Safety Review

Annual Mandatory Training

2021

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

Improve the Accuracy of Patient Identification

1

Use Two Patient Identifiers

Always use a minimum of two patient identifiers when:
- Administering medications
- Administering blood or blood components
- Collecting specimens
- Providing treatments or performing procedures
- Providing any other direct care service

2

Improve the Accuracy of Patient Identification

1

2

Identifiers include:

- Name (first and last). Let the patient spell their last name to you or have them state their last name to you if they are able.
- Date of Birth. Have patient state their Date of Birth to you if they are able.
- Medical record number (if DOB is not available).

NOTE: A patient's room number is not considered a patient identifier and should never be used

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Improve Communication

1

2

3

Improve Communication

Improve Communication

Improve the effectiveness of communication among team members

Inadequate communication between team members remains one of the top reasons for negative patient outcomes.

Improve Communication

1 Speak Up for Patient Safety

It is essential to patient safety to create a culture where "speaking up" is practiced.

Speak up when:
- Team members deviate from policies or checklists intended to keep patients safe
- Team members take shortcuts or develop at-risk behaviors
- Any time a patient is at risk for injury or infection

3

Improve Communication

1

2

Other Communication Safety Measures

- Use only approved abbreviation
- Practice effective handover and use communication tools
- Escalate concerns
- Ensure timely documentation

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Patient Safety Organizations (PSO)

1

2

3

For more information refer to [AAH's Patient Safety Evaluation System Policy](#)

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Patient Safety Organizations (PSO)

What is a Patient Safety Organization (PSO)?

Under the federal 2005 Patient Safety and Quality Improvement Act <https://psnet.ahrq.gov/issue/patient-safety-and-quality-improvement-act-2005>, a Patient Safety Organization or PSO is an entity, approved by the Agency for Healthcare Research and Quality (AHRQ) that has expertise in identifying the causes and threats to safe patient care.

The bill provides legal protection of information voluntarily reported into a PSO. This protection helps encourage institutions and individuals to more freely report incidents, concerns, and near misses. PSOs can receive reports on quality and safety from any health care provider, including hospitals, doctors' offices, nursing homes, and ambulatory surgery centers.

For more information refer to AA

Patient Safety Organizations (PSO)

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What does a PSO do?

PSOs serve as independent, external experts who can assist providers in analyzing data that a provider voluntarily chooses to report to the PSO. Providers that work with a PSO can benefit from the ability of PSOs to aggregate data from all the providers reporting to the PSO. This enables PSOs to develop lesson learned and analysis reports from large numbers of patient safety events. This allows organizations like ours to more broadly communicate lessons learned.

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

Patient Safety Organizations (PSO)

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3

Does AAH belong to a PSO?

Yes, currently AAH participates in at least one PSO for the collection and analysis of our patient safety events. AHRQ has a long list of approved PSOs and specialty PSOs. Specialty PSOs collect and analyze data related to a specific sub-set of data. Examples of focus areas of specialty PSOs are breast cancer, surgical outcomes, and radiation oncology.

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

- Why is the influenza vaccination important?

- What are some facts about influenza?

- What is Advocate Aurora's policy on influenza

Flu Information

Why is the influenza vaccination important?

What are some facts about influenza?

What is Advocate Aurora's policy on influenza

- 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?

What are some facts about influenza?

What is Advocate Aurora's policy on influenza

- Some otherwise healthy adults may be able to infect others beginning 1 day BEFORE symptoms develop and up to 5 to 7 days AFTER becoming sick. A person can easily pass the virus to others without knowing it.
- The virus can stay alive on hard surfaces for 24 to 48 hours and for at least 5 minutes on your hands.
- 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.

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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
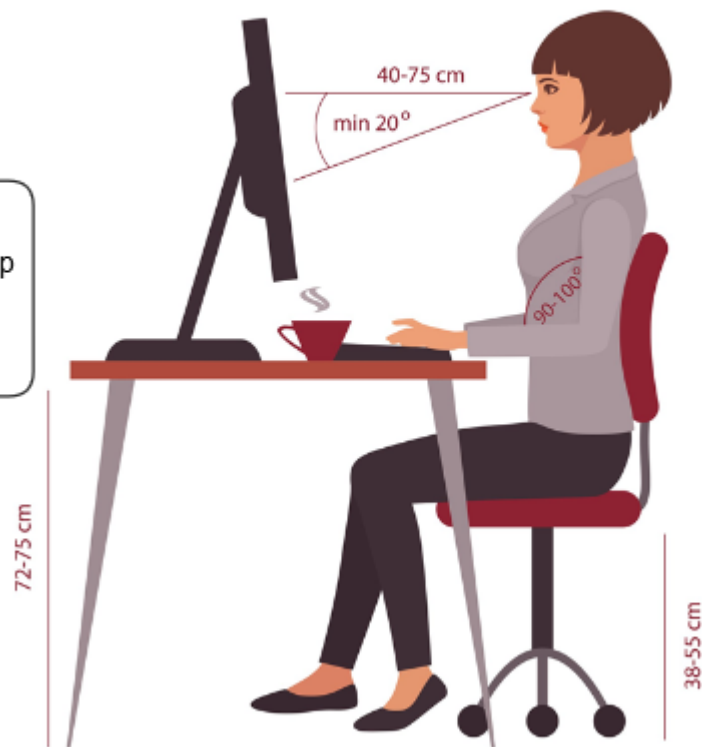
How to Set up an Ergonomic Workspace

1

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i

40-75 cm

min 20°

90-100°

72-75 cm

38-55 cm

How to Set up an Ergonomic Workspace

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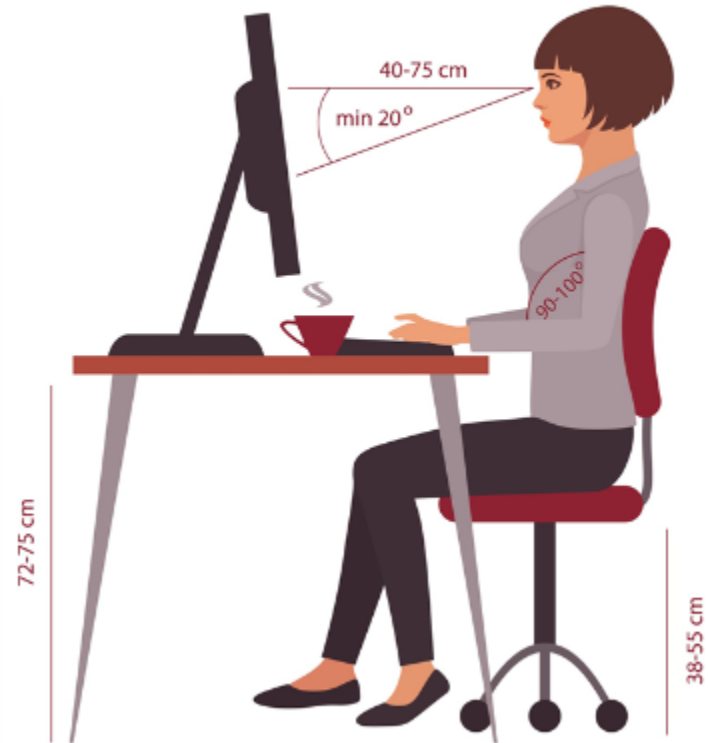
Maintain Good Posture

Keep your back straight, remember, no slouching. Keep your head balanced above your neck and arms resting at your sides comfortably.

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AdvocateAuroraHealth®

How to Set up an Ergonomic Workspace

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Adjust your seat

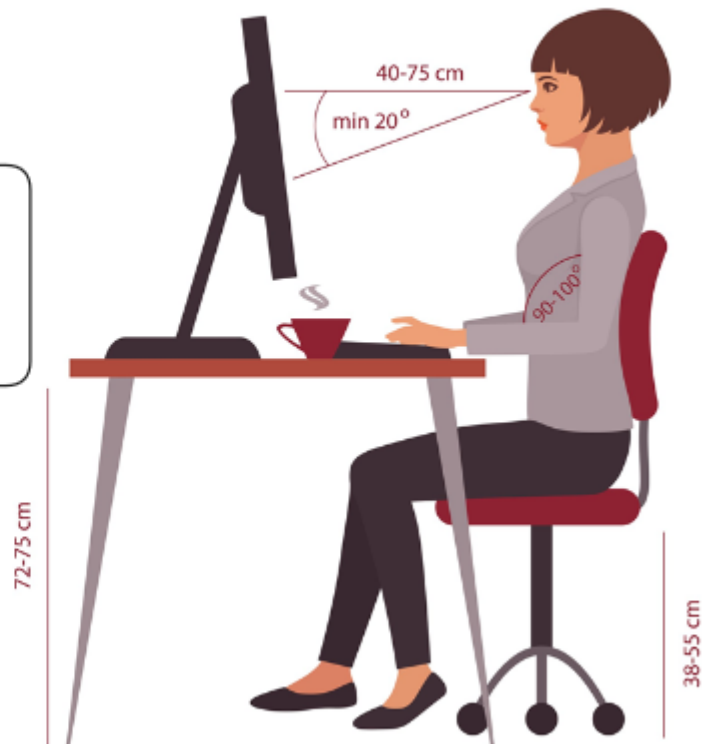Position your hips a bit higher than your knees, with your feet on the floor/footrest and your lower back supported.

