

PRINCIPLES OF CAREGIVING: FUNDAMENTALS

CHAPTER 9 – FIRE, SAFETY AND EMERGENCY PROCEDURES

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OBJECTIVES

1. Describe and explain the importance of an emergency plan.
2. Describe and explain the principles of environmental, fire, and medical emergency procedures.
3. Identify and explain safety techniques for direct care workers.
4. Explain the use of a fire extinguisher.

SKILLS

1. Procedures for calling 911
2. How to use a fire extinguisher

KEY TERMS

911	Emergency medical technician (EMT)
CPR	Fall prevention
Electrical safety	Fall risk
Emergency	Fire safety
Emergency plan	Non-responsive
Emergency medical system (EMS)	P.A.S.S.

A. EMERGENCY PLANNING

Good safety precautions can help prevent falls, fires, and other emergencies. Keep appliances in good repair, practice personal safety, and prepare a plan for emergencies. Direct care workers (DCWs) need to know how to respond to emergencies and how to help prevent them. Elderly persons and people with disabilities are more at risk for injuries.

- Living longer may bring more frailty or cognitive impairment.
- Illness or medications can cause dizziness or unsteadiness.
- Decreased mobility makes response times slower.
- Slower response times can increase accident risk. This includes driving.
- Safety hazards (rugs, pets) often exist in homes. A frail person may fall more easily when tripped.

1. General Guidelines

- **STAY CALM.** You help the individual just by your calm demeanor. It can give reassurance.
- Yell for someone to assist you if possible.
- **DO NOT LEAVE** the individual unless it is to call 911. Then return immediately.
- Keep the individual's airway open.

If the individual is not responding and not breathing:

- Yell for help. Have someone call 911, or you leave the individual briefly and call 911.
- Don't leave the individual alone except to call for help.
- Begin a CPR assessment and procedure.
- Do not stop CPR until help has arrived.
- Take medicine or medicine bottles with you to the emergency room.

If the individual is not responding but is breathing:

- Call 911 for emergency assistance.
- Place the person on his/her side if possible. This helps to keep the person's airway open.
- If you can't get emergency assistance, take the individual to the nearest emergency center.
- Take medicine or medicine bottles with you to the emergency room.

Cell phone use: If you call 911 from a cell phone, be prepared to describe your exact location. The fire department cannot always locate your cell phone. **Use a fixed land line if possible.**

Call your supervisor after the paramedics have been called and the client is no longer in danger.

2. Emergency Plan

Every individual—especially if living alone—should have an *Emergency Plan*. It should be posted in an obvious place such as the refrigerator. The plan should be kept up to date with *current* medications (recommend attaching it to the back of the plan) in case the individual is unable to give the paramedics the information in an emergency. Below is an example of an Emergency Plan.

EMERGENCY PLAN	
Name:	_____
Address:	_____
Phone:	_____
Responsible Party/Emergency Contact(s)	
Name:	_____ Phone(s): _____
Name:	_____ Phone(s): _____
911: Fire/Police/Paramedics	
Hospital Preference:	_____
Physician:	_____ Phone: _____
Allergies:	_____
Living Will:	<input type="checkbox"/> Yes <input type="checkbox"/> No
CPR:	<input type="checkbox"/> Yes <input type="checkbox"/> No (If No, my orange form is located (where): _____
My current medication list is located (where):	_____
Comments:	_____ _____ _____
Signature:	_____ Date: _____

3. The Service Plan

Every client has a service plan (or care plan). It describes what services should be provided. The plan also lists the needs of the client and the tasks for the DCW. You should be familiar with the service plan and know about the following:

- Risk factors.
- Safety precautions.
- Instructions for assisting the client.



4. Procedure: Calling 911

Emergency situations can be very stressful for everyone involved. It is important that you remain as calm as possible. Then get help as quickly as possible. Individuals with disabilities and those who are elderly are vulnerable. They are more likely to injure themselves in the home or become seriously ill. They may require immediate medical attention. It is very possible a situation may arise where the DCW must make an emergency 911 call.

Some situations that would require you to call 911 would be:

- Chest pain.
- Shortness of breath.
- Suspected heart attack or stroke.
- Suspected heat stroke.
- Non-responsiveness.
- Confusion that is not common with individual.
- Individual falls and cannot get up.
- Fire.
- Safety issues, such as gas leaks.



