for 24 to 48 hours and for at least 5 minutes on your hands.

What is Advocate Aurora’s policy on influenza?
• You cannot get the flu from a flu vaccination.
• It takes two weeks after the vaccination to build up antibodies.
• Serious side effects from the vaccination are very rare. Normal side effects may be soreness, redness or swelling at the site or mild fever.

Advocate Aurora Health®
Flu Information

Why is the influenza vaccination important?

What are some facts about influenza?

What is Advocate Aurora’s policy on influenza?

- Purpose: Protect patients, team members, family members and the community from influenza
- Requirement: Annual influenza immunization
- Scope: All individuals working or volunteering at Advocate Aurora Health are required to be vaccinated
- Procedure: Free vaccination clinics will be offered
- Exemptions: May be granted for medical contraindications or religious beliefs
Preventing Lifting Injuries at Work

- Think before you lift
- Get help, either ask another person or use a lifting device
- Place feet shoulder width apart, pivot with your feet and don’t twist at your waist
- Bend with your knees, not your back
- Keep the object close to your body
How to Set up an Ergonomic Workspace

Hover over each number to find out how to set up an ergonomic workspace

1
2
3
4
5
Tuberculosis

- It is caused by a bacterium called *mycobacterium tuberculosis* and usually affects the lungs.
- It is spread via an “airborne” route. Germs are spread person to person through tiny particles in the air.
- Germs are spread by coughing, sneezing, singing or just talking, and can remain in the air for hours.
- There are two types of TB infection: Inactive (Infection cannot spread to others) and Active (can spread the disease to others).
Tuberculosis

- Cannot spread to others
- Germs are in the body but not active
- Patient has a positive TB test, but a negative chest x-ray
- No symptoms
- Preventative antibiotic therapy may be indicated to decrease likelihood of becoming active disease in future
Tuberculosis

- If suspected of having TB, patient is to wear a surgical mask upon entering the building and placed in “airborne precautions” negative pressure room.
- Team members cannot go into this room without wearing an N95 mask (Respirator) or a Powered Air Purifying Respirator (PAPR).
- Team members must be fit tested to wear an N95 mask (respirator) annually.
- Team members must be trained on PAPR use before wearing it into a patient room.

What causes TB and how is it transmitted?
What are some facts on active TB?
What are some facts on inactive or latent TB?
How do you take care of a patient with suspect TB?
Team Member TB Testing and Screening

• All team members are tested for TB at the time of hire.

• Any team member having an unprotected exposure to a person with active TB will have baseline and follow-up testing at 8-10 weeks post exposure. A TB risk assessment and symptom evaluation will also be done at baseline and 8-10 weeks post exposure.

• Team members with a history of previous positive TB testing must complete an annual TB risk assessment and symptom evaluation.
Aerosol Transmissible Disease (ATDs)

In addition to Tuberculosis (TB), if you are exposed to any of the following common ATDs, notify Employee Health:

- Chickenpox
- Measles
- Pertussis (Whooping Cough)
Bloodborne Pathogens

What is an exposure?
- A cut or needle stick with a sharp item contaminated with blood or body fluid
- Splash to mucosal membranes (eyes, nose, mouth) with blood or body fluid
- Blood contact on broken or abraded skin
- A human bite when skin is broken

Click on each image to get more information on the different types of bloodborne pathogens and exposure response.
Safe Patient Handling Mobility (SPHM)

Hover over your location button to learn more:

- ILLINOIS
- WISCONSIN
Sharps Safety

• Avoid recapping a needle. When it’s not possible to use a sharp with a safety device, use the Point-Lok needle safety device or the one-handed scoop method.
• Sharps containers should be replaced when they are ¾ full. Environmental Services and nursing staff are responsible for ensuring this happens.
• Check for exposed needles prior to touching the sharps container.
• Never place hands in a sharps container for any reason.
• Staff responsible for cleaning reusable sharps require additional training. Check with your leader.
Section 3 – Infection Prevention
Resources

For Wisconsin team members - refer to *Infection Prevention* in *Places* on *Caregiver Connect*.

For Illinois team members – refer to *Top Applications – Infection Prevention Resources*

Aligned Physician Partners contact Medical Staff Services for assistance

COVID-19 Information Center for Team Members and Physicians

If you are not employed by Advocate Aurora Health and do not have access to the intranet, please contact your leader or administrator to access these policies.
Hand Hygiene

Hand hygiene is the single most effective method to prevent spread of infection.

All team members and providers are required to perform hand hygiene:

- Upon *entering* and when *exiting* patient environment (i.e. room, bay, cubicle)
- Before applying gloves and upon removing gloves
- Before patient contact
- Before performing aseptic task
- After blood or body fluid exposure
Hand Hygiene

Use it when:
- Your hands are visibly dirty, contaminated or soiled.
- During *Clostridioides difficile* (C. diff) outbreaks or hyperendemic (sustained high rates) settings
- During outbreaks of Norovirus Gastroenteritis.

How to use it:
1. Wet hand with water, apply soap, rub hands together for at least 20 seconds.
2. Rub hands together covering all surfaces and fingers, rinse thoroughly and dry with disposable towel.
3. Use disposable towel to turn water off.
Hand Hygiene

Use:
- To routinely clean your hands if hands are not visibly soiled.
- After caring for a patient with suspected or known Clostridium difficile (C. diff) – (May be used in non-outbreak situations).

How to use it:
- Apply enough hand rub to palm of hand to adequately cover all surfaces of both hands.
- Rub hands together, covering all surfaces of hands and fingers until hands are dry.
Hand Hygiene

Fingernail Policy for Direct Patient Care:
- Do not wear artificial fingernails or extenders when having direct patient contact.
- Keep natural nail tips less than ¼-inch long.

Sores or cracks on your hands may be a source of infection for yourself and your patients:
- Use Advocate Aurora-supplied hand lotions.
- Notify Employee Health if you have any problems with your hands including sensitivity to hand sanitizer.
Respiratory Etiquette

The Centers for Disease Control (CDC) recommends healthcare facilities take the following measures for practicing respiratory etiquette.

Hover over each number to find out what the measures are.
Environmental Cleanliness Reminders

- It is everyone’s responsibility to keep the environment clean.

- Everything patients, visitors and team members touch must be considered contaminated.

- Cleaning medical equipment after every patient contact is important to remove germs and prevent the spread of infection.

- When cleaning medical equipment, follow the manufacturers instruction for use.

- Check with your unit/department leader for cleaning responsibilities.
Safely Navigating through COVID-19 Pandemic

Important Infection Prevention Safety Measures:
• Universal masking by all team members
• Eye protection should be worn for all patient-facing encounters
• Wash or sanitize your hands
• Maintain safe distancing of ≥ 6 ft. between team members
• Disinfect surfaces before and after your lunch & breaks
• Respectfully speak up when breaks in process are identified
• Refer to the COVID-19 Information Center frequently for guidance and updates
Section 4 – Physical Environment
Equipment and Electrical Safety

How can you use equipment safely in your workplace?

- Use new medical equipment only after it has been inspected.
- If you find frayed wiring stop using the device, unplug it and report it.
- The use of extension cords is strongly discouraged and permitted only on a temporary basis. All extension cords must be obtained through Facilities Operations.
- Power strips providing power to patient care medical equipment must be Special Purpose Re-locatable Power Taps and listed as UL1363A or UL60601-1. Check with your Facilities Operations or Clinical Engineering departments.
- Know where operators’ manuals are located for easy reference.
Handling of 9-Volt or Lithium Batteries

Storage:
- Keep batteries in original packaging until ready to use.
- Store in a safe location, standing upright, if possible.
- Do not store loose in a drawer.