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How to Set up an Ergonomic Workspace

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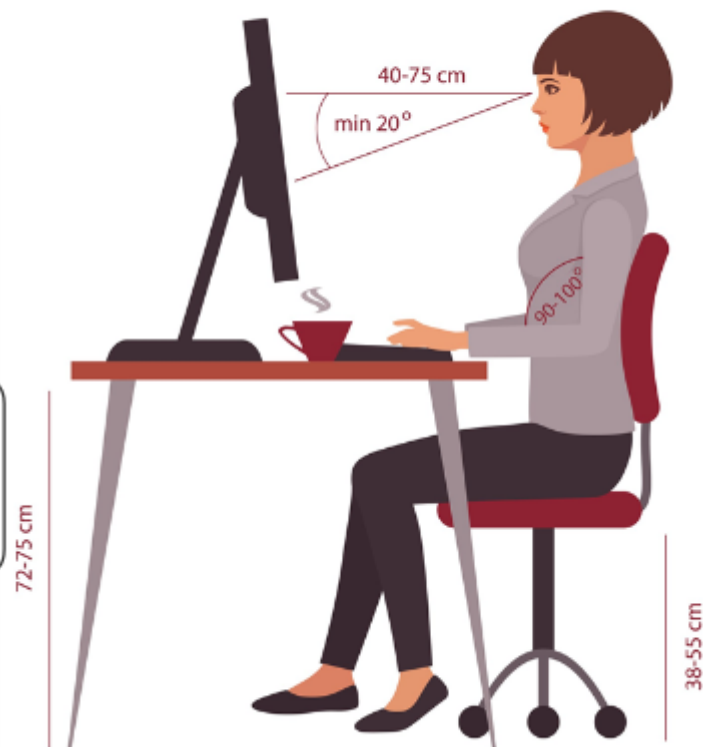**Position Monitor**

Raise or lower it so you can clearly see the whole screen without tilting your neck up or down.

4

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40-75 cm

min 20°

90-100°

72-75 cm

38-55 cm

How to Set up an Ergonomic Workspace
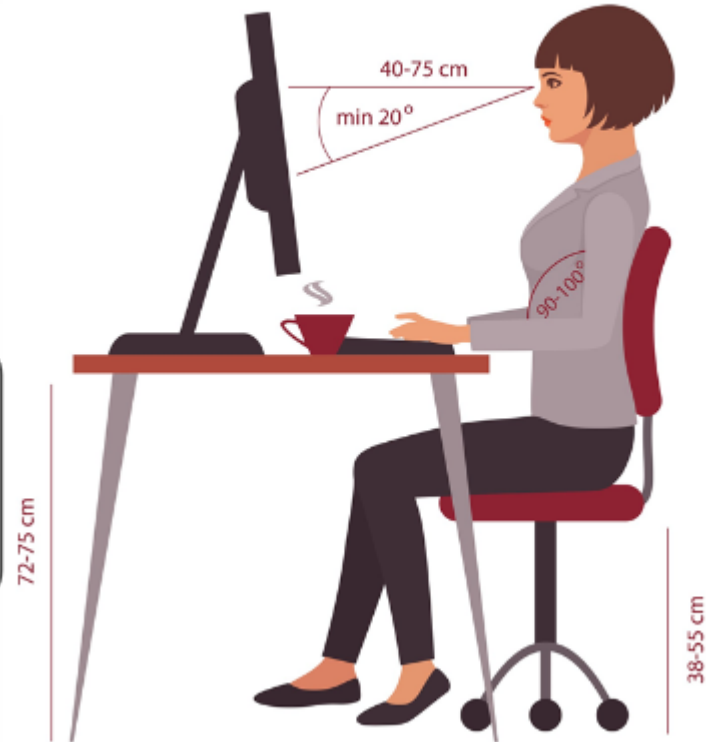
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Place Key Board and Mouse

Keep them close to each other on the same level with the home row of keys easy to reach with your elbows positioned at 90 degrees. As you type, your wrists should be straight.

40-75 cm

min 20°

90-100°

72-75 cm

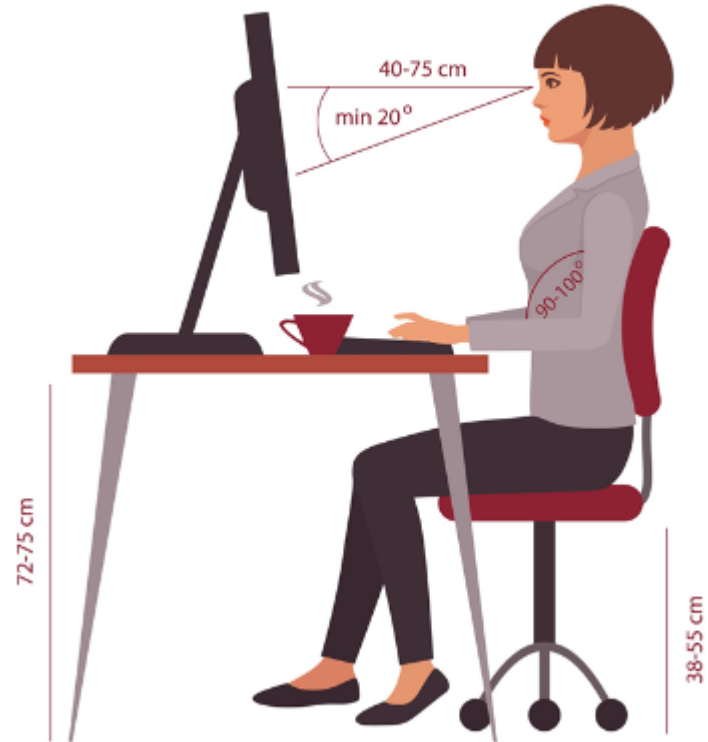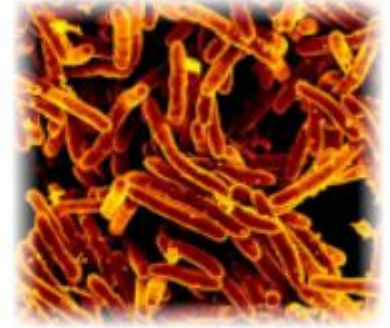38-55 cm

How to Set up an Ergonomic Workspace

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Rest Regularly

Every 20 minutes or so, take short, 15 to 30-second breaks. Take a few longer breaks during the day.

i

40-75 cm

min 20°

90-100°

72-75 cm

38-55 cm

Tuberculosis

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**?

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Tuberculosis

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?

- 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

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?

Active TB can spread to others.

- Patient shows positive TB skin test or positive blood test for TB AND their chest x-ray is positive.
- Clinical symptoms are:
  - Bad cough that has lasted 3 weeks or longer
  - Chest pain
  - Coughing up blood or sputum (phlegm from deep inside the lungs)
  - Unusual weakness or fatigue
  - Unexplained weight loss
  - No appetite, fever, night sweats

If you develop signs and symptoms of TB, you must promptly notify Employee Health

Tuberculosis

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?

- 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

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?

- If suspected of having TB, patient is to wear a surgical mask upon enter 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).
- Team members must be trained on PAPR use before wearing it into a patient room.

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:
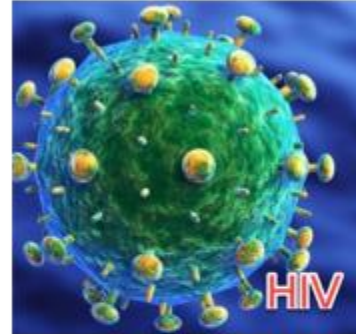
- Chickenpox
- Measles
- Pertussis (Whooping Cough)

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

HIV

Hepatitis C

Hepatitis B

Exposure Response

Bloodborne Pathogens

HIV

Facts:

- There is no vaccine for HIV
- It is fragile if exposed to air
- There is a 0.3% risk of transmission after exposure

Signs and Symptoms:

- After exposure some people develop a flu-like illness, usually two to four weeks after being infected. Doctors refer to this illness as acute retroviral syndrome, or primary HIV infection
- Early signs and symptoms may include: fever, headache, fatigue, swollen lymph glands, and rash

HIV

Hepatitis C

Hepatitis B

Exposure Response

Bloodborne Pathogens

Hepatitis C

Facts:
- There is no vaccine
- The incubation period is 20-30 years

Signs and Symptoms:
- Hepatitis C usually produces no signs or symptoms during its earliest stages
- When they do occur, they're generally mild and flu-like and may include: fatigue, fever, nausea or poor appetite, muscle and joint pains, tenderness in the area of your liver

HIV

Hepatitis C

Hepatitis B

Exposure Response

Bloodborne Pathogens

Hepatitis B

Facts:
- Vaccine Series - 3 injections - offered free to all (at risk) team members for protection from the Hepatitis B virus
- Hepatitis B is 100 times more infectious than HIV
- Can be transmitted in dried blood

Signs and Symptoms:
- It usually appears about three months after you've been infected and can range from mild to severe
- May include abdominal pain, dark urine, fever, joint pain, loss of appetite, nausea and vomiting, weakness and fatigue, and yellowing of your skin and the whites of your eyes (jaundice)

HIV

Hepatitis C

Hepatitis B

Exposure Response

Bloodborne Pathogens

Exposure Response

- Exposures are treated as Medical Emergencies
- Provide First Aid:
  - Wash wounds with soap/water for 5 minutes
  - Flush eyes or mouth with large amounts of water for 15 minutes
- Report Immediately - post exposure prophylaxis (PEP):
  - Employee Health, Nursing Supervisor, Occupational Health or designated contact when Employee Health is unavailable
- Fill out an Incident Report
- Remember to keep the source patient available for assessment and testing
- Follow-up testing and results will be handled through Employee Health
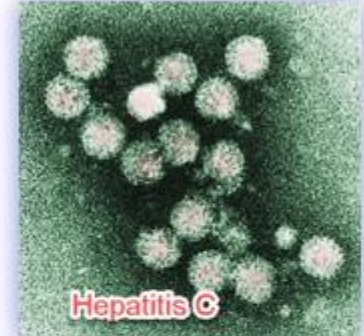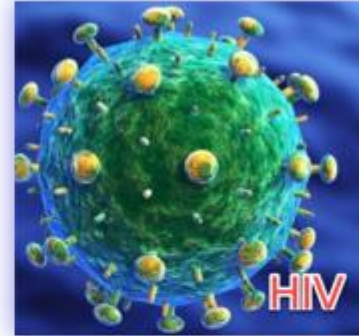
Safe Patient Handling Mobility (SPHM)

