

**THE FACTS**

In 2003, fire departments in the United States responded to more than 500,000 home fires. The U.S. has one of the highest fire death and injury rates in the world. Every year fire kills more Americans than all natural disasters combined, and 85% of all fire deaths occur in residences (homes, apartments, etc.). About 4,000 Americans die as a result of fires in homes. Most of the victims do not die from burns; they die from smoke or toxic gases. The two groups at highest risk of fire-related deaths and injuries include children age 4 and under, and adults age 65 and older. Because so many homecare patients are elderly, it is very important for home health aides to know how to promote fire safety in the home.

**Elements Needed for Fire**

Fire is actually a chemical reaction involving burning of fuel. In order for a fire to begin and to spread, three elements are needed. They include:

1. Fuel — this can be any material that will burn and includes vapors and gases
2. Oxygen — the oxygen in the air we breathe is more than sufficient to maintain a fire
3. Heat — in order for a fire to begin there must be sufficient heat to increase the temperature of the fuel for ignition to occur. The heat source can be electrical, or chemical.

Without all three of these factors, a fire cannot occur or will go out if it is already burning. That concept is important to keep in mind when planning for fire safety.

**There Must Be a Plan**

One of the most important fire safety precautions is to develop a plan for escape in case of fire. The plan must be developed beforehand. Many homecare agencies assist the patient in developing an evacuation plan. Important considerations include:

- » How many possible escape routes exist
- » Whether there are multiple floors
- » The escape route in an apartment building
  - Distance and direction to nearest stairwell or fire escape (keep in mind elevators cannot be used during fires)
  - How safety bars on windows can be removed
- » The patient's physical or mental limitations
- » Presence of others in the home.

An aide should discuss problems with the supervisor, especially if it does not appear that the aide could evacuate the patient without assistance.

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**Fire Safety in the Kitchen**

Careless cooking is the number one cause of fires in the home. Thirty percent of all home fires start in the kitchen, more than any other room in the house. There are many ways to promote fire safety in the kitchen. They include:

- » Never leave the stove unattended, especially when cooking at high temperatures.
- » Never pour water on a grease fire; turn off the stove and carefully cover the pan with a lid.
- » Keep pot handles pointing to the back of the stove.
- » Do not wear clothing with long, loose fitting sleeves while cooking.
- » Never place potholders, towels, or other equipment on the stove since they can easily be ignited.
- » Use the small burners for small pots and pans.
- » Use insulated potholders for handling hot pots and pans.
- » Clean the stove regularly and wipe up spills as soon as possible.
- » Never store flammable and/or combustible items near the stove.
- » If there is a fire in the oven, keep the oven door closed and turn off the heat.
- » Keep children and pets away from the cooking area.
- » NEVER use the stove top or open the oven door to provide heat in the kitchen.

**Smoke Detectors Save Lives**

Smoke inhalation is the primary cause of death in fires that begin in the home. Smoke detectors can reduce the number of deaths significantly. There are smoke detectors specially designed for the hearing impaired. These detectors use flashing lights and/or vibrations to alert the hearing impaired.

- » All homes should have at least one smoke detector on each level.
- » Smoke detectors should be dusted regularly and the batteries changed at least once a year.
- » The home health aide should notify the supervisor if a patient does not have a working smoke detector. Smoke detectors are inexpensive and are required by law in some communities.

**Space Heaters**

Home fires are more common during the winter months, and part of the reason is the use of supplemental heaters. Such heaters may be wood or coal burning stoves, kerosene heaters, gas space heaters, or electrical heaters. Fires from supplemental heaters often occur at night or at other times when the heaters are unattended. All heaters come with manufacturer's instructions regarding where and how to use the heaters. It is very important that these instructions be carefully followed.

**Electrical Cords and Outlets**

Loose or frayed wires on cords or plugs could cause a fire. Overloaded extension cords can also produce sparks that can start a fire. Electric blankets must be kept in good working order and either repaired or discarded if they malfunction. Lamps and other lights should not be touching any fabrics such as bedspreads or drapes.

**Cigarettes, Lighters, and Matches**

Most cigarette fires start when ashes or cigarette butts drop on upholstered furniture or bedding. Garbage cans may catch on fire if cigarette butts are not completely out when ashtrays are emptied. Young children are very attracted to lighters and matches and children younger than five years old are especially likely to start fires with them.