Disposal:
- Place used battery individually in a plastic bag or place a piece of tape (any kind) across the two posts/terminals on a 9-volt battery or the positive end of all other types of lithium batteries prior to disposal.
- 9-volt batteries can be disposed of in the garbage or in a specific recycling container.
- Lithium batteries are handled as hazardous waste and will be disposed of according to regulation. Contact your site Environmental Services Department with questions.

NOTE: Any 9-volt or Lithium (all sizes) batteries can pose a fire hazard when the terminals, found at the top of the battery, come into contact with each other or anything metal. There have been occurrences where smoke and/or sparks are generated when this happens, which can lead to fire.
R.A.C.E.
As you enter the workroom you smell smoke and see flames in the wastebasket. Respond using R.A.C.E.

- **RESCUE** those in immediate danger, including yourself.
R.A.C.E.

As you enter the workroom you smell smoke and see flames in the wastebasket. Respond using R.A.C.E.

- **RESCUE**: Alert everyone in your location of the fire. Dial the emergency phone number for your location. If you are in a facility, consult your emergency flipchart poster. If you are in an office call the switchboard or office receptionist. Activate the nearest fire alarm pull station.

- **ALERT**: Everyone in your location of the fire. Dial the emergency phone number for your location. If you are in a facility, consult your emergency flipchart poster. If you are in an office call the switchboard or office receptionist. Activate the nearest fire alarm pull station.

- **CONTAIN**: Everyone in your location of the fire. Dial the emergency phone number for your location. If you are in a facility, consult your emergency flipchart poster. If you are in an office call the switchboard or office receptionist. Activate the nearest fire alarm pull station.

- **EVACUATE**: Everyone in your location of the fire. Dial the emergency phone number for your location. If you are in a facility, consult your emergency flipchart poster. If you are in an office call the switchboard or office receptionist. Activate the nearest fire alarm pull station.
R.A.C.E.

As you enter the workroom you smell smoke and see flames in the wastebasket. Respond using R.A.C.E.

**RESCUE**

**CONTAIN** the fire. Confine the spread of heat. Close the door of the room in which the fire is located. Close all doors that do not close automatically.

**ALERT**

**CONTAIN**

**EVACUATE**
R.A.C.E.
As you enter the workroom you smell smoke and see flames in the wastebasket. Respond using R.A.C.E.

- **EVACUATE** the immediate area. Check all areas for staff and visitors. Meet at the predetermined location.
- **EXTINGUISH** the fire only if you can do so safely. For patient care areas in a hospital, follow your department-specific fire plan. You will either shelter patients in place or move patients to an adjacent smoke compartment, depending on the location of the fire.

- **RESCUE**
- **ALERT**
- **CONTAIN**
- **EVACUATE**
P.A.S.S.

After following R.A.C.E. (rescue, alert, contain, evacuate) you attempt to put out the fire using the fire extinguisher.

PULL

AIM

SQUEEZE

SWEEP

PULL the pin. The pin is a safeguard to lock the handle in place.
P.A.S.S.

After following R.A.C.E. (rescue, alert, contain, evacuate) you attempt to put out the fire using the fire extinguisher.

- **PULL**
- **AIM**
- **SQUEEZE**
- **SWEEP**

AIM the nozzle. You must aim the nozzle, horn or hose at the base of the fire.
P.A.S.S.

After following R.A.C.E. (rescue, alert, contain, evacuate) you attempt to put out the fire using the fire extinguisher.

- PULL
- AIM
- SQUEEZE
- SWEEP

SQUEEZE the handle. You must squeeze the handle to activate the extinguisher.
P.A.S.S.

After following R.A.C.E. (rescue, alert, contain, evacuate) you attempt to put out the fire using the fire extinguisher.

**PULL**

**AIM**

**SQUEEZE**

**Sweep**

SWEEP back and forth. Sweep in a back and forth motion continuing to aim at the base of the fire. Remember: Stand at least 10 feet away from the fire. You do not want the force of the extinguisher to spread flaming debris.
Types of Hazardous Waste Generated in Healthcare Facilities

Proper collection containers with proper labeling will be available to your department/clinic to dispose of hazardous waste.

If you have waste in your area that you think might be hazardous, contact Environmental Services, site Safety Officer or your leader.

Examples
- Chemical wastes from laboratory equipment
- Specific metals contained in E-waste
- Specific batteries from equipment
- Unused high-level disinfection agents
- Unused, partial, left-over Medications
- Infectious Waste
Hazardous Substance Spill

- Protect yourself and fellow team members. Resist the temptation to rush in
- Use strong verbal commands to instruct patients and staff out of or away from spill site
- Isolate the area and immediately notify your internal emergency number, provide your name and location of spill
- An overhead announcement will be made
- Be ready to identify the hazardous substance. Obtain the Safety Data Sheet (SDS)
- Public Safety and department leader will determine need for evacuation
- Team members in the immediate area of an incidental/occupational spill will clean up per department protocol. Environmental Services may be contacted for assistance
Consequences of Improper Waste Management

The United States Environmental Protection Agency (USEPA) can take enforcement action when businesses do not properly manage their hazardous wastes.

- Civil enforcement penalties for noncompliance may begin at $37,500.00 per day, per violation.

- That means that one violation, for three days, could result in a penalty of $112,500.00.

- The USEPA can also seek criminal penalties for intentional hazardous waste violations which will result in more severe fines and imprisonment.

- The consequences of not complying with environmental rules is substantial.
Radiation Safety

- The risks of radiation exposure include: cancer, cataracts, and genetic effects.
- Keep yourself safe by knowing the three (3) basic rules of radiation safety:
  - Time
  - Distance
  - Shielding
- The risk of harm increases with increased exposure.
Radiation Safety

- Spend the least time possible in an area where diagnostic testing is done.
- Wear lead protective garments or stand behind a lead shield if you must be close to an x-ray procedure.
- Ensure that the radioactive material is shielded anytime you are working in the presence of radioactive materials.
- Contact your site Radiation Safety Officer for questions.
Radiation Safety

- The signs and symbols pictured below warn us of the hazards of radiation

- If you come across a package bearing these signs, notify your Radiation Safety Officer or the Nuclear Medicine Department for further instructions. Do not touch the item.

- Contact your Radiation Safety Officer for any radiation accidents or spills
Magnetic Resonance Imaging (MRI) Safety

- MRI uses a very powerful magnetic field to create images. **This intense magnetic field is always on.**
- Metal objects become deadly projectiles if taken into the magnetic field.
- Medical implants (pacemakers and defibrillators) are adversely affected by a magnetic field.
- Some medication patches may cause injury if worn during an MRI.
- Never enter the scan room without consulting an MRI technologist or leader of imaging.
If Someone is Harmed by Equipment

The Safe Medical Devices Act (SMDA) requires all medical equipment incidents causing serious injury, illness or death to be reported to the manufacturer and/or the FDA.

If a patient, family member or team member is harmed by equipment, do the following:

- Report any incidents to your leader.
- Remove, tag and sequester equipment on the unit.
- Tubing or disposable products, along with packaging and lot numbers, shall be kept with equipment.
- Notify Healthcare Technology Management to service equipment.
Medical Gas Shut Off

- Medical gases such as oxygen can fuel a fire.

- The main supply of medical gas for your unit may need to be shut off in the event of a fire.

- Before the main oxygen supply can be turned off, oxygen dependent patients need to have another source of oxygen.

- Know the locations of the medical gas shut-off valves in your department.

- Authority to Shut Off Medical Gas – The team member, in collaboration with the Patient Care Manager or their designee, can shut off or give authorization to shut off medical gases to an affected area. Portable oxygen tanks can be provided to patients with oxygen needs.
Section 5 – Emergency Management
Emergency Preparedness

- We have a duty to ourselves, our fellow team members and our patients to have a plan for incidents that could disrupt the delivery of patient care and the continuation of a safe environment.