ILLINOIS

WISCONSIN

Safe Patient Handling Mobility (SPHM)

ILLINOIS

WISCONSIN

- Advocate Aurora Health has a SPHM with Minimal Manual Lifting Policy
- Find "Safe Patient Handling Mobility" information under "Resources" on the AdvocateOnline SharePoint site
- Utilize Transfer Mobility Coaches (TMC) on your unit as a resource
- Avoid manual lifting with SPHM tasks when able, when lifting **more than 35#** use SPHM equipment and tools to avoid patient and or team member injury
- For SPHM Equipment repairs, contact Clinical Engineering by initiating a Service Request on the AdvocateOnline SharePoint site under "Top Applications"

Safe Patient Handling Mobility (SPHM)

ILLINOIS

WISCONSIN

- Advocate Aurora Health Care has a SPHM with Minimal Manual Lifting Policy
- Reference "Safe Patient Handling Mobility" to your quick links on Caregiver Connect for SPHM resources
- Utilize Transfer Mobility Coaches (TMC) on your unit as a resource
- Avoid manual lifting with SPHM tasks when able, when lifting **more than 35#** use SPHM equipment and tools to avoid patient and or team member injury
- For SPHM Equipment repairs call 414-219-7700, have the asset tag information ready

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.
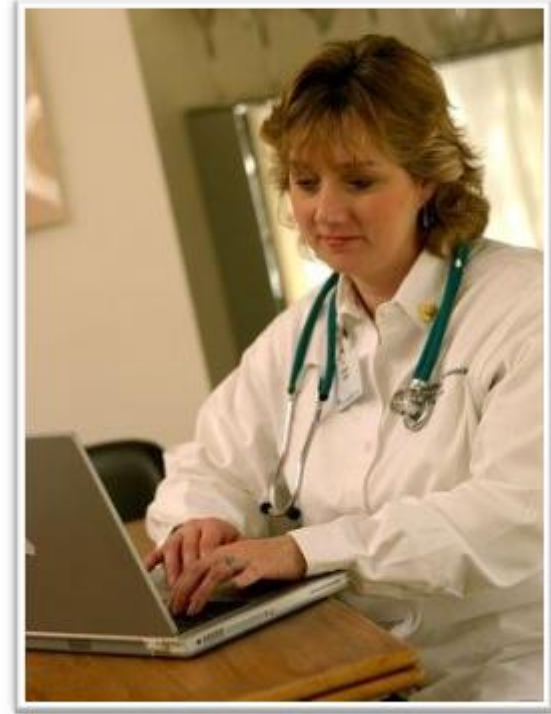
Hand Hygiene

- **Facts**
- **Soap and Water**
- **Alcohol-based Hand Sanitizer**
- **Healthy Hands and Fingernails for Direct Patient Care**

Hand Hygiene

Facts

Soap and Water

Alcohol-based Hand Sanitizer

Healthy Hands and Fingernails for Direct Patient Care

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

Facts

Soap and Water

Alcohol-based Hand Sanitizer

Healthy Hands and Fingernails for Direct Patient Care

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

Facts

Soap and Water

Alcohol-based Hand Sanitizer

Healthy Hands and Fingernails for Direct Patient Care

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

Facts

Soap and Water

Alcohol-based Hand Sanitizer

Healthy Hands and Fingernails for Direct Patient Care

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.

1   2   3   4

5   6   7

Respiratory Etiquette

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

Measure #1

Practice good cough and sneeze etiquette: always cough and sneeze into a tissue or your upper shirt sleeve, completely covering your mouth and nose.
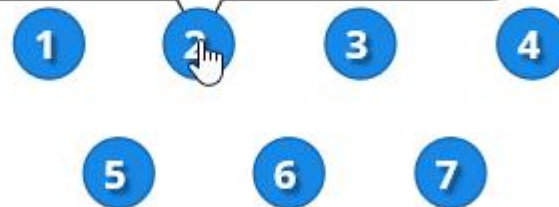
1 2 3 4

5 6 7

Respiratory Etiquette

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

Measure #2

Instruct patients and visitors to perform hand hygiene after contact with respiratory secretions and contaminated objects in the environment.

1 2 3 4

5 6 7

Respiratory Etiquette

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

Measure #4

Post visual alerts (signs) at the entrances to all healthcare facilities informing patients and visitors about these respiratory hygiene measures.
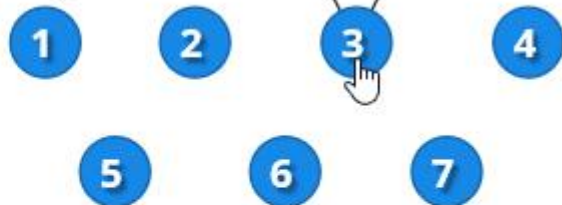
1   2   3   4

5   6   7

Respiratory Etiquette

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

Measure #5

When space permits, encourage individuals who are coughing or sneezing to sit at least three feet away from others in common waiting areas.

4

5 6 7

Respiratory Etiquette

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

Measure #6

Healthcare personnel should follow standard precautions and wear a mask when examining patients presenting with symptoms of a respiratory infection.
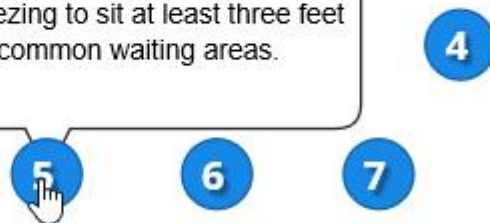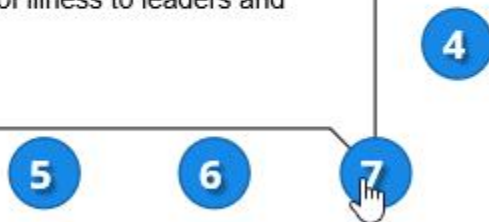
5   6   7

Respiratory Etiquette

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

Measure #7

Healthcare personnel should wear a mask when the healthcare worker has respiratory symptoms. (Report symptoms of illness to leaders and Employee Health).

4

5   6   7

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

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Healthcare Associated Infection (HAI)

- An HAI is an unexpected infection that develops after receiving care for another condition in a healthcare setting.

- Centers for Disease Control and Prevention (CDC) reports on any given day, about 1 in 31 US hospital patients has at least one healthcare-associated infection.

- Most HAIs are passed to the patient from the hands of healthcare workers or the healthcare environment.

- Surgical site infections (SSIs) are one of the most common HAI.

- Other types of HAI's include catheter associated urinary infections (CAUTI), Central Line associated Bloodstream infection (CLABSI) and Gastrointestinal infection caused by *Clostridioides difficile (C. diff)*.

Infection Prevention Practices

Advocate Aurora Health is protecting our patients from healthcare-acquired infections (HAI) through the following initiatives:

- Enterprise-wide Hand Hygiene Program
- Antimicrobial stewardship
- Protecting patients from bacterial transmission by performing hand hygiene, early placement in transmission-based precautions, and use of appropriate personal protective equipment
- Reducing healthcare-associated infections from urinary catheters and central lines by limiting use and early removal.
- Prevention of surgical site infections

Precautions and Personal Protective Equipment

| Standard Precautions | Personal Protective Equipment (PPE) | Transmission-based Precautions |

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Precautions and Personal Protective Equipment

| Standard Precautions | Personal Protective Equipment (PPE) | Transmission-based Precautions |

Standard Precautions are the minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where healthcare is delivered.

- Hand Hygiene
- Use of personal protective equipment (i.e. gown, gloves, eye protection)
- Respiratory etiquette
- Sharps safety
- Safe injection practices
- Cleaning and disinfection

When Standard Precautions alone cannot prevent transmission, they are supplemented with Transmission-based Precautions

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Precautions and Personal Protective Equipment

| Standard Precautions | Personal Protective Equipment (PPE) | Transmission-based Precautions |

Personal Protective Equipment (PPE) refers to wearable equipment that is designed to protect you from exposure to or contact with infectious germs. These include gloves, face masks, protective eye wear, and or face shields.

Hand Hygiene should be performed before applying or removing PPE.

Precautions and Personal Protective Equipment

Standard Precautions	Personal Protective Equipment (PPE)	Transmission-based Precautions

Transmission-based Precautions are designed to supplement Standard Precautions in patients with documented or suspected infection/colonization of highly transmissible or epidemiologically important pathogens.

Categories include:

- Contact Precautions
- Droplet Precautions
- Airborne Precautions
- Contact and Special Precautions

For diseases that have multiple routes of transmission (e.g., MDRO and influenza), more than one Transmission-based Precaution category may be used.

