

Unit Four - Safe and Sound

Patient and Employee Safety - Lecture Notes

Safety

- Freedom from danger, risks, and injury.
- Quality health care begins with the safety of the patient and the health care worker.
- You must know how to respond if an emergency occurs.
- SAFETY FIRST!
- Questions:
 - What are some personal safety practices that you do everyday?
 - “That looks like an accident waiting to happen”.
 - Causes of common accidents can be prevented.

Prevention

- The best way to control accidents and injuries is to prevent them.
- Regular safety training is required of health care workers.
- Report unsafe practices to a charge nurse or supervisor.
- Learn how to modify your environment to create safe working conditions.

Governing Agencies

- Occupational Safety and Health Administration (OSHA).
 - Oversees safety in the workplace.
- Centers for Disease Control & Prevention (CDC).
 - Set standards for accidental transmission of diseases.
- Food and Drug Administration (FDA).
- Environmental Protection Agency (EPA).

OSHA Standards

- Employees have the right to know what hazards are present in their environment.
- Employers are required to train and offer immunizations to high-risk employees in the first 10 days of a new job.
- Health care agencies and facilities must address:
 - Ergonomic program
 - Injury & illness program
 - Hazard communication program
 - Exposure control plan

Material Safety Data Sheets

- Required by OSHA – all employees must be told about all hazards and chemicals in the workplace.
- Manufacturers are required to provide a copy of the MSDS for all products they sell.
- Formats are not standard, however the information that must be covered in an MSDS are standard.
- The MSDS should contain:
 - Manufacturer’s name and address.

Health Occupations Professional Essentials

- Chemical information & formula.
- Physical appearance and how to recognize it.
- Health hazards.
 - Health hazard information
 - Methods of exposure.
 - First aid.
 - Personal protective equipment required.
 - Occupational control measures
 - Exposure limits.
 - Storage & special information
 - Hazard rating for the chemical
 - 0 = no hazard
 - 4 = extreme hazard
- Fire and explosion data.
- Reactivity level (stability, decomposition).
- Personal protective equipment (PPE) required when handling the chemical.
- Leak/spill disposal procedures.
- Hazard rating for the chemical.
- Labels
 - All chemicals must be properly labeled.
 - If a label is not readable or is missing, it must be replaced or the chemical disposed of.
 - Must include chemical name, hazard warning, and manufacturer's information.
- Failure to comply can result in large fines for health care institutions.

Waste Handling

- Huge fines are also given for improper medical waste disposal.
 - Sharp instruments
 - Must be disposed of in “sharps containers”, securely affixed to a wall or counter to avoid tipping.
 - Containers cannot be emptied & re-used.
 - Biohazardous materials
 - Red bag with biohazard label.
 - Chemotherapy wastes
 - Yellow bag with chemotherapy label.
 - Radioactive wastes
 - Handled only by nuclear medicine or by radiological health.
 - Chemical wastes
 - Bagged with clearly identifiable label as to the material contained.

Spill Response

- The general spill response is to:
 - Isolate the area to prevent personnel exposure and spreading of material.
 - Notify supervisor and other appropriate departments.
 - Utilize Body Substance Precautions when cleaning up blood or other potentially infectious materials.