**Candles**

Decorative candles have become very popular and candle fires have increased in the United States. Candles must be kept out of reach of children and pets, and away from curtains and furniture. They should not be left unattended even for a minute. Older people should not use candles unsupervised.

**IF THERE IS A FIRE IN THE HOME**

The response to a fire in the home will vary according to the situation. Keep in mind that your first priority is to get yourself and the patient to a safe area. Generally speaking, if there is a small fire in the home:

1. Use the fire extinguisher if one is available. Remember the word "PASS."
  - Pull the pin, releasing the lock with the nozzle pointing away from you
  - Aim low, pointing the extinguisher at the base of the fire
  - Squeeze the lever slowly and evenly, and
  - Sweep the nozzle from side to side.
2. If the fire is small, use a large wet towel to smother it.
3. If the fire is not an electrical fire or a grease fire, pour water on it.

It is extremely important that you not waste time in the presence of a big fire, or a fire in another area of an apartment building. Never try to fight a fire if it is spreading, or if the fire can block your only exit, or if you don't have adequate equipment. If there is a large fire or the fire is spreading beyond the point where it started, get yourself and the patient out of the building as quickly as possible. If you must evacuate, do not stop to gather up personal belongings, or even to call 911. Take the following precautions:

1. Moisten a couple of towels to cover your own and the patient's mouths and noses to keep out smoke and fumes.
2. If there is already smoke, stay as low to the floor as possible (smoke always rises).
3. Touch any door before opening it. If the door is hot, do not open the door. Find another exit.
4. In a private home, exit the house according to the plan.
5. In an apartment building, exit via the nearest stairway marked "Exit" or use the fire escape if the stairway isn't accessible. Always go down, never up, the stairs.

**IF SOMEONE CATCHES ON FIRE**

If your clothing should catch on fire for any reason, STOP, DROP, and ROLL.

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- STOP where you are and do not run.
- DROP to the floor, and
- ROLL around on the floor.

This will smother the flames and may save your life.

If another person catches on fire, keep the person from running. Grab a blanket or rug and wrap the person in it to smother the flames.

#### THE HOME HEALTH AIDE'S ROLE IN FIRE SAFETY

Home health aides spend more time in patients' homes than other caregivers and they are also more likely to be cooking. Careful attention to fire safety in the home requires that the home health aide be alert to problem areas and report them to the supervisor. Home health aides need to pay attention to:

- » The safety plan for the patient  
Learn and follow your agency policies and procedures concerning the safety plan. Make certain that you know what plan is in place for each patient. Consider the exits in the house or apartment and determine what your actions would be in case of fire.
- » Availability of a fire extinguisher  
Ask the patient whether he or she has a fire extinguisher. If so, note its location and learn how to use it. In an apartment building, make certain you know where the nearest fire extinguisher is located.
- » Working smoke detectors  
If the patient has no smoke detector, or if the one in the home is not working, report this to the supervisor.
- » Storage around the stove or oven  
Make certain there are no items that could be ignited.
- » Appropriate use of space heaters
  - There should be nothing within three feet of the heater.
  - Space heaters should be placed on the floor, not on desks or tables.
  - Space heaters should be located in areas without traffic, and certainly not in places where a person or pet could knock them over.
  - Space heaters should be turned off when not attended and should not be left on during the night.
  - Electrical space heaters in bathrooms should not be plugged into outlets near water.
- » Overloaded electrical outlets and extension cords or frayed wiring
- » Careless management of cigarettes and/or lighters

Report to your supervisor if you notice the patient or others in the home are careless with smoking materials.

**CASE STUDY**

Today is Aileen's first visit to Mrs. Kelly who is 80 years old and has severe arthritis. She introduced herself and asked Mrs. Kelly where her folder is. Mrs. Kelly led her to the kitchen. All of the burners on the stove were turned to "high" and the oven door was open. Mrs. Kelly told Aileen that she does that in the mornings because the apartment is chilly and, "It helps warm these old bones."