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Transmission-based Isolation – PPE Selection

- **Contact**
- **Droplet**
- **Airborne**
- **Contact & Special**
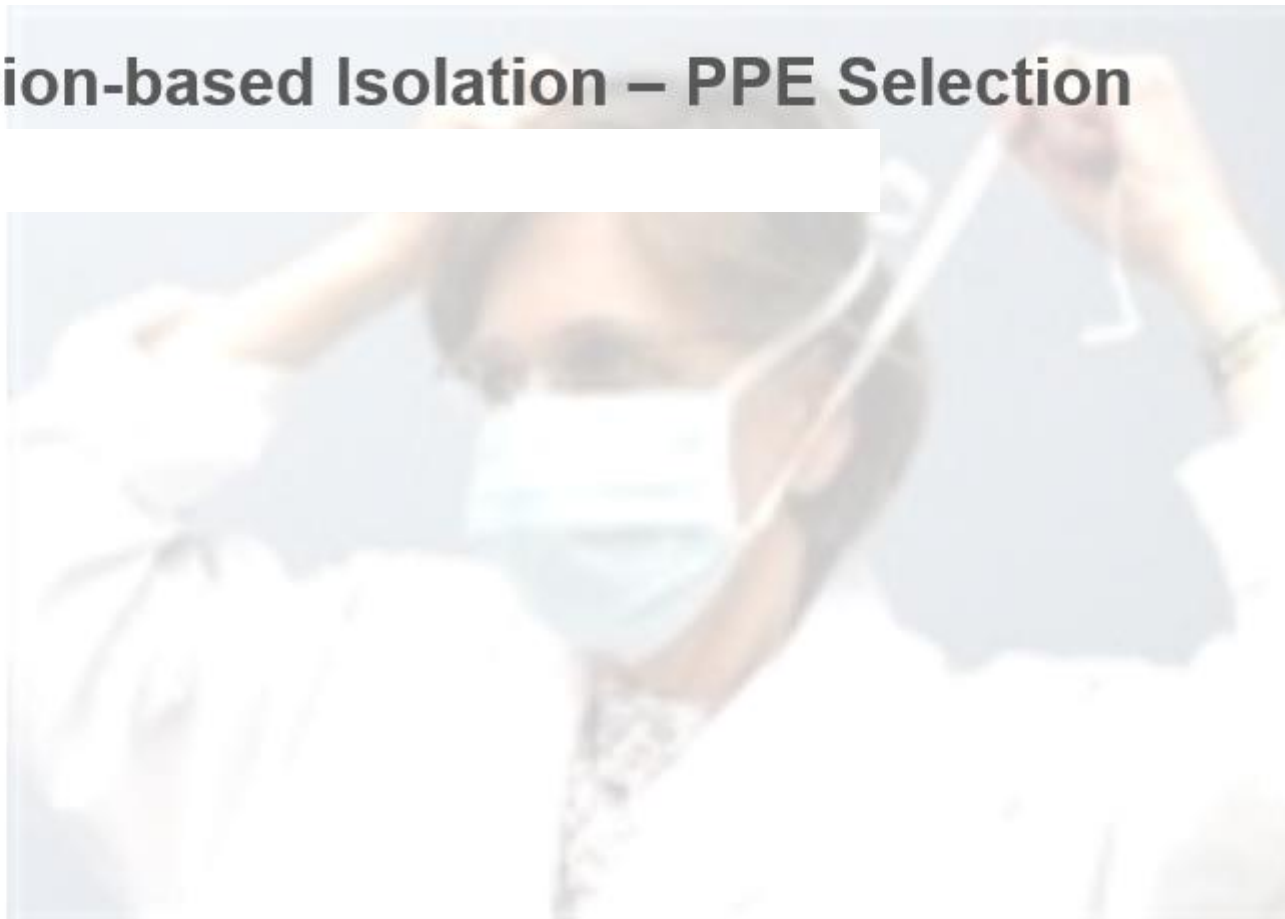
Transmission-based Isolation – PPE Selection

Contact

Droplet

Airborne

Contact & Special

Purpose: Reduce the risk of transmission of microorganisms by direct or indirect contact.

Required PPE: Gown and gloves

Transmission-based Isolation – PPE Selection

Contact

Droplet

Airborne

Contact & Special

Purpose: Reduce the risk of droplet transmission of infectious agents.

Required PPE: Procedure Mask

Transmission-based Isolation – PPE Selection

Contact

Droplet

Airborne

Contact & Special

Purpose: Reduce the risk of transmission of microorganisms by direct or indirect contact.

Also, requires specialized room cleaning.

Required PPE: Gown and gloves

Bioterrorism and Emerging Infectious Diseases

As you know, we are seeing new diseases everyday. To find out about these diseases:

- Ask the experts—Infection Preventionists
- Read Infection Prevention alerts when communicated to you
- Examples of some emerging threats include:

  - CRE (Carbapenem-resistant Enterobacteriaceae)
  - C.auris
  - CRAB (Carbapenem-resistant Acinetobacter)
  - Measles
  - Legionella

Multidrug-Resistant Organisms (MDRO)

- MDROs are bacteria resistant to many antibiotics

- They spread from patient to patient, usually from unwashed hands

- MDROs require Transmission-based Precautions in addition to Standard Precautions

- MDRO examples include: Methicillin-resistant *Staphylococcus Aureus* (MRSA), Vancomycin-resistant Enterococcus (VRE), and Carbapenem-resistant Enterobacteriaceae (CRE)

Communicable Disease Reporting

The main purpose of reporting communicable diseases is to prevent the spread of the disease, epidemics, death or disability resulting from the disease.

Depending on where you work, you may be involved in some communicable disease reporting.

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

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.

RESCUE

ALERT

CONTAIN

EVACUATE

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.

FIRE
PULL DOWN

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

CONTAIN

EVACUATE

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.

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

CONTAIN

EVACUATE

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.

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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

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.

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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

Hazardous Materials and Chemicals

1 2 3

4 5 6

Hazardous Materials and Chemicals

1 **2** **3**

4

Hazardous Materials and Chemicals

The likelihood of an adverse health impact occurring and the severity of the impact, is dependent upon:
- The toxicity of the hazardous substance
- The nature and extent of exposure to the hazardous substance
- Route of exposure

Hazardous Materials and Chemicals

1 **2** **3**

4 **5**

Four Main Routes of Exposure

There are four main routes of exposure:
- Inhalation - gases or vapors of volatile liquids
- Skin contact or absorption via mucous membranes
- Ingestion - less common route of exposure
- Injection - direct access to bloodstream due to mishap with sharps (highly unlikely)

NOTE: Ordinary Products and cleaners that are used daily can be hazardous
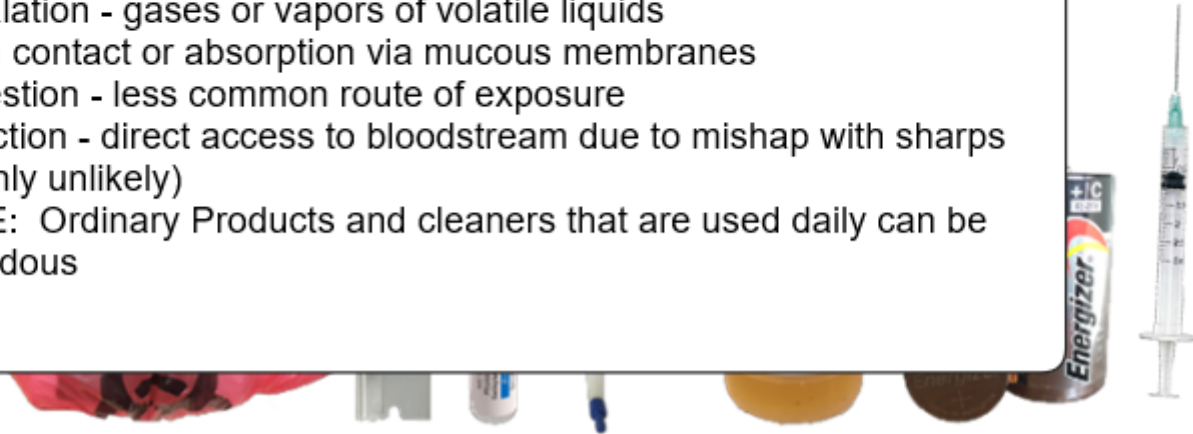
Hazardous Materials and Chemicals

1 **2** **3**

4 **5** **6**

Info on Hazardous Materials and Chemicals

Where you can find out about hazardous materials and chemicals:
- Safety Data Sheets tell you how to protect yourself from hazardous materials. They include precautions for protecting yourself and instructions for clean-up.
- Depending on where you work, online internal access to electronic SDS sheets are available.
- You may use other search engines such as Google or Yahoo to look up a chemical.

Hazardous Materials and Chemicals

1   **2**   **3**

4   **5**   **6**

Uniform Labeling of Containers

- Product identification
- Signal word - either **"Warning"** or **"Danger"** depending on the level of hazard
- One of nine pictograms showing the type of hazard - Explosive, Flammable, Oxidizer, Compressed Gas, Corrosive, Acute Toxicity, General Hazard, Health Hazard, and Environmental Hazard

The hazardous substance pictogram is a red-bordered diamond around a black symbol

Hazardous Materials and Chemicals

① ② ③

④ ⑤ ⑥

Safety Data Sheets (SDS) Information

Standardized 16-section Safety Data Sheet (SDS) - No longer MSDS
- Due to the standardized format, information will be more readily and easily accessible
- Less complicated - easier to understand
- Information on the label should be used to ensure proper storage of hazardous chemicals
- Information on the label should be used to quickly locate first aid when needed

Hazardous Materials and Chemicals

1 **2** **3**

4 **5** **6**

Hazardous Material Containers

More information on uniform labeling of hazardous material containers:
- **Hazard statements** describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard. For example, "Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin."
- **Precautionary statements** are to cover prevention, response to an accidental spill, or exposure, storage, and disposal as appropriate. Response includes first aid and fire situations related to the product.
- Name, address, and phone number of chemical manufacturer, distributor or importer is included.

