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FIRE PREVENTION IN HEALTHCARE FACILITIES

Leader's Guide, Fact Sheet & Quiz

Item Number: 4917

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.

b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.

c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.

d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes *before* the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.

b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.

c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.

d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

4917 FIRE PREVENTION IN HEALTHCARE FACILITIES
FACT SHEET

LENGTH: 15 MINUTES

PROGRAM SYNOPSIS:
When fire gets out of control, it can be devastating. Every year, more than a million fire emergencies are reported in the U.S. Over 5,000 of them occur in healthcare facilities. They cause at least $45 million dollars in damage as well as hundreds of injuries and many deaths, but most fires are preventable. To keep incidents like these from happening, employees need to know how fires burn and how they can be extinguished. They should be able to recognize the fire hazards that are likely to exist in their workplace and understand how to control or eliminate them. They need to know what to do to keep patients, visitors, coworkers and themselves safe in case of a fire emergency. This program is designed to provide employees with the information they need to help prevent fires from starting in their workplace and to deal effectively with any that do occur.

PROGRAM OBJECTIVES:
After watching the program, the participant should:
- Understand how fires burn and how they can be extinguished.
- Know the four classes of fires that they are most likely to encounter and what makes them different from each other.
- Know the policies and practices that should be used to help prevent fires in their facility.
- Recognize common fire hazards that can be encountered in healthcare environments.
- Know the safe practices that can be used to help control or eliminate these types of hazards.
- Understand how they can keep patients safe during a fire emergency.
- Know how the acronym "R.A.C.E." can help them to act quickly and safely in a fire emergency.
- Know how to respond if a fire occurs in their workplace.

PROGRAM OUTLINE

BACKGROUND
- **Ever since we learned to control fire, it's helped us to do a lot of good things. It has:**
  - Kept us warm when we were cold.
  - Cooked our food when we were hungry
  - Created light when it was dark.
- **But when it gets out of control fire can be devastatingly destructive to property, and lethal to people.**
  - Every year in the U.S., more than a million fire emergencies are reported, over 5,000 of them in healthcare facilities.
  - They cause injuries, deaths, and more than $45 million dollars in damage.

HOW FIRES BURN
- **To burn, a fire needs three ingredients:**
  - Fuel.
  - Oxygen.
  - Heat.
- **The "fuel" is any material that will burn. Fuels can include:**
  - Combustible solids such as wood, paper, cardboard and some metals.
  - Flammable and combustible liquids such as gasoline, isopropyl alcohol and some cleaning and disinfectant solutions.
  - Ignitable gases such as propane and anesthetic gases.
- **Next, a fire must be in an environment where there is oxygen that it can "breathe".**
  - The more oxygen a fire has, the better it will burn, which is why "fanning" a fire makes it flare up.
- **The third element that a fire needs is heat:**
  - A "source of ignition", such as a burning match or an electric spark, that "lights" it and keeps it burning.
- **In a healthcare facility, potential sources of ignition can include:**
  - A smoldering cigarette butt.
  - An overloaded electrical circuit.
  - A coffeepot on a cluttered desk.

- **Once a fire has started, it will continue to burn as long as there is fuel and oxygen to feed it.**

— Left to itself, it will burn bigger and hotter until it gets out of control.

- **All that it takes is fuel, oxygen and heat, but when you remove any one of these ingredients, the fire goes out.**

— To put out most fires, you apply some type of "retardant", like water, baking soda or sand, that will reduce its heat or deprive it of fuel or oxygen.

— But not all fires are alike.

- **Depending on the types of materials that are burning and where the fire is located, using the wrong fire retardant can make a bad situation even worse.**

— For example, water does a great job of putting out a fire in a pile of cardboard.

— But if you pour water on burning liquids, it will spread the fire further.

— Since water conducts electricity, somebody could get electrocuted if you use it on a fire that is burning in or around any electrical equipment.

FOUR CLASSES OF FIRE

- **To make it easier to distinguish between different types of fires and determine what substances should be used to extinguish them, fires have been divided into "classes".**
- **"Class A" fires involve everyday solid combustibles like paper and wood.**

— These can be extinguished with water.

- **"Class B" fires involve flammable gases, liquids and some plastics.**

— They are usually extinguished by applying chemical foams.

— Fires fueled by materials such as isopropyl alcohol, cleaning supplies, disinfectants and anesthetic gases that are commonly used in healthcare facilities are all Class B fires.