- You may be asked to extend your shift or report to work on short notice when a disaster strikes. In order to better prepare for this occurrence, consider creating a personal contingency plan that identifies who will provide for your children, dependent adults and pets when you are unable.
Plain Language

Plain Language Emergency Notifications:
• Is understandable without further need of explanation
• Individuals will understand what actions are required, based on the plain language/wording that is communicated
• Promotes a safe environment for team members, patients and visitors within hospitals and campuses

Plain Language allows the site to use plain wording in real-time to clearly communicate an emergency as it evolves.

FACILITY - Fire Alarms, Electricity Disruption, Hazardous Spill, Evacuation, Mass Casualty, Health Informatics Technology

MEDICAL - Patient Surge, Medical Code Team, Stroke Alert, Trauma, Behavioral Health Response Team

SECURITY - Missing Person (infant, child, adult), Active Threat, Suspicious Package, Security Assist, Perimeter Control/Lock Down

WEATHER - Severe Thunderstorm, Tornado, Snow Storm, Ice Storm
Emergency Management Planning

Fact #1
Emergency Operations Plans for each hospital include key information for managing patients and resources during an emergency.
Emergency Management Planning

1. Fact #2
   During an emergency, hospitals use an "all hazards" approach for emergency response
   - A Hazard Vulnerability Analysis is performed annually
   - Strategies for preparedness, mitigation, response and recovery are identified.
Emergency Management Planning

Fact #3
Hospitals have a well-equipped Command Center. The Command Center is activated when conditions greatly impact the delivery of patient care.
Fact #4
Facilities have emergency resources on hand (cots, medical respirators, portable generators, redundant communication).
Emergency Management Planning

Fact #5
Exercise/drills occur annually in the hospital setting to test plans.
Utility Outage

If the power fails, follow these instructions. Hover over each button to find out more:

- If you are in a facility
- If you are at a patient’s home
Facility Alert/Facility Emergency

A Facility Alert/Facility Emergency (response to a utility failure, building damage or flood) can be initiated by Site Leadership.

- If you are working check your department-specific plan for details for your department response.

- If evacuation is necessary check for your department-specific process in the plan.
Weather Alert/Severe Weather

Tornado Watch
In a facility, **Severe Weather - Tornado Watch** will be announced based on National Weather Service warnings. Be sure to do the following:

- Report to your department immediately.
- Whether you are in a facility or a patient’s home similar rules apply. Flying glass is a major hazard during severe storms.
- Advise team members, patients and visitors of the Tornado Watch.

Tornado Warning
**Severe Weather - Tornado Warning** means a **tornado** is in the area. This is based on National Weather Service warnings. Be sure to do the following:

- Report to your department immediately.
- Close doors, windows, curtains and blinds.
- Protect the patient’s head and face with blankets and pillows. Have shoes readily available just in case there is broken glass.
- Ask patients who can walk and visitors to move into interior spaces, stay away from windows, and remain there until an ‘All Clear’ is announced.
The Incident Command Structure

May be used for:
- **Natural Disasters** (tornado, severe weather)
- **Technologic Disasters** (electrical outage, water failure)
- **Human Disasters** (mass casualty, evacuation, active threat)
- **Hazardous Material Events** (hazardous material spill, radiologic exposure)
Hospital Incident Command System

- The Hospital Incident Command System (HICS) is a standardized, all-hazard incident management system.

- Enables hospitals and other healthcare facilities to organize:
  - Resources (supplies, food, water)
  - Staff
  - Communication
  - Emergency Responses

- The Hospital Incident Command System will help a hospital to remain operational during an emergency and promote the restoration of day-to-day operations.
Mass Casualty/Patient Surge

Mass Casualty/Patient Surge is our plan for an external disaster (such as a bus accident or other event that generates a large number of victims). This plan allows us to quickly respond with more staff and supplies to care for multiple victims. It can be initiated by Site Leadership.

- If you are at **home**, you may be called to come and help:
  - Bring your employee ID/nametag
  - Report to your department and follow department specific plan
- If you are **working**, check your department-specific plan for details
Medical Alert/Medical Emergency

Cardiac Arrest, Code/Medical Code Team Response
Our plan is to provide immediate assistance to someone who is not breathing, has no pulse, or needs immediate medical attention.

- Call for immediate assistance
- Call your workplace emergency number to get additional assistance; State your location
- Know your role. It may vary according to your job position.
Section 6 – Other Safety Considerations
Security Assistance

What you can do to stay safe:
- Always have a plan of action
- Be alert and aware of your surroundings
- Control visitor movement in and around the facility, challenging unauthorized persons
- Report suspicious activity, missing property and other circumstances that could result in injury, damage or loss of property
- Wear your name badge at all times when working, positioned above chest level with name side out

Notify Security & Public Safety of all threatening or suspicious persons

For emergency assistance:
- Dial Emergency Security number for your area
- Give location and have police called if needed
- Remain calm
- For non-emergency assistance: (theft, vandalism, etc.) dial the non-emergency number for your area
Security Alert – Building Threat

In a facility, Security Alert – Building Threat means there is a Bomb Threat.

If you are the one who receives a bomb threat phone call:
- Handle the call QUIETLY and CALMLY
- Try to keep the caller talking
- Call Security & Public Safety immediately
- Avoid using wireless two-way communication, such as pagers, wireless phones, cell phones and hand-held radios because they may activate the bomb
- Do not touch or move suspicious objects
Workplace Violence

How can we prevent workplace violence?

- What are key components of our Violence in the Workplace policy?
- Are there training opportunities on dealing with workplace violence?
- What should be done about domestic violence in the workplace?

When dealing with an angry person:
- Keep your voice calm and low
- Listen to the person - present a composed and caring attitude
- Trust your instinct and be aware of your surroundings
- Don’t isolate yourself with a potentially violent person
- Always keep an open path for exiting
- Don’t give orders or match threats
- Avoid any aggressive behavior
- Immediately report any aggressive/violent behavior to your leader.
- Call Security & Public Safety
Workplace Violence

How can we prevent workplace violence?

What are key components of our Violence in the Workplace policy?

Are there training opportunities on dealing with workplace violence?

What should be done about domestic violence in the workplace?

- Zero tolerance for ALL violence - verbal and physical
- Establishment of a Threat Assessment Team to address reports and occurrences of violence.
- Identification of resources for all departments to help reduce violence.
- Advocacy emphasis to support team members.
Workplace Violence

How can we prevent workplace violence?

What are key components of our Violence in the Workplace policy?

Are there training opportunities on dealing with workplace violence?

What should be done about domestic violence in the workplace?

- Self-Paced online introductory course through Learning Connection
- One-hour overview course available through an Security & Public Safety training session
- One-day (8-hour) Verbal Defense and Influence Course (Learning Connection)
- Two-day (16-hour) course combining Verbal Defense and Influence with Principles of Stabilization and Control (physical). (Learning Connection)
Workplace Violence

How can we prevent workplace violence?

What are key components of our Violence in the Workplace policy?

Are there training opportunities on dealing with workplace violence?

What should be done about domestic violence in the workplace?

Co-workers
- Create a supportive environment.
- Encourage co-workers to talk to your leader. “There are people and resources that can help you.” “You don’t have to be so alone in this.”

Leaders
- Keep information confidential.
- Offer services of EAP, Security & Public Safety, Human Resources, and community support agencies.
Conditions Requiring Immediate Medical Attention

We have a responsibility to anyone who:
- Calls us on the phone
- Is on our property or in our clinics

Even if you are not a clinical team member, you are responsible to seek assistance if you are the first person to see and/or speak to a patient that needs immediate medical attention.