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

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

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

Risks

Precautions

Warning Signage

- 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.
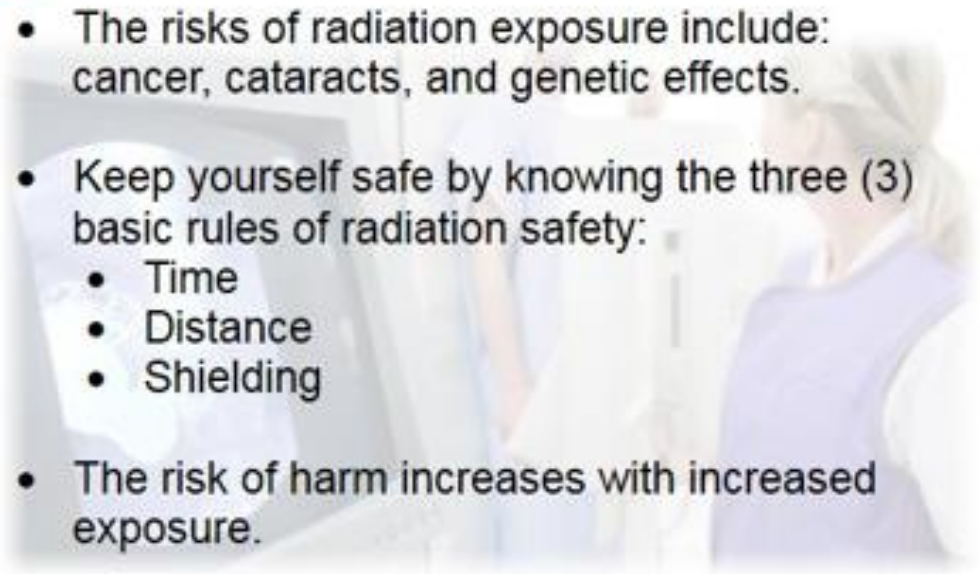
Radiation Safety

Risks

Precautions

Warning Signage

- 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

Risks

Precautions

Warning Signage

- 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

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

2.

3.

4.

5.

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

2

- Strategies for preparedness, mitigation, response and recovery are identified.

3

4

5

Emergency Management Planning

1

2

3

4

5

Fact #3

Hospitals have a well-equipped Command Center. The Command Center is activated when conditions greatly impact the delivery of patient care.

Emergency Management Planning

1

2

3

4 **Fact #4**
Facilities have emergency resources on hand (cots, medical respirators, portable generators, redundant communication).

5

Emergency Management Planning

1

2

3

4

Fact #5

5   Exercise/drills occur annually in the hospital setting to test plans.

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Utility Outage

If the power fails, follow these instructions

If you are in a facility

If you are at a patient's home

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Utility Outage

If you are in a facility   **If you are at a patient's home**

- Hospitals, Ambulatory Surgery Centers, some clinics and business office buildings have emergency generators. Find out from your leader whether your site location has an emergency generator.
- If the power fails, emergency generators will resume power within 10 seconds to red/gray electrical outlets
- To help you be prepared when utilities fail in the facility:
  - Know where your flashlights and batteries are kept
  - Know which phones will work if the phone system fails
  - Have a plan on how patients will summon help in case the call system fails
  - Ensure critical patient care equipment is plugged into red/gray outlets
- Site-specific
  - In the event of other major utility failures (phone, gas, water, drains, ventilation, etc.) call the Facilities Operations Department, and when needed, call the operator to have the emergency overhead announced.

Utility Outage

If you are in a facility **If you are at a patient's home**

- Encourage patients to keep an emergency kit on hand with enough supplies to last at least 3 days (i.e., water, food that won't spoil, flashlights with extra batteries, blankets, a first-aid kit, and any medications and supplies).

- Medical equipment may have a back-up battery system. Be sure to review all training materials.

- Encourage patients to keep emergency phone numbers (ambulance, fire, police, hospital) on hand.

- Have a battery-powered radio with extra batteries available and tune in to local news station for specific instructions in case of power outage.

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?

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 Response
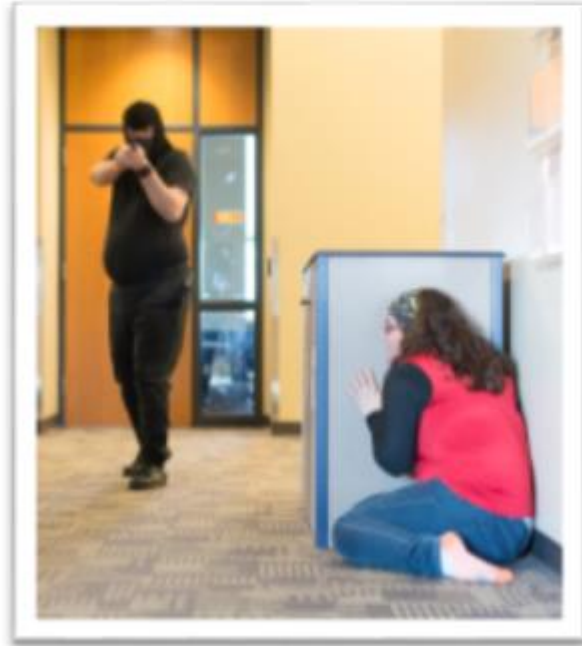
Follow the **"RUN-HIDE-FIGHT"** response in any order as safely as possible.

RUN

HIDE

FIGHT

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
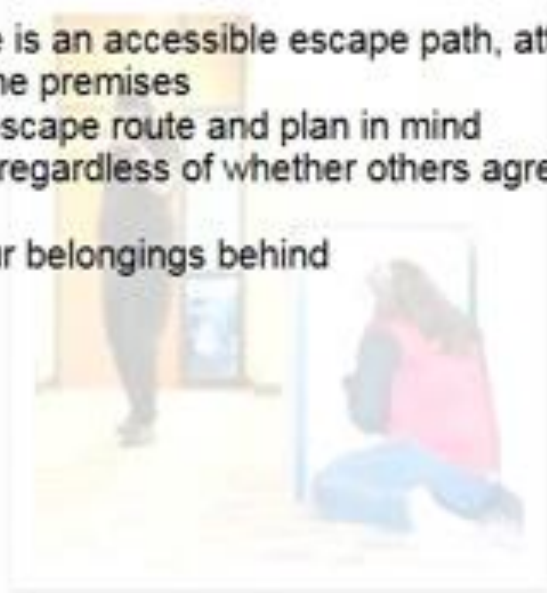
Active Shooter Response

Follow the "**RUN-HIDE-FIGHT**" response in any order as safely as possible.

RUN

HIDE

FIGHT

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

Active Shooter Response

Follow the "**RUN-HIDE-FIGHT**" response in any order as safely as possible.

RUN

HIDE

FIGHT

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

Threat to an Individual

Threat to a Specific Department

Threat to a Specific Building/Facility

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.

Perimeter Control

Threat to an Individual

Threat to a Specific Department

Threat to a Specific Building/Facility

- Identify a safe zone within the department, preferably a room with a lock

- No overhead announcement will be made

Perimeter Control

- **Threat to an Individual**

- **Threat to a Specific Department**

- **Threat to a Specific Building/Facility**

- 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

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Perimeter Control

Threat to an Individual

Threat to a Specific Department

Threat to a Specific Building/Facility

- 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

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

Classic Patient Presentation

Presentation in Women

Presentation in the Elderly

Presentation of Diabetic Patients

Risk Factors

Signs and Symptoms of Acute Coronary Syndrome

Classic Patient Presentation	Presentation in Women	Presentation in the Elderly	Presentation of Diabetic Patients	Risk Factors

- Left chest pain, pressure
- Burning with or without radiation to left arm and/or jaw
- Sweating
- Shortness of breath
- Abnormal symptoms may include:
- Nausea, vomiting, belching and hiccups

Signs and Symptoms of Acute Coronary Syndrome

Classic Patient Presentation	Presentation in Women	Presentation in the Elderly	Presentation of Diabetic Patients	Risk Factors

- Unusual fatigue and/or weakness
- Sleep disturbances
- Shortness of breath
- Indigestion and/or nausea
- Anxiety
- Dizziness
- Cold sweats

Signs and Symptoms of Acute Coronary Syndrome

Classic Patient Presentation

Presentation in Women

Presentation in the Elderly

Presentation of Diabetic Patients

Risk Factors

- Generalized weakness/fatigue
- Upper abdomen pain
- Sweating
- Nausea and/or vomiting
- Altered mental status
- Dizziness
- Fainting episodes

Signs and Symptoms of Acute Coronary Syndrome

Classic Patient Presentation	Presentation in Women	Presentation in the Elderly	Presentation of Diabetic Patients	Risk Factors

- Shortness of breath
- Sweating
- Weakness and/or fatigue
- Pain in the upper abdomen and/or chest
- Nausea and vomiting

Signs and Symptoms of Acute Coronary Syndrome

| Classic Patient Presentation | Presentation in Women | Presentation in the Elderly | Presentation of Diabetic Patients | Risk Factors |

- Smoking
- High blood pressure
- High blood cholesterol
- Diabetes
- Physical inactivity
- Being overweight or obese
- A family history of chest pain, heart disease or stroke

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.

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Stroke / Brain Attack

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?

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Stroke / Brain Attack

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A **stroke**, also called a **brain attack**, occurs when blood flow carrying oxygen and nutrients to the brain cells is interrupted (stopped), causing brain cells to die within minutes. This causes **permanent damage** to the brain.

During a stroke, approximately 32,000 brain cells die every second.
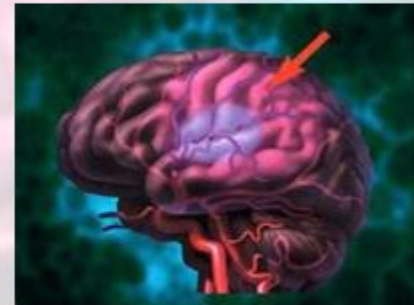
Stroke / Brain Attack

What is Stroke or Brain Attack?

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What is a Transient Ischemic Attack (TIA)?