Preventing Accidents

- All members of the health care team must commit to safety.
- Every accident/injury must be documented and reviewed to help prevent future accidents.
- Poor judgment, physical limitation, and lack of training are a few of the causes of accidents.
- Education is the key to a safe facility.
- Accidents can be divided up in to two main categories:
 - Accidents related to the physical environment and equipment.
 - Accidents related to patient care.
- Guidelines for preventing and reacting to accidents and emergencies:
 - Know the environment, including the location of exits, stairs, fire alarms and extinguishers, call signals, paging systems, and emergency lights.
 - Know the safety policies and procedures for your facility.
 - Operate only the equipment you are trained to use.
 - Report accidents, spills, and damaged or malfunctioning equipment immediately.
 - Do not use frayed or damaged electrical cords or ungrounded equipment.
 - Wash your hands frequently.
 - Never use any product that does not have a readable label.
 - Read all labels at least three times before using the product.
 - Read the MSDS for any product you will be using.
 - Wear personal protective equipment when handling hazardous or unknown chemicals.
 - Never mix solutions or chemicals.
 - Know how to report an accident or obtain emergency assistance.
 - Use the right side of the hallway and stop at intersections.
 - Allow others to exit before you enter stairways, doorways, or elevators.
 - Wipe up spills and place litter in containers.
 - Report any injury to yourself or others to your supervisor immediately.
- Guidelines for patient safety:
 - Ensure that the patient knows how to operate call signals, emergency call lights, handrails, safety rails, and how to locate the bathroom.
 - Identify patient and explain a procedure before beginning.
 - Perform only those procedures for which you have been trained.
 - Report safety hazards, such as spills, loose carpet, or extremely hot food or drinks.
 - Be aware of any changes in the patient and report them to your supervisor immediately.
 - Ensure the privacy, safety, and comfort of your patient.

Fire Safety

- Fires are one of the dangers most feared by health care providers.
- A fire or threat of fire can be extremely frightening to patients who may be unable to leave a facility on their own.
- Fire can occur in any setting when three elements are present.
 - Fuel: something that will burn.
 - Heat: enough to make the fuel burn.
 - Oxygen: to feed the fire.

Types of Extinguishers

- 5 types are available, with ABC being the most common.

Fire Extinguishers	
<u>Class</u> A (Water) B (Carbon Dioxide) C (K bicarbonate) D ABC (Chemical)	<u>Application</u> Common combustibles Flammable liquids Electrical Combustible metals All ABC fires

How to Use a Fire Extinguisher

- Remember the key word PASS:
 - P = Pull the pin.
 - A = Aim at the base of the fire.
 - S = Squeeze handle.
 - S = Sweep nozzle from side to side to displace oxygen away from the fire.
- Stand about 6-10 feet away from the fire.

Putting Out Fires

- If your clothes are burning, immediately drop to the ground and roll back and forth quickly.
 - Stop, drop, and roll.
- Do not use water for grease or electrical fires. Use an ABC or C only fire extinguisher or throw baking soda over the flames.
 - Shut off the main power supply for electrical fires.
- If the fire is small, you can try to put it out. However, if the flames begin spreading, evacuate immediately and call 911.

When a Fire Emergency Occurs

- Remember the key word RACE:
 - R = Rescue.
 - A = Alarm. Assign someone to pull the alarm.
 - C = Contain. Close the windows and doors.

Emergency Fire Rules

- Be prepared! Know your responsibilities.
 - Know when and how to evacuate.
 - Know where the fire alarms are located and how to activate them.
 - Keep fire extinguishers in plain view and readily accessible.
 - Practice fire safety and safe evacuation with patients and staff.
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- Keep areas uncluttered.
 - Evacuate ambulatory patients first, then the wheel-chair bound, then the bed-bound.
 - If possible, never leave a patient alone in a fire emergency.
 - Never use an elevator in a fire situation.
 - Never open windows.
 - Never open a door that feels hot.
 - Follow your facility's procedures when a fire is discovered.

Rules for Oxygen Use

- Post a "No Smoking – Oxygen in Use" sign.
- Remove all smoking materials, candles, lighters, and matches from the room.
- Avoid the use of electrically operated equipment whenever possible.
- Do not use flammable liquids such as alcohol, nail polish, and oils.
- Avoid static electricity by using cotton blankets, sheets, and gowns.

Disaster Preparedness

- In addition to fires, other types of disasters may occur.
- Examples include tornadoes, hurricanes, earthquakes, floods, and bomb threats.
- In any type of disaster:
 - Stay calm.
 - Follow the policy of the facility.
 - Provide for the safety of yourself and the patients.
- All health care facilities are required to have a disaster plan.
- You are legally responsible for knowing the plan and responding when a disaster occurs.
- Rules to remember when a disaster strikes:
 - Assess the situation, stay calm.
 - Be sure that you are not in danger.
 - Remove those who are in immediate danger, if it is safe to do so.
 - Notify others of the emergency according to policy.
 - Use the stairs, not the elevator.