If the patient contacts us by phone and describes symptoms that require immediate medical attention, you should;

You should contact 911. There is a potential that you could be the one to call 911 for the patient in case you are disconnected. Important information to obtain:
- Name of patient
- Phone number
- Location/address
- Date of birth
- Physician
Active Shooter - Video

As we’ve seen in many venues across the nation, an armed individual could come onto the property with the intent to commit great bodily harm or death. We must be prepared to protect ourselves and those in our care.

Watch the 3.5-minute DHS Active Shooter Training Options for Consideration video. This is an office environment YouTube video and closed caption is available.

For a hospital-based scenario, watch this 11-minute video Hospital-Based Run Hide Fight MESH Coalition.
Active Shooter Response

Follow the “RUN-HIDE-FIGHT” response in any order as safely as possible.

RUN - If there is an accessible escape path, attempt to evacuate the premises
  • Have an escape route and plan in mind
  • Evacuate regardless of whether others agree to follow
  • Leave your belongings behind
Active Shooter Response

Follow the “RUN-HIDE-FIGHT” response in any order as safely as possible.

RUN

HIDE - If evacuation is not possible, find a place to hide where the active shooter is less likely to find you
- Your hiding place should be out of the active shooter’s view
- Provide protection if shots are fired in your direction
- Your hiding place should not trap you or restrict your options for movement

FIGHT
Active Shooter Response

Follow the “RUN-HIDE-FIGHT” response in any order as safely as possible.

RUN

HIDE

FIGHT - As a last resort and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter

• Act with physical aggression
• Throw items, improvise weapons, and shout
• Commit to your actions
Active Shooter – Law Enforcement Response

Local Law Enforcement will respond and work directly with Security and Public Safety.

If you are responsible for patient(s), if time allows you will:
- Close patient(s) room doors.
- Block door(s) with heavy furniture.
- If patient is able to move, place them in the restroom in the patient room and close the door.
- If shooter is not located in your unit, lock down and barricade your unit if possible.

When law enforcement arrives, remember:
- Remain calm and follow officer’s instructions.
- Put down any items in your hands (i.e. bags, jackets).
- Immediately raise hands, spread fingers and keep hands visible
- Avoid making quick movements towards officers.
- Avoid pointing, screaming and or yelling.
- Do not stop to ask officers for help or directions. Proceed in the direction from which officers are entering the premises.
Perimeter Control

When a situation develops that could compromise the safety and security of an individual, department, building, or facility, Security & Public Safety will initiate this plan to control access or lock down the affected areas.

- Threat to an Individual
- Threat to a Specific Department
Perimeter Control

- This may be announced overhead
- Security & Public Safety will secure all lockable access points not deemed critical to patient access or department needs
- Security & Public Safety will remain in the department until an ‘All Clear’ is announced
Perimeter Control

- This will be announced overhead
- Your department may need to assist with door coverage responsibilities. If these are unknown, your department manager will follow up with Security & Public Safety
- Security & Public Safety will respond as soon as possible and secure all perimeter entrances to the building or entire facility
- Security & Public Safety will establish manned checkpoints at each entrance to screen incoming persons and/or packages
- Electronic or manual locking procedures may be initiated prior to staffing the location until such time as adequate staff can be called in to provide manned checkpoints
- Security & Public Safety will remain at the checkpoints until an ‘All Clear’ is announced
- You may need your team member photo ID to gain entrance into the building. Get in the practice of taking your photo ID with you at the end of your shift

Threat to an Individual

Threat to a Specific Department

Threat to a Specific Building/Facility
EHAC-Early Heart Attack Care

• EHAC is intended to educate all team members and the public about the early warning signs and symptoms of an impending heart attack.

• Early warning signs occur in >50% of patients
  • Recognition of early warning signs can prevent heart attack
  • Symptoms can begin hours to weeks before a major heart attack occurs

• The key to preventing damage or death of the heart is early recognition and treatment
Signs and Symptoms of Acute Coronary Syndrome

Hover over button to learn more

- Classic Patient Presentation
- Presentation in Women
- Presentation in the Elderly
- Presentation of Diabetic Patients
- Risk Factors
Cardiac Emergency Care

• If you encounter a patient experiencing cardiac symptoms immediate action should be taken.

• Follow your site’s medical emergency plan by calling the appropriate emergency number. This phone number will differ by location.

• If you are at home or out in the community, always dial 911 and activate the emergency response system.
Stroke / Brain Attack

Hover over each button to learn more.

What is Stroke or Brain Attack?

Types of Stroke and Causes of Stroke

What is a Transient Ischemic Attack (TIA)?

What are Stroke Risk Factors?
Is it a Stroke? Think B.E. F.A.S.T.

If you think someone is having a TIA or Stroke, evaluate for sudden symptoms. Hover over each letter to find out more.
Definition of Abuse

Abuse is defined as the willful infliction of injury, unreasonable confinement, intimidation, or punishment, with resulting physical harm, pain, or mental anguish. This includes staff neglect or indifference to infliction of injury or intimidation of one patient by another.

“Hospitals must ensure that patients are free from all forms of abuse, neglect, or harassment.”
Additional Information on Abuse

Hover over each box to learn more.

- Types of Abuse
- Patients Vulnerable to Abuse
- Abusive Team Member Behavior
Reporting Abuse

Advocate Aurora Health is required by law to report suspicion of abuse. If patient abuse is suspected:
• Immediately report the concern to your leader and Risk Management
• Complete a Patient Safety Event Form

Hover over your location button to learn more:

ILLINOIS

WISCONSIN
Food Allergies – Keeping our Patients Safe

Fact:
Food allergies affect an estimated 4-6% of children under age 3 and up to 4% of adults.

AAH Strategy:
Advocate Aurora Food and Nutrition Services reviews all food products used for patient food service and identifies all allergens contained in the product or food item.
Food Allergies – Keeping our Patients Safe

Fact:
For some, an allergic reaction to a particular food may be uncomfortable. For others an allergic food reaction can be frightening and even life threatening.

AAH Strategy:
Updates to product ingredients and recipe changes are monitored and allergens are updated regularly to prevent patients from receiving foods to which they may be allergic.
Food Allergies – Keeping our Patients Safe

Fact:
The 8 most common food allergies are: Cow’s milk, Eggs, Tree nuts such as pecans and walnuts, Peanuts, Shellfish, Wheat, Soy and Fish

Fact #1

Fact #2

Fact #3

AAH Strategy:
Not all foods come directly to our patients from Food and Nutrition Services. Foods like pudding, juice and Jello may be stocked on a nursing unit and be given to patients between meals. Team members can help protect our patients by doing the following:
Be aware of what food allergies a patient has
Read labels on any foods provided to the patient prior to ensuring the food does not contain an ingredient to which the patient is allergic.
Abduction-Missing Person

What information should be gathered if a person is thought missing?

- A description of the person - age, gender, hair/eye color, attire, etc.

What are some initial actions to take if a person is thought missing?

- The last person seen with him/her.

What should be done if person is still not found after initial actions are taken?

- The last location of the person.

What should be done if a child or infant is abducted or missing?
Abduction-Missing Person

- The person who believes a person to be missing will immediately notify the leader or designated team member on duty of the suspected missing person.

- Check all rest rooms, other activity areas, therapy rooms, etc.

- An immediate search of the surrounding area of the center will also be conducted.

- Leader will call Security & Public Safety if patient is not found within 5 minutes or foul play is suspected.

What information should be gathered if a person is thought missing?

What are some initial actions to take if a person is thought missing?

What should be done if person is still not found after initial actions are taken?

What should be done if a child or infant is abducted or missing?
Abduction-Missing Person

- What information should be gathered if a person is thought missing?
- What are some initial actions to take if a person is thought missing?
- What should be done if person is still not found after initial actions are taken?
- What should be done if a child or infant is abducted or missing?