- **"Class C" fires involve electricity, and can occur in medical equipment, light fixtures, fuse boxes, electrical wiring and receptacles.**

— These are fought by smothering them with "nonconductive" substances, which deprives them of oxygen.

- **"Class D" fires involve combustible metals and can be dangerous to extinguish.**

— You're not likely to encounter a Class D fire in a healthcare environment, but don’t attempt to put one out yourself if you do.

RESPONDING TO A FIRE EMERGENCY

- **When a fire occurs, you need to respond quickly and effectively.**

— Your employer has developed an "Emergency Action Plan" to help everyone in your facility prepare for such an incident.

- **The plan discusses:**

— How to report a fire.

— Who should fight a fire.

— How to ensure patient safety.

- **It can be tough to think clearly when the fire alarm bell rings.**

— Emergencies can be confusing as well as frightening.

— You can prepare now to do the right thing under pressure by remembering the acronym "R.A.C.E."

- **The letters "spell out" the steps you should follow in responding to a fire emergency:**

— "**R**escue".

— "**A**larm".

— "**C**onfine".

— "**E**xtinguish".

- **"Rescue" is the top priority.**

— It means getting patients out of the danger area and into a safe location.

- **The next task is to check that the emergency "alarm" has been activated, and that 911 has been called.**
- **Then you should ensure that the fire is "confined", i.e. shut off from the rest of the facility wherever that is possible.**
- **Even small fires can create a lot of smoke and toxic gases.**

— They can be very dangerous to anyone who breathes them.

— The smoke and gases need to be prevented from spreading throughout the building.

— "Shut them out" by closing as many doors as possible.

- **If your facility is equipped with automatic fire doors, check that nothing has prevented them from closing completely.**
- **You should also shut down the ventilation system to stop it from spreading smoke through the facility or feeding the fire**

with fresh air.

- **Only after these steps have been taken should you think about trying to extinguish a fire.**
- **Healthcare facilities are required to be equipped with fire extinguishers, but don't attempt to use one unless you have been trained how.**

— Leave firefighting to the professionals instead.

PATIENT SAFTY AND EVACUATION PROCEDURES

- **In an office building or industrial facility, "evacuation" usually means moving everyone to a safe area outside.**

— But in most healthcare environments this procedure is not practical, or safe.

- **Patients who are in immediate danger from smoke**

or fire should be removed from the hazard area to a "safe refuge" location, usually on the same floor.

- **Patients or residents who are too frail or unwell to be moved, and are not in immediate danger, may be "defended in place".**

— They should remain in their rooms while nurses or other designated support personnel care for them.

- **Patients who are ambulatory should be directed to take themselves to the "safe refuge" area.**
- **It's important for patients and residents to see that you are "in control of the situation" during a fire emergency.**

— You can set a good example for them and your coworkers by remaining calm.

- **Be prepared to assist visitors as well.**

— Help them to leave the facility by an approved evacuation route.

- **Take the time now to learn at least two escape routes from your work areas.**

— In an emergency, knowing a second way out can literally be a "life saver" if the primary route has somehow been blocked.

- **If your emergency plan requires you to eventually evacuate the building, a few safe practices will help you and others to get out safely.**

— Keep the evacuation orderly.
— Walk, do not run.

Never use elevators to get out of a building in an emergency.

— If the power fails, you could be trapped inside.
— Use the stairs instead.

- **If you come to a closed door, feel it before opening it.**

— Doors that are warm or hot to the touch probably have flames behind them.
— So do not open them.

- **If a door is cool to the touch, you can proceed through, but remember to close it behind you to keep the fire contained.**
- **If you have to pass through smoky areas, remember that smoke rises.**

— You can avoid inhaling it by getting as low as possible.
— Crawl on the floor if necessary.
— Breathing through a damp cloth will also help.

- **When you get outside, proceed to the assembly area designated in your Emergency Action Plan and report yourself "safe".**

FIRE PREVENTION METHODS

- **The best way to "fight" fire is to prevent it from starting in the first place.**

— Your company has created a written "Fire Prevention Plan" that describes how to do this.
— The plan includes a list of the potential fire hazards and ignition sources in your facility, as well as policies and procedures for preventing fires from starting.

- **Stacks of empty boxes in a storage closet, scattered papers at a nurse's station, piles of laundry in washing areas, all of these are fires "waiting to happen".**
- **Good housekeeping can fight "clutter" and the fire hazards that it creates.**

— Inspect your work space regularly.
— Dispose of all litter.
— Keep the area neat and orderly.