Aileen reviewed the assignment sheet and began to assist Mrs. Kelly with her bath. There was a space heater in the bathroom directly beneath the towels. The electrical cords were frayed and the space heater was plugged into an electrical socket just above the sink. When Aileen asked Mrs. Kelly why the heater was on Mrs. Kelly replied, "The bathroom is on an outside wall and it gets too cold in here if I don't have the heater on. I just leave it on all the time since I never know when I'll have to go."

When Aileen took Mrs. Kelly to the bedroom she noticed that the battery compartment of the smoke detector was open. She mentioned this to Mrs. Kelly who said, "You know, I just can't keep a battery in there. My grandchildren take them out all the time." Mrs. Kelly told Aileen that her grandchildren come to her apartment after school every day until her daughter gets off work.

In the living room, Aileen saw a package of cigarettes, a lighter, and an ashtray full of cigarette butts. Mrs. Kelly noticed that Aileen was looking at them and said, "Oh, those aren't mine. I don't smoke. My daughter leaves them here so she'll be sure to have one when she gets off work." Aileen saw several burns on the couch and Mrs. Kelly said, "Well, my daughter puts the ashtray on the couch and sometimes she'll leave a cigarette in the ashtray while she tends to one of the kids. It's an old worn-out couch anyway."

**THINK ABOUT IT**

- » How many fire safety concerns can you identify in Mrs. Kelly's apartment?
- » What are some other areas Aileen should check in Mrs. Kelly's apartment?
- » Is there anything Aileen should report to the supervisor? If so, what?
- » Think about some fire safety concerns you have encountered during recent visits. Did you take any action, or did you simply ignore the concerns?

DIRECTIONS: READ EACH QUESTION CAREFULLY. THEN, DETERMINE THE BEST ANSWER. CHECK THE CORRESPONDING BOX ON YOUR ANSWER SHEET. DO NOT WRITE ON THIS POST-TEST.

1. Which is the leading cause of home fires?
  - a. Smoking in bed
  - b. Careless cooking
  - c. Overloaded electrical outlets
  - d. Unattended candles
  
2. If your clothing catches on fire, what action should you take?
  - a. Run to the bathroom and jump in the shower.
  - b. Dial "911" immediately and report the fire.
  - c. Stop where you are, drop to the floor, and roll around on the floor.
  - d. Grab the fire extinguisher and spray yourself.
  
3. Which of the following is not a crucial part of a fire escape plan?
  - a. Knowing the telephone number of the nearest fire department
  - b. Determining how many possible escape routes there are
  - c. Knowing the distance and direction to the nearest stairwell
  - d. Knowing the patient's physical or mental limitations
  
4. Which of the following does not promote fire safety in the kitchen?
  - a. Keep pot handles pointing to the back of the stove.
  - b. Do not cook in clothing with long, loose-fitting sleeves.
  - c. Clean the stove regularly.
  - d. Keep potholders and towels on top of the stove so they are within easy reach.
  
5. The most common cause of death due to fires is inhalation of smoke and/or toxic gases.
  - a. True
  - b. False
  
6. All of the following are elements needed for fire except:
  - a. Carbon monoxide
  - b. Fuel
  - c. Oxygen
  - d. Heat

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7. The word that is helpful to remember how to use a fire extinguisher is:
- a. **THROW**
  - b. **FIRE**
  - c. **PASS**
  - d. **STOP**
8. All of the following statements about space heaters are true except:
- a. Space heaters should be turned off when not attended.
  - b. There should not be anything within 3 feet of the space heater.
  - c. Space heaters should be placed in areas without traffic.
  - d. Space heaters should be up on a table.
9. Pouring cold water on a grease fire is the best way to put it out.
- a. True
  - b. False
10. Which of the following is not true about decorative candles?
- a. Candles do not produce sufficient heat to cause a fire.
  - b. Candles must be placed out of reach of children.
  - c. Candles should not be left unattended even for a minute.
  - d. Candle fires have increased in the United States.

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# MONTHLY INSERVICE ANSWER SHEET

In-service Month \_\_\_\_\_ Year \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

1. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

2. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

3. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

4. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

5. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

6. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

7. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

8. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

9. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_

10. a. \_\_\_ b. \_\_\_ c. \_\_\_ d. \_\_\_