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Most common type is an **Ischemic Stroke**
Cause: Blockage of blood Flow
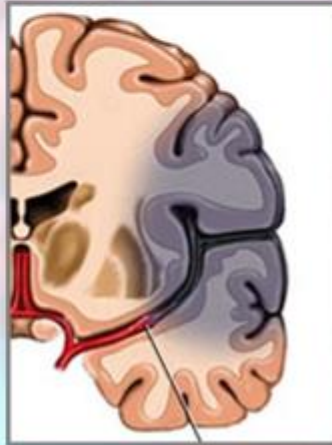
The other, less common, is a **Hemorrhagic Stroke**
Cause: Bleeding into the brain

Stroke / Brain Attack

What is Stroke or Brain Attack?

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What is a Transient Ischemic Attack (TIA)?

What are Stroke Risk Factors?
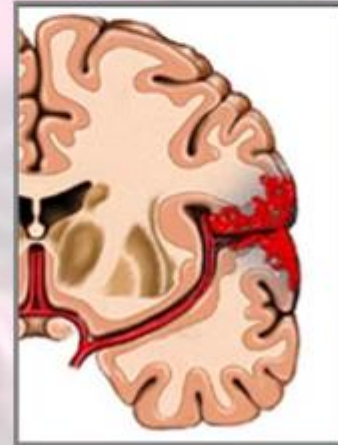
Some people refer to a transient ischemic attack (TIA) as a "mini stroke", or *"WARNING STROKE."*

TIA is an **EMERGENCY** since the chance of developing a stroke is 10X higher in a person with a TIA.

You will learn in future slides what actions to take if someone shows signs and symptoms of a TIA or stroke.
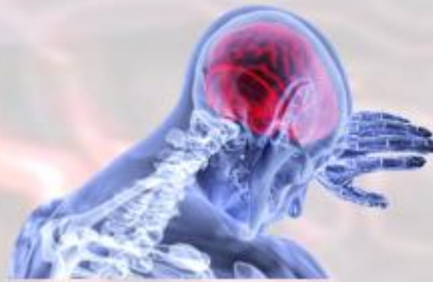
Stroke / Brain Attack

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?

What Can't be Changed	What Can be Changed or Managed
• Age • Gender • Race Past • Medical History • Family History of Stroke	• High Blood Pressure • Diabetes • Smoking (i.e. cigarettes, vape pens) • Excessive Alcohol or Drugs • Poor Diet • Physical Inactivity • High Cholesterol (Fatty Blood) • Irregular Heartbeat

Is it a Stroke? Think B.E. F.A.S.T.

B **E** **F** **A** **S** **T**

Is it a Stroke? Think B.E. F.A.S.T.

B **E** **F** **A** **S** **T**

BALANCE – is the patient experiencing a change in walking or looks uncoordinated?

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Is it a Stroke? Think B.E. F.A.S.T.

B   **E**   **F**   **A**   **S**   **T**

EYES - Is there sudden blurred or double vision or sudden, persistent vision trouble? Is the patient looking to one side?

Is it a Stroke? Think B.E. F.A.S.T.

| B | | E | | F | | A | | S | | T |

ARMS – Ask the person to raise both arms. Does one side drift downward? Is there weakness or numbness on one side?
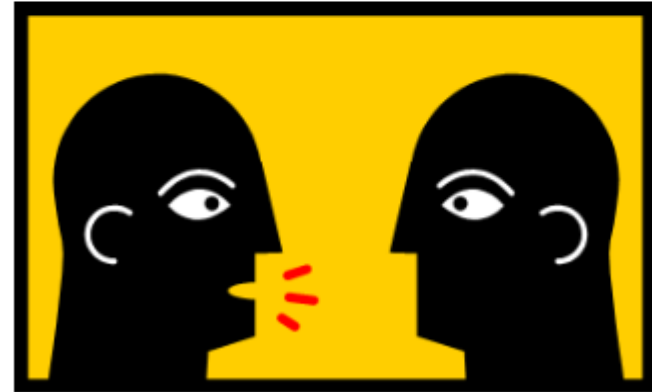
Is it a Stroke? Think B.E. F.A.S.T.

B	E		F	A	S	T

TIME – Call medical alert/rapid response team for immediate medical attention if you notice one or more of these signs. Also, take note of when symptoms began.

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

Types of Abuse

Patients Vulnerable to Abuse

Abusive Team Member Behavior

Physical Abuse – Unlawful use of any physical force on another person, including beating or offensive touching without the person's consent.

Sexual Abuse – Use of force to have sexual contact or intercourse.

Emotional/Psychological Abuse - Threatening, intimidating or harassing a patient.

Additional Information on Abuse

Types of Abuse

Patients Vulnerable to Abuse

Abusive Team Member Behavior

The elderly, especially those living in long-term care settings.

Needy/demanding patients.

Patients who are totally dependent upon a caregiver for their needs.

Patients with psychiatric disorders

Additional Information on Abuse

Types of Abuse

Patients Vulnerable to Abuse

Abusive Team Member Behavior

Unwillingness to care for patient.

Defensiveness when asked about a patient.

Displaying anger towards a patient.

Ignoring patient needs.

Inappropriate affection for a patient.

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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

ILLINOIS

WISCONSIN

Reporting Abuse

Advocate Aurora Health is required by law to report suspicion of abuse. If patient abuse is suspected:

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ILLINOIS

WISCONSIN

Report any instance of abuse to IDPH within 24 hours of receiving the suspected abuse information.

Report to IDPH submitted by Site regulatory department or designee.

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](#)

ILLINOIS

WISCONSIN

Child Abuse/Neglect:
- Cases of suspected child abuse/neglect must be reported to Child Protective Services in the county where the child lives or to local law enforcement as soon as possible after assessment.

Adult Abuse:
- When warranted, report adult abuse to local law enforcement as soon as is reasonably possible.
  - Abuse of adults 59 and younger will be reported to Adult Protective Services in the county where the patient lives
  - Abuse of adults 60 and over, should be filed with the county department, the adult-at-risk agency, a state or local law enforcement agency, the department or the board on aging and long-term care.

Food Allergies – Keeping our Patients Safe

Fact #1

Fact #2

Fact #3

Food Allergies – Keeping our Patients Safe

Fact #1

Fact #2

Fact #3

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 #1

Fact #2

Fact #3

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 #1

Fact #2

Fact #3

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

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 ensure 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?

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?

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

- The last person seen with him/her.

- The last location of the person.

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?

- **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.

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.

- Notify Security & Public Safety of missing/ eloped patient.

- Security & Public Safety will activate search protocol.

- If needed, Security & Public Safety will initiate an overhead announcement.

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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.
- 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.

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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

2

3

4

5

6

Compressed Gas Cylinder Safety

1

2

3

4

5

6

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

3

4

5

6

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).

Compressed Gas Cylinder Safety

1

2

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Rule #1

Oxygen cylinders should be removed from wheelchairs when approved use during transport is complete.

Compressed Gas Cylinder Safety

1

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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.

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 **2** **3**

The RIGHT drug | The RIGHT dose | The RIGHT duration

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 ② ③

WHAT is Antimicrobial Stewardship?

Antimicrobial Stewardship is an effort to ensure that all patients are prescribed antimicrobials appropriately, while minimizing adverse events, unintended consequences (*C. difficile* infections), and antimicrobial resistance that are associated with misuse.

drug

HT
dose

The RIGHT
duration
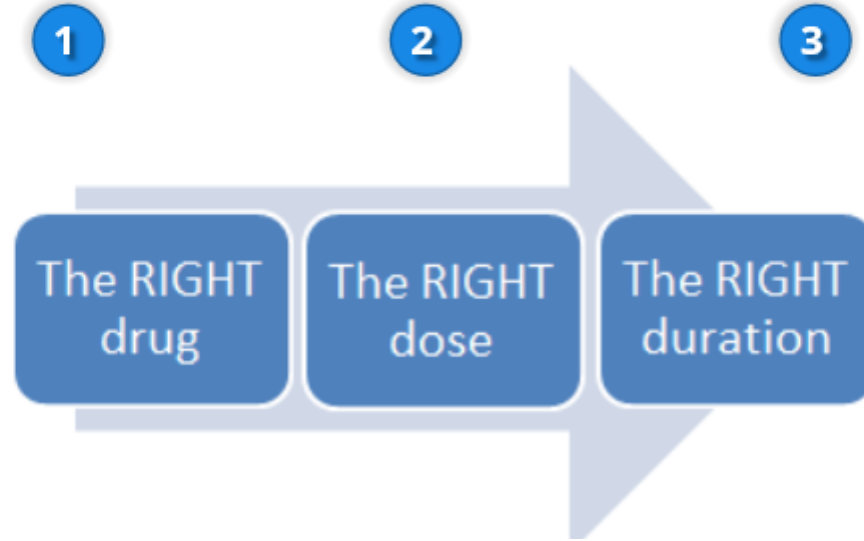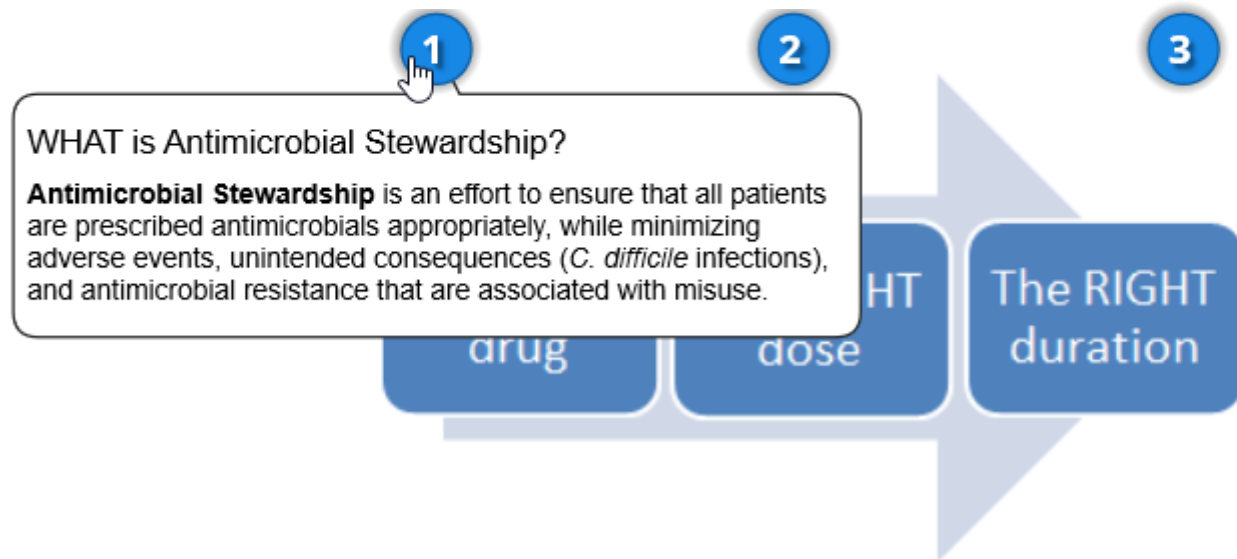
Antimicrobial Stewardship