- Follow site specific information found on your Emergency Preparedness flipchart/portfolio.
- Security & Public Safety will activate search protocol.
- If needed, Security & Public Safety will initiate an overhead announcement.
Abduction-Missing Person

- Follow site specific information found on your Emergency Preparedness flipchart/portfolio.
- Notify Security & Public Safety of missing child/infant.
- Provide description if possible - age, gender, hair/eye color, attire and last known location.
- For hospitals that have an Infant Abduction protocol, Security & Public Safety will activate the site plan by calling the Switchboard to initiate an announcement.
- Exits and stairwells will be secured/monitored and no one will be allowed to leave the premises without being screened.
Infant Abduction Prevention

Safeguarding newborn infants requires a comprehensive program including:

Newborn security procedures
- Abduction/Missing Infant Response including regularly scheduled drills
- Infant/Parent Identification (Wrist bands)
- Staff Identification
- Restrictions on transportation of infants in the hospital

Physical and electronic security measures
- Infant Protection Banding System
- Limited Access to areas in obstetrical unit (i.e. nursery and stairwells) and delayed egress locks on exits
- Closed Circuit TV Cameras

Education
- Parent education on what to be alert for including visualization of proper staff ID, never to leave infant unattended, and positioning bassinet away from hallway door
- Hospital staff being aware of unusual behavior and alert to unfamiliar people on the unit is key. One of the most effective techniques is to ask, “May I help you?” or “Who are you here to visit?”
The “Safe Place for Newborns” Law

“Safe Place for Newborns” is based on a Wisconsin law to provide a safe place for abandoned newborns. When a person approaches any team member and indicates that they want to give you a newborn, the caregiver should accept the baby and take it to the Emergency Department.

What if you are approached to take a newborn?
- Do take the baby to the Emergency Department
- Do obtain a package of information from the Emergency Department or main entrance and offer it to the individual (they do not need to accept it.)
- Don’t walk away without taking action
- Don’t ask their name or other questions
- Don’t give the newborn back
- Don’t notify police

Follow up care to ensure the baby’s safety will be initiated by the Emergency Department.
Compressed Gas Cylinder Safety

1. Fact #1
   It is a state violation to leave a cylinder unsecured. All compressed gas cylinders must be secured in an approved cart or holder.
Compressed Gas Cylinder Safety

1.

2. Fact #2
   Cylinders are required to be stored so that full cylinders are separate from empty cylinders.

3.

4.

5.

6.
Compressed Gas Cylinder Safety

1.

2. Fact #3
Cylinders that are dropped or are left unsecured and tip over can become a moving object with the force and speed similar to a torpedo.
Compressed Gas Cylinder Safety

1

2

3

Fact #4
According to federal regulations, no more than 12 full or partially-filled cylinders are allowed in storage per smoke compartment. (A smoke compartment is a building space enclosed by smoke barriers on all sides, top and bottom). This volume calculation does not include opened cylinders in use (on carts, wheelchairs or in patient rooms).

4

5

6
Compressed Gas Cylinder Safety

1. 
2. 
3. 
4. 
5. Oxygen cylinders should be removed from wheelchairs when approved use during transport is complete.
6. 

Rule #1
Compressed Gas Cylinder Safety

1. 
2. 
3. 
4. Rule #2
Cylinders should not be left unattended in wheelchairs at hospital entrances. Any team member can remove a cylinder and deliver it to a patient care area for storage in an approved holder and room.
5.
6. 

Advocate Aurora Health
Antimicrobial Stewardship

An antimicrobial is a medication used to treat infections. Wise use of these vital medications is essential to patient safety and public health.

1. The RIGHT drug

2. Expectations when Prescribing Antibiotics
   - Conduct an antibiotic time-out after 48-72 hours to reassess therapy for safety and efficacy, review cultures, de-escalate, escalate, discontinue as appropriate, or define the appropriate duration of therapy for indication.
   - Antimicrobial utilization can be associated with significant adverse events, including, but not limited to acute kidney injury (e.g. vancomycin plus piperacillin/tazobactam combination) and neurotoxicity (e.g. cefepime). Routine monitoring of antimicrobials is expected.
   - Unnecessary prolongation of antimicrobial therapy (e.g. 10-day treatment of pneumonia when 7 days are recommended), or unnecessary initiation of antimicrobial therapy (e.g. non-indicated treatment of asymptomatic bacteriuria) can result in devastating consequences that increase patient morbidity and mortality, such as C. difficile associated diarrhea. Avoiding unnecessary antimicrobials is of utmost importance for preventing such consequences.
Antimicrobial Stewardship Opportunities

Example Case 1: A patient is started on ciprofloxacin for bacteria in the urine but is asymptomatic has no indications for treatment per published guidelines.

Example Case 2: A patient is started on vancomycin and piperacillin/tazobactam for community acquired pneumonia but did not present with risk factors for methicillin resistant Staphylococcus aureus (MRSA).
Antimicrobial Stewardship Opportunities

**Example Case 1:** A patient is started on ciprofloxacin for bacteria in the urine but is asymptomatic has no indications for treatment per published guidelines.

**Consequence:** On day 5 the patient develops a *Clostridiodes difficile* infection as a result of exposure to antimicrobials and requires additional treatment. *Clostridiodes difficile* infections caused an estimated 12,800 deaths and led to 1 billion in estimated attributable healthcare costs in 2017.

**Example Case 2:** A patient is started on vancomycin and piperacillin/tazobactam for community acquired pneumonia but did not present with risk factors for methicillin resistant *Staphylococcus aureus* (MRSA).

**Opportunity:** Treatment of bacteria in the urine with antibiotics is only recommended if the patient has symptoms of a urinary tract infection or if they have risk factors associated with severe disease (ie, pregnancy, planned urinary tract procedure). Discontinuation of the antibiotic could have prevented development of a secondary *Clostridiodes difficile* infection.
Antimicrobial Stewardship Opportunities

Example Case 1: A patient is started on ciprofloxacin for bacteria in the urine but is asymptomatic has no indications for treatment per published guidelines.

Example Case 2: A patient is started on vancomycin and piperacillin/tazobactam for community acquired pneumonia but did not present with risk factors for methicillin resistant Staphylococcus aureus (MRSA).

Consequence: On day 3 the patient develops an acute kidney injury as a result of the use of this antibiotic combination and requires escalation of care and a longer duration of stay in the hospital.

Opportunity: Treatment of community acquired pneumonia should be guided by risk factors for resistant bacteria. AAH System guidelines and order sets in the electronic medical record provide support for this assessment. If no risk factors are present for MRSA, discontinuation of the vancomycin could have prevented development of the acute kidney injury.
What is Advocate Aurora’s true north goal for decreasing serious safety event to patients?

- a. Decrease serious safety events by 25% by 2025
- b. Decrease serious safety events by 50% by 2025
- c. Decrease serious safety events by 75% by 2025
- d. Eliminate all serious safety events by 2025

- d. Eliminate all serious safety events by 2025
Which item below CANNOT be used as a patient identifier?

a. First name
b. Room number
c. Date of Birth
d. Last name

b. Room number
Speak up for patient safety when:

- a. Team members deviate from policies or checklists
- b. Team members take shortcuts
- c. Any time a patient is at risk for a safety event
- d. All of the above

- d. All of the above
Patient Safety Event Reports must be entered in the following situations:

- a. Near miss event
- b. Event reaches patient but no harm occurs
- c. Event reaches patient and patient is harmed
- d. Conditions are unsafe
- All of the above

**All of the above**
If you have an on the job injury, you should report it?

- a. Within 3 days to your leader
- b. Within 5 days to your leader
- c. Within 10 days to your leader
- d. Immediately to your leader

- d. Immediately to your leader
All of the following are examples of bloodborne pathogens except:

- a. HIV
- b. Hepatitis B
- c. Influenza
- d. Hepatitis C

- c. Influenza
Hand hygiene is the single most effective method to prevent the spread of infection.