Body Mechanics

- Positions and movements used to maintain proper posture and avoid muscle and bone injuries.
- Back injury is the number one injury experienced by health care workers while they are on the job.
 - Lift, transfer, or position patients.

Principles of Body Mechanics

- Body alignment depends on the correct positioning of the head, back, and limbs.
- The body performs better when it is in alignment.
- Preserve the natural curves of the back.
- Proper standing position
 - Feet flat on floor, about 6-10 inches apart.
 - Back straight, knees flexed slightly.

Body Mechanics Failure

- Causes back problems including acute strains, sprains, disc strain and bulge, disc herniation, and fatigue.
- Prevention is the best cure for back pain.

Key Components of Body Mechanics

- Keep feet a shoulder-width apart – wide base of support.
- Always use two hands to move someone or something.
- Face the direction in which you intend to move. Never twist.
- Avoid unnecessary reaching.
- Keep your chin up and look straight ahead.
- Keep your shoulders back.
- Bend at the hips and knees.
- Keep your back straight.
- Keep the object you are lifting close to your body.
- Exhale when you are lifting or exerting force.
- Tighten your abdominal muscles.
- Lift with your legs, not your back.
- Push, pull, or slide instead of lifting.
- Pushing is the best technique for moving something large.
- Use the weight of your body to help you push or pull.
- Always ask for help whenever needed.
- Tell the patient what you are going to do and ask for the patient's help.

Ergonomics

- Promote the safety and well-being of a person by adapting the environment and using techniques to prevent injuries.
 - Correct placement of furniture and equipment.
 - Training in required muscle movements.
 - Efforts to avoid repetitive motions.
 - Awareness of the environment to prevent injuries.
- You spend a large portion of your day in the work environment.
- You should be comfortable, use good posture, and learn exercises to prevent getting stiff and sore.
- Your chair, desk, and computer must be adjusted to fit your needs.

Standard Safety Precautions

- Standard precautions are appropriate for all patients receiving care or service in a health care environment, regardless of their diagnosis.
- These precautions provide protection from contact with blood, mucous membranes, non-intact skin, and all body fluids.
- Three diseases that can be contracted by exposure to body fluids include:
 - Hepatitis B
 - Hepatitis C
 - AIDS/HIV
- Personal protective equipment
 - Gloves: wear when in contact with any body fluids or non-intact skin; wear when you have a rash, open sores, or chapped skin.
 - Nonpermeable gowns: wear during procedures that are likely to expose you to any body fluids.
 - Mask, protective eyewear, face shield: wear when splashes or droplets are likely (i.e. patient coughing continuously).

Patient Safety

- When you work directly with a patient you must always identify the patient to avoid mistakes.
- Ambulation devices must be structurally safe and covered with rubber tips to prevent slipping.
- Transporting devices (wheelchairs and gurneys) – brakes should be locked except when you are moving, secure straps or put up side rails, never leave patients unattended.
- Postural supports/restraints – a physician’s order is required by law, only used when a patient’s safety is in jeopardy. Check patients frequently.
- Side rails – falls from beds are a common cause of injury.
 - Always in place at night.
 - Small children, heavily medicated patients, and confused or restless patients require side rails at all times.
- Make sure you have the proper authorization to perform any procedure on a patient.
- Use correct and approved methods while performing any procedure.
- Provide privacy for all patients. Ask for permission to enter.
- Always identify the patient. Also identify yourself.
- Explain the procedure so the patient knows what you are going to do – informed consent.
- Answer any questions.
- Be alert to the patient’s condition at all times.
- Observe all safety checkpoints before leaving.

It's Your Responsibility!

- Every health care worker must accept the responsibility for using good judgment in all situations, asking questions when in doubt, and following approved policies and procedures to create a safe environment.
- The health care worker has a legal responsibility to protect the patient from harm and injury.

Questions:

- If a glass bottle of medicine falls on the floor and breaks, what should you do?
- Why should yearly safety training be conducted at a health care facility?
- Which type of fire extinguisher is most commonly used and why?