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

1   **2**   **3**

Aurora Health Care Antimicrobial Stewardship Program

The AAH ASP is a system-wide, multidisciplinary and collaborative group of experts who:

- Measure and analyze data related to antimicrobial activity and use throughout Advocate Aurora and implement clinical programs to **optimize antimicrobial use**
- Develop educational materials for caregivers and patients - available online

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

2

3

The RIGHT drug

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

Click each button to see the consequence and opportunity for each Case.

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).

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

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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

● 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)

- [x] a. Remove equipment from service and sequester it

- [x] b. Tag the equipment "Do Not Use"

- [x] c. Keeping all tubing and other disposable products with equipment

- [x] 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

○ False

◉ 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

○ False

◉ 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.

Fire Safety in the Procedural Environment

Description
This fire safety educational session is designed to review the components of a fire triangle and safety measures required to prevent and/or contain fires in the procedural environment. It will take approximately 30 minutes to complete this course.

Instructions
- This course is tested and guaranteed to function on an Aurora network PC
- How to navigate this course
- This course does not have sound
- The CME credits version of this course is available through the CPD Learning Platform

Technical Contact
If you have technical questions please contact the Service Desk at 414-647-3520 in Milwaukee or 1-800-889-9677.

Content Contact
Peggy Kuehl MSN RN CNOR
CNS procedural Service, ASMMC

Created September 2011
Updated June 2019

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
- Pneumonectomy
- 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 electrocautery

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 electrocautery 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

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.

[ ] Convert to High Risk Score

- [ ] 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

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 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

In the event of a fire on a patient:

Rescue
- Rescue the patient from harm

RACE

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.

RACE

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

RACE

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/internal 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/compartments 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

Rescue 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

Alarm – initiate fire emergency

- Communicate fire activity to all procedural personnel, especially personnel in adjacent rooms
- Pull nearest fire alarm station and activate response team

Confine the fire to one room/area

- Close all doors to involved room
- Shut off medical gas to room
- Turn off electricity to involved room

Extinguish 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 patent 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

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 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

Association of periOperative Registered Nurses (AORN). (2019). *Fire Safety Tool Kit*. Denver, CO:AORN Inc.

The Joint Commission. (2003). *Sentinel Event Alert: Preventing surgical fires, 29*. Retrieved from http://www.jointcommission.org/assets/1/18/SEA_29.PDF

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-health_care/t/fire-or-hundreds-are-hurt-every-year/ on 4/2/2014.

ABC news story: https://abcnews.go.com/GMA/video/inside-renewed-push-prevent-procedural-fires-51352364

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AAH Universal Protocol for Procedural Safety

Title: AAH Universal Protocol for Procedural Safety	Document Number:
Document Type: ☒ Policy ☒ Procedure ☐ Guideline ☐ Protocol ☐ Other	Last Review/Revision Date:
Content Applies to Patient Care: (Select all that apply) / Content Applies to: (Select One)	Next Review Date:
☒ Adults / ☒ Pediatrics (Under 18) — ☒ Clinical / ☐ Administrative	Effective Date:

Scope: ☒ AAH System ☐ ACH ☐ AAH IL Only ☐ AAH WI Only ☐ Site Only (Location Name):
☐ Department Only (Department Name):

I. PURPOSE

To establish expectations for compliance with the Universal Protocol (UP) for Procedural Safety initiative, and optimize patient safety by preventing wrong-person, wrong-procedure, and wrong site procedures through enhanced team communication.

II. SCOPE

This policy applies to Advocate Aurora Health, Inc. and any entity or facility owned and controlled by Advocate Aurora Health.
A. The UP requirements are applicable to all invasive medical and surgical procedures for which a written informed consent is obtained regardless of the location of the procedure at which they are performed or if anesthesia or sedation are planned.
  a. Hospital based locations include but are not limited to:
    i. Operating rooms, hospital-based Ambulatory Surgery Centers, procedures performed in Same Day Surgery or Post-Anesthesia Care Units, minor procedure rooms
    ii. Cardiac catheterization and Electrophysiology labs
    iii. GI Lab
    iv. Interventional Radiology
    v. Ambulatory treatment centers and special procedure areas where biopsies or other invasive procedures maybe performed (example breast imaging)
    vi. Emergency department
    vii. Bed-side procedures
  b. Non-hospital-based ambulatory procedural facilities including but not limited to: Ambulatory surgery centers, free-standing pain centers, etc.
  c. Areas in which procedures are done outside of primarily designated invasive procedural areas and office and clinic settings in the outpatient arena, please see the attachment AAH- Procedures Done Outside of Primarily Designated Invasive Procedural Areas for a list of procedures for which the Universal Protocol should be followed. The attachment also includes a list of procedures that are excluded.
B. Exclusion: Routine "minor" procedures (see definitions) are out of scope for this policy.

III. DEFINITIONS/ABBREVIATIONS

A. **Universal Protocol (UP):** Standards that help prevent the occurrence of wrong person, wrong procedure and wrong site surgery and enhance patient safety by requiring a uniform process for correctly identifying the patient, the appropriate procedure, and the correct site of the procedure.

B. **Informed Consent:** Informed consent is the shared decision-making process in which a health care provider educates a patient or their substitute decision maker about the risks, benefits, and alternatives of a given procedure or intervention. The patient or substitute decision maker voluntarily decides about whether to undergo the procedure or intervention.

C. **Routine "minor" procedures:** Procedures for which informed consent is not required. Examples include but are not limited to venipuncture, peripheral IV-line placement, medication administered via subcutaneous or intramuscular or intradermal injection, and insertion.

D. **Emergency Procedure:** A case in which there is an immediate threat to life or limb, and the patient is unable to give informed consent.

E. **Team:** All individuals assigned to a particular medical or surgical procedure.

F. **Licensed Independent Practitioner (LIP):** An "LIP" is a licensed independent practitioner, defined as an individual, as permitted by law and regulation, and also by the organization, to provide care and services without direction or supervision within the scope of the individual's license and consistent with the privileges granted by the organization. This includes but is not limited to, advance practice nurse practitioners (APRNs) and physician assistants (PAs).

G. **Red Rule:** Red rules are rules that cannot be broken. In highly reliable industries, red rules are few in number, easy to remember, and associated only with processes that can cause serious harm or death to team members or patients.

H. **Ignition Source:** Any device that produces heat and may include, but not limited to:
  a. Fiberoptic light cables, light boxes
  b. Drills, saws, burrs

c. Electrocautery devices including hand-held battery-operated cautery devices
d. Argon beam coagulators
e. Lasers
f. Defibrillators

I. **Implant:** A device or tissue that is intended to be placed into the body for more than 30 days to continually assist, restore, or replace the function of an organ system or structure of the human body throughout the useful life of the device or tissue, this includes any FDA designated implant.

J. **EHR:** Electronic Health Record

K. **Universal Protocol Checklist:** a tool used by team members at Advocate Aurora Health that outlines the steps of the Universal Protocol that may be accessed via poster, job aide or within the Electronic Medical Record

L. **POA-HC:** Power of Attorney for Health Care

M. **HOD:** Hospital Outpatient Department

IV. **POLICY**

A. The appropriate Universal Protocol Checklist is used by team members when performing an invasive procedure within the scope of the Universal Protocol policy. Checklists and elements of the Time Out and Sign Out vary based upon practice setting and include:
  1. Expanded Universal Protocol targeted areas include but are not limited to:
    a) Operating Rooms (ORs)
    b) Obstetrics Operating Rooms (OB ORs)
    c) Gastrointestinal (GI) labs
    d) Interventional Radiology (IR)
    e) Cardiac Cath Labs
    f) Pain Clinics (OpTime)
    g) Ambulatory Surgery Centers
  2. Abbreviated Universal Protocol targeted areas include but are not limited to:
    a) Bedside procedures
    b) Emergency Department (ED)
    c) Intensive Care Units (ICUs)
    d) Wound Care Clinics
    e) Pain Clinics (HOD)
    f) Clinic and Office Settings

3. Areas in which procedures are done outside of primarily designated invasive procedural areas (based on EHR build)

B. Completion of the elements of the Universal Protocol are documented with the EHR when performing an invasive procedure within the scope of the Universal Protocol policy.
  1. If multiple Time Outs are performed, each will be documented.