- [ ] True
- [ ] False

- [ ] True
Hand Hygiene should be performed:

- a. Upon entering and when exiting patient environment
- b. Before applying gloves and upon removing gloves
- c. Before Patient contact
- d. Before performing aseptic task
- e. After blood or body fluid
- f. All of the above
Contact isolation requires gown and gloves to reduce the risk of transmission of microorganisms.

- True
- False

True
Transmission-based isolation signage describes what items and actions should be performed before entering patients room

○ True
○ False

○ True
If I have a question about what I need to do before entering an isolation room, I should ask the clinician caring for the patient.

- True
- False

True
Cleaning medical equipment after every patient use is EVS's responsibility.

- True
- False

False
Standard precautions should only be applied to patients over the age of 65.

- True
- False

False
Safety Data Sheets (SDS) are used to provide safety information about specific chemicals used at our sites and are used to provide information on chemical spill clean-up.

- True
- False

True
The three basic rules of radiation safety include: time, distance and shielding.

- True
- False

○ True
If a piece of equipment is involved in a patient incident/injury, what are some steps you can take? (Select all that apply)

- a. Remove equipment from service and sequester it
- b. Tag the equipment “Do Not Use”
- c. Keeping all tubing and other disposable products with equipment
- d. Notify Healthcare Technology Management to service equipment

If a piece of equipment is involved in a patient incident/injury, what are some steps you can take? (Select all that apply)

- a. Remove equipment from service and sequester it
- ✔️ b. Tag the equipment “Do Not Use”
- ✔️ c. Keeping all tubing and other disposable products with equipment
- ✔️ d. Notify Healthcare Technology Management to service equipment
We use the acronym - RACE - to help us remember how to react to a fire.
R = Rescue persons from immediate danger and close door
A = Activate the alarm to alert others
C = Contain the fire (close doors)
E = Extinguish if it can be done without endangering safety or Evacuate.

True
We use the acronym - PASS - to help us remember how to use a fire extinguisher.
P = pull the pin
A = Aim the nozzle
S = Squeeze the handle
S = Sweep from side to side at the base of the fire

True
When assisting in evacuating patients, what equipment may be used

- a. Evacuation chairs
- b. Tarps/Bedding
- c. Vests/baskets/boards
- d. All of the above

- d. All of the above
When a decontamination area is secured not allowing team members to access the area, it is safe to ignore the warning and enter the area.

○ True
○ False

○ False
Establishing Incident Command allows the hospital/site to organize:

- a. Staff
- b. Resources (food, water, supplies)
- c. Emergency responses
- d. All the above

- d. All the above
A comprehensive program is in place to safeguard newborn infants in our hospitals that includes:

- a. An electronic infant protection banding system
- b. Unannounced drills
- c. Access restrictions to nurseries and labor/delivery areas
- d. All of the above

- d. All of the above
We have ZERO tolerance for violence - verbal and physical - in our workplace, regardless if it involves a team member, physician, patient or family member.

○ True
○ False

○ True
Active Shooter response for all team members is: Run, Hide and Fight.

- True
- False

- True
Which of the following letters represent the B.E. F.A.S.T. scale?

- a. B=Bounce, E=Exercise, F=Face, A=Ambulance, S=Smile, T=Time
- b. B=Bounce, E=Eyes, F=Frown, A=Arm, S=Speech, T=Toes
- c. B=Balance, E=Eyes, F=Face, A=Arm, S=Speech, T=Time
- d. B=Balance, E=Eyes, F=Fast, A=Arm, S=Smile, T=Tongue

- c. B=Balance, E=Eyes, F=Face, A=Arm, S=Speech, T=Time
Which of the following is the goal of antimicrobial stewardship?

- a. Minimize adverse events and unintended consequences of antimicrobial use
- b. Ensure that antimicrobials are prescribed appropriately
- c. Slow the development of antimicrobial resistance
- d. All of the above

- d. All of the above
If you do not work in procedural areas or have already completed education on Fire Safety in the Procedural Environment in 2021, you may stop here.

If you DO work in procedural areas and have not already completed education on Fire Safety in the Procedural Environment in 2021, please continue.
Medical Fires

Medical fires occur about 200-240 times/year.

- 44% occur on head, neck, and upper chest
- 26% elsewhere on the patient
  - 21% in the airway
  - 8% non-airway
- Medical fires occur in ambulatory centers, physician offices, and hospitals

Of the medical fires:

- 20-30 cause serious injury or result in disfigurement
- 1-2 are fatal (mainly due to airway fires)

AORN 2019 Fire Safety Tool Kit
Fires as reported by procedure

- Tracheotomy
- Oral surgery
- Facial surgery
- Infant surgery
- Pneumonecetomy
- Cervical conization
- Cesarean section

High risk procedures occur above the xiphoid process and in the oropharynx and include:

- Lesion removal on head, neck or face
- Tonsil surgery
- Tracheostomy
- Burr hole surgery
- Removal of laryngeal papilloma
Contributing factors in procedural fires

Ignition sources:
- Electrocautery units
- Other heat sources (fiberoptic light sources, high speed burrs, defibrillators)
- Lasers

Oxidizers
- Oxygen enriched environment

Fuel
- Alcohol based procedural preps
- Drapes
Fire Triangle

Three components of the fire triangle are present in the procedural room at all times.

These include:
- Ignition source – bovie (proceduralist influence)
- Fuel source – cloth, drapes (nurse influence)
- Oxidizer – oxygen rich environment (anesthesia or RN influence (IV sedation)).
**Ignition Source**

An ignition source is anything that provides enough energy to start a fire. Ignition sources can be in the form of a visible spark or increased heat.

Common ignition sources found in the Procedural Room include:
- Electrocautery units
- Laser units
- Light sources
- Power tools
- Argon beam coagulator
- Fiber optic light source
**Ignition source prevention**

Electrocautery units account for 70% of fires caused by an ignition source. Tips to prevent fires from electrocautery use include:

- Place dispersive electrode on large muscle mass close to incision
- Use at lowest possible setting
- Do not use in the presence of flammable liquid
- Always place hand piece in the safety holster when not in use
- Do not use near open oxygen or nitrous oxide
- Check connections and cords for frays
- Keep electrode tip clean
- Do not use in close contact with another metal object that conducts heat
- Allow prep solution to dry and fumes to dissipate before using
  - Follow manufacturer’s instructions for use (IFU)
- Use approved protective covers to insulate the active electrode:
  - Do not use rubber catheter sleeves as protective covers
- Remove active electrode tip from unit before discarding
Ignition source prevention

Argon/laser is responsible for 10% of fires caused by an ignition source. Tips to prevent fires from laser use include:

- Place wet sponges or towels around procedural site
- Use laser specific endotracheal tube for head, neck, lung, or airway surgery. Inflate tube with tinted saline (i.e. methylene blue) to detect problems
- Place wet sponges around endotracheal tube cuffs to retard fire potential
- Avoid using combustible liquid/ointments around lasers
- Keep laser in standby mode when not in use
- Only the person controlling the laser beam should activate the laser
- Have water and fire extinguisher immediately available.
Ignition source prevention

Other heat sources account for the remaining 20% of fires caused by an ignition source, e.g., fiber optic lights, burrs, defibrillator paddles, etc.