- **Careless smoking can often provide a source of ignition for any fuels that are present.**

— Smoking policies typically require people to "light up" outside, away from the building, or in a designated fire-safe area.

- **A Fire Prevention Plan also establishes standard procedures for the safe handling of flammable and combustible materials that are used on-site.**

- **Isopropyl alcohol is a highly flammable liquid.**

— Many hand cleansers, disinfectants and "pre- moistened" antiseptic pads that are used in healthcare facilities are flammable as well, because they contain isopropyl alcohol.

— Your Fire Prevention Plan will describe how you can safely store, use and dispose of these materials.

- **Anesthetic gases such as fluroxene, diethyl ether and ethylene are flammable gases that can ignite when exposed to heat, sparks or flames.**
- **Two other gases used in healthcare, oxygen and nitrous oxide (also known as "laughing gas") are "oxidizers".**

— While they're not flammable, they can enrich the atmosphere with oxygen so that fires ignite more easily and burn more intensely.

— Follow the safe work practices described in your facility's Fire Prevention Plan when working with or around these gases.

CONTROLLING ELECTRICAL HAZARDS

- **Healthcare facilities use a lot of electrically-powered equipment.**
- **Although these devices have been designed to work safely, the electricity that powers them can become a source of ignition when the equipment:**

— Becomes worn or damaged.

— Is used unsafely.

- **To prevent electrical hazards from causing fires in your facility, make a habit of inspecting all electrical equipment before you plug it in.**

— Look for any for wear, damage or missing parts.

- **Examine power cords for:**

— Torn, frayed or cracked insulation.

— Exposed metal wires.

— Missing "ground" prongs.

- **If you see these or other types of damage:**

— Don't use the equipment.

— Get a replacement.

— Notify your supervisor.

- **Patients and visitors sometimes bring shavers, hair dryers, coffee makers, radios and other electrical appliances with them from home.**

— These devices can cause a fire if they are used carelessly, so they should not be allowed in patient rooms without official approval.

- **"Overloaded" electrical circuits are another common fire hazard.**

— A circuit becomes "overloaded" when it's forced to carry more current than it can safely handle, often because too many devices are plugged into a single outlet.

— This can cause the wiring that supplies power to the outlet to heat up and start a fire.

— If you notice an outlet that's crowded with plugs, bring it to your supervisor's attention immediately.

- **One way overloads can be prevented is by not using "power strips" or other "multi-plug" adapters when connecting equipment to receptacles.**
- **If an extension cord can't handle the amount of current that is being "drawn" by the device it's connected to, it can overload as well.**

— Make sure any extension cord you use is "rated" for the amount of power it will have to carry.

- **Now that you know how fires can start, how to prevent them and how to respond effectively if one does occur, you can help your patients and your coworkers to stay safe, every day.**

ANSWERS TO THE REVIEW QUIZ

1. a
2. b
3. a
4. a
5. a
6. a
7. a
8. b
9. a
10. a

FIRE PREVENTION IN HEALTHCARE FACILITIES
REVIEW QUIZ

Name_____Date_____

The following questions are provided to determine how well you understand the information presented in this program.

1. Once a fire has started, is will continue to burn as long as there is fuel and oxygen to feed it.

a. True
b. False

2. All classes of fires can be safely extinguished by applying large quantities of water to them.

a. True
b. False

3. You should not try to use a fire extinguisher to put out a fire unless you have been trained about how to do it.

a. True
b. False

4. If a fire occurs, healthcare employees can use the acronym "R.A.C.E." to guide them in responding to the emergency.

a. True
b. False

5. In a fire emergency, patients who are in immediate danger from smoke or flames should be removed from the hazard area to a "safe refuge" location.

a. True
b. False

6. You can minimize your chances of inhaling smoke during a fire evacuation by staying as close to the floor as possible.

a. True
b. False

7. Careless smoking often provides the source of ignition for fires that occur in healthcare facilities.

a. True
b. False

8. Electrical equipment should be inspected for wear, damage or missing parts on a weekly basis.

a. True
b. False

9. Patients should not be allowed to use shavers, hair dryers, coffee makers or other small appliances in their rooms without official approval.

a. True
b. False

10. An "overload" can occur in an extension cord if it is connected to a device that draws more current than the cord can safely handle.

a. True
b. False