C. The Universal Protocol for Procedural Safety Policy requires that the following elements must be performed.
  1. Pre-procedure verification
    a) Patient verification will be performed per AAH Patient Identification policy.
    b) If a patient is a minor, verification must be done with the parent/legal guardian.
  2. Pre-procedure site marking, as appropriate
    a) Site marking applies to procedures where there is more than one possible location for a procedure.
    b) Site marking on minor patients must include parent/legal guardian.
    c) For procedures in which a pre-procedure peripheral block will be used, the intended site of injection must be marked in addition to the intended site of incision.
  3. The Time Out is performed immediately prior to starting the procedure. Special circumstances for performing the Time Out are noted below:
    a) Emergency procedure Time Out will verify:
      (1) Correct patient identity
      (2) Agreement of the procedure to be done
      (3) Relevant medical conditions that may impact the procedure
    b) Multiple Time Outs are required when:
      (1) Multiple procedures are performed on a single patient that requires completion of multiple informed consents.
      (2) Multiple procedures are being performed on the same patient by different surgical or procedural teams.
        (a) Administration of a regional anesthetic block prior to or following a procedure.
    c) Failure of the Time-Out process is considered a violation of a Red Rule. Information regarding Red Rule violations is detailed in the system policy for Red Rules.
  4. Sign Out is performed at the conclusion of a surgery or procedure before team members disperse

D. Informed consent is complete and reviewed prior to procedure as required in the Informed Consent policy.

E. A standardized implant verification will be performed prior to opening an implant package when implants will be used.

V. PROCEDURE

A. **Pre-procedure verification process includes** verification of the correct person, correct site and correct procedure should occur at the times listed below with patient, legal guardian or POA included whenever possible.
   1. When the procedure is scheduled
   2. At the time of pre-admission testing and assessment
   3. Upon admission or entry into the facility for a procedure.
   4. When the responsibility for the patient is transferred from one team member to another.
   5. The elements of pre-procedure verification may include but is not limited to:
      a) An accurate and complete informed consent is present per policy, except in cases of emergency where a consent is not required.
      b) The site is confirmed with the patient or duly appointed legal guardian or POA.
      c) Relevant documentation or required diagnostic reports are available and reviewed.
      d) Requested blood or blood products are available
      e) Requested implants, devices or equipment are available
      f) All documents are addressed to ensure that the correct site and/or side is listed.
      g) Missing information or discrepancies will be addressed before starting the procedure.

B. **Site Marking**
   1. Procedure or surgical site marking applies to procedures where there is more than one possible location for a procedure. Examples are:
      a) Laterality
      b) Limbs
      c) Digits (Fingers and toes)
      d) Lesions
      e) Levels of spine
      f) Organs
   2. Procedures on premature infants for whom marking may cause a permanent tattoo, follow site specific site identification process.
   3. The procedure site is marked before the procedure is performed and if possible, with the patient involved.

4. The site will be marked by the individual performing the procedure with their initials. The site marking should occur prior to sedation with the patient, awake and involved, if possible, or with their duly appointed guardian.
   a) The mark is made using an approved single use patient skin marker at or near the procedure site and is sufficiently permanent to be visible after skin preparation and draping.
5. For minimal access procedures that intend to treat a lateralized internal organ, whether percutaneous or through a natural orifice, the intended side is indicated by a mark at or near the insertion site and remains visible after completion of the skin prep and sterile draping.
6. For teeth, the operative tooth name(s) and number are indicated on documentation or the operative tooth (teeth) is marked on the dental radiographs or dental diagram. The documentation, images, and/or diagrams are available in the procedure room before the start of the procedure.
7. Procedures Exempt from Site Marking
   a) Procedures that have a midline approach intended to treat a single, midline organ (e.g. C-section, CABG).
   b) Endoscopies without intended laterality.
   c) Procedures in which there is no predetermined site of insertion such as cardiac catheterization and other interventional procedures.
   d) Cases in which the individual doing the procedure is in continuous attendance with the patient from the time of decision to do the procedure (and consent obtained) up to the time of procedure itself. Applicable to instances outside of primarily designated as invasive procedural areas. (bedside, office, etc.)
   e) Site marking for Bilateral Procedure is not required.
8. Site marking for Spinal Procedures is a 2-step process:
   a) First the general level of procedure (cervical, thoracic or lumbar) must be marked pre-operatively. If the approach involves anterior versus posterior, or right versus left, then the mark must indicate this. (Site marking for anterior lumbar approaches should be at the level/site of intended incision point, for example.)
   b) Secondly, intra-operatively, the exact interspace(s) to be operated on should be precisely marked using radiographic marking technique.
9. Marking obvious wound or lesion
   a) If there are multiple wounds or lesions and only some of them are to be treated, then the sites to be treated should be marked at the time the decision to treat them is made.

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C. **Addressing Fire Safety Risk**
1. For situations where an ignition source will or could be used, address fire safety risk prior to the start of any surgical or invasive procedure.
2. Appropriate fire safety measures will be implemented based on fire safety risk.
3. Identified fire risk(s) will be communicated to the procedural team during the Time Out.

D. **Time Out**
1. The Time Out
   a) Involves all immediate members of the surgical or procedural team who will be participating in the procedure from the beginning.
   b) Must be performed immediately prior to the incision, injection or start of the procedure
   c) All other activities are suspended, to the extent possible without compromising patient safety
   d) Is performed using an interactive, challenge-response communication method
2. Can be initiated by any member of the team. All team members are authorized and required to express any concerns or discrepancies that exist. No procedure will be initiated until all identified differences and/or concerns are reconciled to the satisfaction of all team members.
3. Time Out (Non-Emergency Procedures) will verbalize/address:
   a) Expanded Time Out
      (1) Correct patient
      (2) Correct procedure
      (3) Site marking visible or correct site verified
      (4) Consent accurate and signed
      (5) Required images, implants, and equipment available
      (6) Patient allergies
      (7) Fire risk and special precautions
      (8) Code status addressed (for non-full code patients)
      (9) Antibiotic dose and time given, if appropriate
      (10) Beta blocker given, if ordered
      (11) Team invited to voice any concerns
   b) Abbreviated Time Out
      a) Correct patient
      b) Correct procedure
      c) Site marking visible or correct site verified
      d) Consent accurate and signed
      e) Required images, implants, and equipment available
      f) Patient allergies
      g) Fire risk and special precautions (*inpatients*)

h) Code status addressed (for non-full code patients) (*inpatients*)

E. **Implant Verification (when applicable)**
1. Use of a separate implant verification process supports focused team communication and reduces surgical/procedural errors.
2. The implant verification will be performed prior to opening an implant package and include the following elements:
   a) Correct size
   b) Correct laterality (if applicable)
   c) Implant type
   d) Expiration date (if applicable)
   e) Assurance of package integrity
3. Prior to opening an individually packaged implant and delivering it to the procedural team, the following steps should occur:
   a) Circulating nurse/technologist reads directly from the implant packaging.
   b) Implant package is held up to surgeon/proceduralist so that they may confirm that the implant is correct.
   c) Final verification must be completed at a minimum by the surgeon/proceduralist and circulator of surgical/procedural team, NOT the vendor.
   d) Document implant identification information in the EHR.

F. **Sign Out**
1. During the Sign Out all team members will actively participate.
2. The Sign Out will include the below components:
   a) Expanded version:
      a) Final procedure performed
      b) Specimens removed (Yes / No)
         (a) Specimens labeled with correct patient identifiers
         (b) Correct specimen testing ordered
      c) Count results addressed
      d) Estimated/Quantitative blood loss and I/O verified
      e) Immediate post-op needs, and destination
      f) Post-op code status addressed (for non-full code patients)
      g) Programming needs of pre-existing permanent pacemaker /implanted device addressed
      h) Wound class verified, if appropriate
      i) General or equipment concerns addressed
   b) Abbreviated version:
      a) Final procedure performed
      b) Specimens removed (Yes / No)
         (a) Specimens labeled with correct patient identifiers

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      (b)   Correct specimen testing ordered
      (c)   Specimen transport plan

CROSS REFERENCES

AAH Patient Identification
Informed Consent for Minors (IL Only)
Informed Consent for Procedures, Interventions or Medical Care That Require
Consent for Adults (IL Only)
INFORMED CONSENT- INFORMED REFUSAL (WI Only)
AAH Corrective Action

VI.   **RESOURCES AND REFERENCES**

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B.   Association of Peri-Operative Registered Nurses (AORN). (2020).
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      Practices, and Guidelines AORN. Denver: CO.
C.   DNV GL Healthcare: Accreditation, Certification and Training. Retrieved
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F.   **Association of Peri-Operative Registered Nurses (AORN). (2021)
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      Manual, Appendix L, Guidance for surveyors, Ambulatory Surgery
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H.   **FDA:** https://www.fda.gov/MedicalDevices/default.htm
I.   **Joint Commission Resources:**
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    2.   The Joint Commission. The Universal Protocol. Retrieved from
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    3.   The Joint Commission. Sentinel Event. Retrieved from
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       topics/sentinel-event/
    4.   The Joint Commission. Speak Up Poster. Retrieved from
       http://www.jointcommission.org/assets/1/18/UP_Poster1.PDF
J.   **Additional On-line Universal Protocol Resources:**
    1.   http://www.who.int/patientsafety/safesurgery/en/
    2.   http://www.aom.org/Clinical_Practice/ToolKits/Correct_Site_Surger
       y_Tool_Kit/Comprehensive_checklist.aspx

VII.   **ATTACHMENTS**

A.   AAH Procedures Done Outside of Primarily Designated Invasive
      Procedural Areas
B.   AAH Universal Protocol Checklist Poster - Expanded
C.   AAH Universal Protocol Checklist Poster – Abbreviated (Outpatient)
D.   AAH Universal Protocol Checklist Poster – Abbreviated (Inpatient)

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