Tips to prevent fires from other heat sources include:

Electrical equipment
- Check for frayed cords and remove if present
- Remove any suspicious equipment from service immediately
- Ensure biomed stickers are on equipment before use.
- Do not bypass or disable equipment safety features.
- Keep fluids off of equipment
  - Ensure spiked liquids are not dripping onto electrical equipment
Ignition source prevention - continued

Tips to prevent fires from other heat sources include - continued:

**Fiber optic lights**
- Place light source in standby except when in use
- Keep light source away from flammable items
- Do not place light cable on drapes, sponges, etc. that are flammable
- Ensure cables are in good working order

**Defibrillator Paddles**
- Use correct size paddles for patient and lubricant recommended by manufacturer

**Drills**
- Since drill motion will generate heat – use slow drip saline on moving drill/burr to reduce heat build up.
- Do not place hot drills on patient/drapes when not in use
Fuel source

A fuel is considered anything that will burn.
Some fuel sources will ignite faster than others (alcohol based gels).

Common fuel sources found in the Operating Room include:
- Bed linens
- Drapes
- Alcohol based skin preps
- Gowns
- Patient's hair
Fuel source prevention

Linens
- Do not allow drapes to come in contact with ignition sources (light cords, bovie tips)
- Do not trap chemicals under drapes
- Ensure oxygen does not accumulate under drapes

Skin degreasers
- May contain flammable solution – ensure they are dry before draping/using electrosurgery

Prep solutions
- Do not allow prep solutions to pool on, around, or beneath patient.
  - Remove prep soaked linen and disposable prep drapes
  - Allow prep solution to dry completely before draping
Fuel source prevention

Intestinal gases
- Are flammable and electrosurgery should be used with caution.
- Use suction during rectal surgery to remove intestinal gases.

Patient’s hair
- Recognize that some hair gels contain alcohol and can be a fuel source
  - Patient’s should be instructed by the team members to not apply hair products that contain alcohol.
- Coat any hair that is in close contact with ignition source with water-based jelly to retard ignition
- Evacuate procedural smoke as it can fuel combustion if allowed to accumulate in small enclosed area.
Oxidizer Source

An oxidizer is a gas that can support combustion.

As the concentration of oxygen increases in the environment, the less temperature and energy is required for fuels to ignite.

An oxygen enriched environment is defined as an environment where the percentage of oxygen is greater than 21%.

Common oxidizer sources found in the Operating Room include:

- Oxygen
- Nitrous oxide
Oxidizer source prevention

Oxygen and nitrous oxide should be used with caution in the presence of ignition sources.
- Tent drapes to allow for free air flow
- Ensure drapes do not trap oxygen under them
- Do not use supplemental oxygen if patient’s can maintain O2 saturation without it
  - If oxygen is needed, keep oxygen percentage as low possible
  - If > 30% oxygen is required, recommend intubation /LMA unless patient’s verbal response is required during procedure.
Oxidizer source prevention cont’d

- Ensure anesthesia circuits are free of leaks
- Pack wet sponges around the back of throat to help retard oxygen leaks
- Use suction to evacuate any accumulated oxygen
- Do not use laser or cautery near open oxygen i.e. nasal cannula/mask
- Stop supplemental oxygen or nitrous for one minute before using cautery or laser on head/neck cases
- Turn oxygen off at the end of each procedure
Fire prevention is a team effort.
Every team member that works in an procedural suite is responsible for taking steps that prevent procedural fires and ensure safe patient care.

In addition to understanding the components of the fire triangle, the procedural team must perform a fire risk assessment before the procedure begins.
Fire Risk Assessment & Score

Must be completed for every case in the presence of or potential presence of an ignition source (System policy: 149 PROCEDURAL SAFETY (UNIVERSAL PROTOCOL FOR PREVENTION))

A score of 0, 1, 2, or 3 will be assigned based upon the fire risk. The score will be driven by the following factors:

- Ignition source (cautery, light, laser, etc.)
- Other contributors (burrs, drills, etc.)
- Procedure location (above or below xiphoid)
- Open oxygen source (face mask, nasal cannula, none)
- Skin prepping agents (alcohol or volatile based prep, non-volatile prep)

The fire risk score will be communicated to the procedural team during the time out and documented in the electronic health record.
Fire Risk Interventions Based on Score

Appropriate fire safety measures need to be implemented based on the fire safety risk score. The procedural RN needs to identify which interventions are appropriate for the individual procedure. A score of 0 will not require any interventions.
**Fire Risk Interventions Based on Score**

Appropriate fire safety measures need to be implemented based on the fire safety risk score. The procedural RN needs to identify which interventions are appropriate for the individual procedure. A score of 0 will not require any interventions.
Fire Risk Interventions Based on Score

Routine Protocol for Fire Risk Score 1
Procedure has LOW risk of fire. Follow ROUTINE protocol.

- Minimal amount of prep is used to cover body area
- Dry time followed per manufacturer's instructions
- Draping not performed until prep solution dried
- No pooling allowed
- Check electrical equipment before use
- Protect all heat sources when not in use
- Activate heat source only when active tip in line of sight
- De-activate heat source before tip leaves surgical site
Fire Risk Interventions Based on Score

A fire score of 2 has the option to convert to higher score if anything is added during the case (i.e. no electrocautery was needed to start case but one was added during case elevating score to a 3).

Routine Protocol for Fire Risk Score 2

- Procedure has LOW risk of fire. Follow ROUTINE protocol.
- Minimal amount of prep is used to cover body area
- Dry time followed per manufacturer’s instructions
- Draping not performed until prep solution dried
- No pooling allowed
- Check electrical equipment before use
- Protect all heat sources when not in use
- Activate heat source only when active tip in line of sight
- De-activate heat source before tip leaves surgical site

Convert to High Risk Score
Fire Risk Interventions Based on Score

Routine Protocol for Fire Risk Score 3
Procedure has the HIGHEST risk of fire. Follow HIGH protocol.

- Minimal amount of prep is used to cover body area
- Dry time followed per manufacturer's instructions
- Draping not performed until prep solution dried
- No pooling allowed
- Check electrical equipment before use
- Protect all heat sources when not in use
- **Activate heat source only when active tip is in line of sight**
- De-activate heat source before tip leaves surgical site
- Utilize appropriate draping techniques to minimize oxygen concentration
- Minimize the Electrical Surgical Unit (ESU) settings
- Use wet sponges as appropriate
- Have basin of sterile water/saline immediately available
Fire Awareness

Preparation is the key to fight fires.

- Have water/saline immediately available on procedural back table/field.
- Know where the medical gas panels are located for each procedure room and how to shut off gases, if needed.
- Know how to initiate a fire emergency in your facility.
- Know where the fire extinguishers are in each procedure room and suite.
- Have a stretcher or other mode of transport immediately available to move the patient if needed.
Fire Blankets

- Fire blankets are used on people to smother a fire in normal circumstances.
- They are **not** recommended for procedural fires because of the enriched oxygen environment.
  - In these circumstances the blanket could potentially trap the fire causing more patient harm.
Types of Procedural Fires

Procedural Fires are classified into 3 types:

1. On a patient
   • This includes a fire that is on the patient’s skin, hair, or drapes.

2. On or in a piece of equipment
   • This includes a fire on a piece of equipment but it does not directly involve the patient.

3. In a patient
   • This includes a fire in a patient’s body cavity or an airway fire.
In the event of a fire on a patient:

**Rescue**
- Rescue the patient from harm

**Alarm**
- Announce the fire to all (activate alarms if necessary)

**Confine**
- Attempt to extinguish fire with water or saline
- Remove burning material from patient

**Extinguish/evacuate**
- Extinguish materials on floor
- Turn off oxygen source (circulator to turn off gas panels as directed by anesthesia/proceduralist in absence of anesthesia)
Steps to extinguish a procedural fire using solution

- Use nonflammable liquid such as saline or water
- Pour liquid at base of fire
  - Remember, procedural drapes are impermeable so you need to check if the fire actually went out
- Remove drapes from patient
Steps to smother a procedural fire

- Saturate towel with saline/water
- Place one end of wet towel between patient’s head and the fire
- Drop the other end of towel over the fire (towards the patient’s feet)
- Sweep hand over towel **DO NOT PAT**
- Raise the towel
- To protect yourself, maintain safe distance from fire
In the event of a fire on a patient - continued

Obtain fire extinguisher as last resort.

Reasoning: The fire may be easily extinguished by removing the burning material from the patient and attempting to extinguish with water or saline. (Do not lose valuable time by first retrieving the extinguisher).

After the fire is controlled:

- Assess patient for injury – look for secondary fire under drapes
- Save all involved materials for analysis
- Complete incident report.
- Notify supervisor and risk manager
In the event of a fire on or in a piece of equipment

In the event of an equipment fire:

**Rescue**
- Rescue the patient from harm

**Alarm**
- Announce fire to team members (activate alarms if necessary).

**Confine**
- Disconnect equipment from electrical source. Unplug unit from wall.
- Shut off gases to equipment, if applicable.

**Extinguish/evacuate**
- Assess fire size and determine if equipment can be safety removed from room or if evacuation is needed.
- Extinguish fire with extinguisher if appropriate.
In the event of a fire on or in a piece of equipment

After fire is under control/patient removed from harm:

- Assess patient for injury
- Save equipment and related items for analysis
- Complete incident report
- Notify supervisor and risk manager
In the event of a fire in the patient’s airway

In the event of an airway fire:

**Rescue**
- Rescue the patient from harm
- Remove the endotracheal tube

**Alarm**
- Announce fire to team members (activate alarms if necessary).

**Confine**
- Disconnect the breathing circuit
- Shut off gases

**Extinguish/evacuate**
- Extinguish fire by pouring saline into the airway.
- Collaborate with anesthesia provider to reestablish ventilation
Procedural team duties

Team duties will vary based upon:

Facility
- Hospital
- Surgery center
- Physician office

Time
- Normal business or after hours

Personnel
- Full or partial staff present

Size
- Small or large fire

Location
- On the patient, in the patient or equipment fire
All procedural personnel need to know:

Gas shut off valves
- Location and activation

Fire extinguishers
- Location and activation

Communication
- Department
- Facility/external response
- Fire pull station (external response)
  - In some facilities, the fire pull station or calling 911 may be the only venues that alert the fire department that they need to respond.
  - Know what/who activates the fire department response at your facility
All procedural personnel need to know - continued

Fire/smoke compartments
  • Know where your fire doors/compartmentes are located

Evacuation floor plan
  • Know the evacuation route from each procedural room
  • Refer to your department's evacuation map and/or exit signs.
In the event of a fire - PASS

Pull the pin

Aim the nozzle at the base of the fire

Squeeze the handle

Sweep the extinguisher over the base of the fire
In the event of a fire - RACE

**R**escue the people involved near the fire
- Determine the best method to move the patient (bed, stretcher, carry)
- Determine the safest location to move patient too
- Move patient and staff from burning room

**A**larm – initiate fire emergency
- Communicate fire activity to all procedural personnel, especially personnel in adjacent rooms
- Pull nearest fire alarm station and activate response team

**C**onfine the fire to one room/area
- Close all doors to involved room
- Shut off medical gas to room
- Turn off electricity to involved room

**E**xtinguish the fire and evacuate if required
- Evacuate area when danger is posed to patient and staff
- Transfer to area beyond first set of fire doors
- Follow fire department’s direction for floor evacuation if needed
**Procedural team duties**

**Surgeon/proceduralist**

In the event of a procedural fire the surgeon/proceduralist is responsible to:

- Remove any patient materials that may be on fire and help extinguish fire
- Control patient bleeding and prepare for evacuation if needed
- Complete procedure ASAP

If evacuation is required:

- Place sterile towels over wound
- Help move the patient
Procedural team duties

Anesthesia

In the event of a procedural fire the anesthesia provider is responsible to:

- Shut off flow of oxygen/nitrous oxide to patient/procedural field and maintain breathing using ambu-bag
- Collaborate with circulating staff on need to shut off medical gas valves
- Disconnect all electricity powered equipment on anesthesia machine
- Disconnect leads, lines that may be anchoring patient to the area
- Maintain patient’s anesthetic state and prepare to move patient
- Place additional IV fluids on bed for transport
Procedural team duties

Procedural scrub
In the event of a procedural fire the procedural scrub is responsible to:
- Remove patient materials that may be on fire
- Assist with closing/conclusion of procedure
- Obtain sterile towels or drapes to cover patient and instruments for moving
- Have basin of water/saline on back table during all procedures

If evacuation is required:
- Place minimum number of instruments on tray or basin and place with the patient for transport
- Assist with patient transfer to stretcher or move entire bed out of OR room.
Procedural team duties

Circulating Nurse

In the event of a procedural fire the circulating nurse is responsible to:

- Remain with patient at all times
- Activate the alarm system and direct the fire team to the proper room
- Extinguish small fires/douse them with liquid if able
- Remove any burning material from the patient/sterile field and extinguish on floor
- Prevent fire from spreading.
  - Do NOT step on fire
- Provide scrub person/anesthesia with needed supplies
- Shut off medical gases if deemed appropriate by anesthesia
- Unplug electrical equipment

If evacuation is required:

- Assist anesthesia:
  - Remove IV solution from poles and place with patient
  - Disconnect leads, lines for transfer
- Transfer patient to stretcher or move entire bed out of procedure room.
- Do NOT delay in leaving the procedure room
Procedural team duties

Lead/Charge Nurse
In the event of a procedural fire the lead/charge nurse is responsible to:

- Notify fire personnel of exact location of fire
- Document time fire started
- Determine number of people in the department to account for all staff
- Set up communication point and assign someone to run it
- Determine state of ongoing procedures in department
- Consult with anesthesia personnel on how to handle each patient
- Assign personnel to assist where needed
- Ask all visitors/company reps to leave
- Evacuate patients who may need to be moved immediately
- Notify department manager/director of incident
Procedural team duties

Ancillary staff (CNAs, procedural assistants, schedulers, etc.)

In the event of a procedural fire ancillary staff are responsible to:

- Help clear corridors for evacuation
- Secure equipment for transporting patients as directed
- Prepare safe area to transfer patients too
- Follow instructions of lead/charge nurse and assist where directed
Evacuation Route

- After the room is evacuated, the last person to leave the room should close the doors and place a wet towel at the base of the door.
- Patients should be transferred laterally or horizontally to a safe area (past the fire compartment doors) unless directed to transfer vertically.

Maintain an accurate accounting of all personnel/patients during evacuation.

After the fire, leave everything in place for the safety officer and fire department to conduct a formal investigation.
Communication during a procedural fire is crucial:

1. Family members
   A. Assign someone to notify family members of situation and patient status.

2. Check all rooms
   A. Unoccupied - Place a piece of tape across all procedural doors that have been checked/secured. This notifies the fire department that the room has been cleared of personnel.
   B. Occupied - Keep rooms that are currently performing procedures abreast of what is occurring and potential need for evacuation.

3. Document
   A. Any patient injuries in electronic health record
      i. Staff injuries need to be documented and reported to employee health nurse and supervisor
   B. Complete incident report
If a fire is located in another part of the building

- Charge nurse should notify other rooms with procedures still in progress
- Team should be prepared to evacuate as directed by fire command
- Elective cases should be suspended until cleared by fire command
References


ECRI Institute. Only you can prevent procedural fires

ECRI Institute. Emergency procedure. Extinguishing a procedural fire

On fire in the OR: Hundreds are hurt every year. Obtained from http://www.nbcnews.com/id/26874567/ns/health-healthcare/t/fire-or-hundreds-are-hurt-every-year/ on 4/2/2014.