Supplies

Land line phone (preferred over cell phone).

Description of procedure

1. **Stay calm.** The more calm you remain, the quicker you will be able to get help. Take a deep breath and proceed.
2. Assess the client for responsiveness. Ensure the client is safe in the environment.
3. Call 911. If possible, use a land line phone.
4. State the nature of the emergency in plain, concise tone.
5. State the location of the emergency with the nearest cross streets.
6. Give your name and telephone number.
7. Remain on the line until dispatch tells you to hang up.

8. Render first aid as needed to the client.
9. Stay alert to your surroundings, staying with client, rendering assistance. Reassure and calm the client until the emergency medical services (EMS) team arrives.
10. Notify your supervisor as soon as possible.

Practical tips

- Remain calm.
- Call from a land line. There are fewer dropped calls, and some emergency systems cannot locate you when you use a cell phone.
- Have someone else call if possible. Remain focused on client and his/her needs.
- Render appropriate care for the conditions you find, within the scope of your training.
- Stay with the client until transported and explain what is happening.
- Know the agency's policy for reporting emergency situations.
- Be available to answer questions from the emergency response system (EMS) team.

Don't forget!

- Do not leave the client unattended for a long period. Be sure to render assistance to the client while waiting for EMS.
- Remember to communicate to the client throughout.
- Know the full address where you are. Response time is longer if EMS has to search for the location.

Practice scenarios

- You are at a client's home and he becomes non-responsive. Upon checking, he is not breathing, no heartbeat is detected, and he remains slumped over in his chair. What do you do?

- You are assisting your client with ambulation when she trips over her dog. The client falls to the floor. The client has a lot of pain in her right hip region and is not able to get up on her own. After getting her as comfortable as you can, what will you need to do?

B. MEDICAL EMERGENCIES

If there is a medical emergency or an injury, the DCW needs to decide how to react. If you have first aid and *cardiopulmonary resuscitation (CPR)* training, you may be able to provide assistance. Call 911 for emergencies, and handle minor scratches or insect bites on a case-by-case basis. The chart on the next page lists many medical emergency situations. It also tells you how to react.

For many jobs, training is required in first aid and CPR. Even if it is not required, it is good practice to have this training.

First Aid Chart		
Injury or Emergency	Symptoms	Recommended First Aid Technique
Anaphylaxis – severe allergic reaction to food, medicine	Swelling of throat, lips, tongue, wheezing, respiratory and cardiac arrest, hives	Call 911. Begin CPR assessment and procedure.
Bleeding		Use a pressure bandage or direct pressure on wound. Use sterile dressing or clean cloth. Elevate the extremity.
Breathing stoppage	Look, listen and feel for 10 sec and no breathing noted, bluish gray skin	Call 911. Clear the airway if it is blocked. Give two rescue breaths and continue with CPR assessment and procedure.
Burns		Stop the burn by removing the heat source and immerse in or apply cold water. Do not apply grease or oil
Cardiac arrest (heart attack)	No pulse or obvious signs of circulation, bluish gray skin	Call 911. Begin CPR procedure.
Choking	Unable to talk or cough forcefully Do not do anything to the individual that is able to cough forcefully	Heimlich Maneuver For infant, turn child upside down on forearm with head pointed down, give 4 back blows between shoulder blades and then four two-fingered thrusts along nipple line, keeping the head pointed down.
Diabetic emergency	Hypoglycemia (low blood sugar), slurred speech, uncoordinated movements, change in behavior or responsiveness	If person is responsive give sugar, honey, orange juice, soda. If person is unresponsive squirt sugar (can use tube of cake decorating frosting) inside the mouth. When person comes to, follow with protein snack.
Fractures	Painful movement, joint deformity	Keep affected area from moving. Apply support under and around affected limb with hands and/or clothing. Call 911.
Heat exhaustion	Warm, clammy skin, nausea, weakness	If the person is unresponsive, Call 911. If individual is conscious give fluids and salt.

First Aid Chart		
Injury or Emergency	Symptoms	Recommended First Aid Technique
Heat stroke	Hot, dry skin, elevated body temp, rapid pulse, disorientation	Call 911. First and foremost, cool the victim. Possibly spray with a water hose or apply cool towels.
Insect bites, stings		Treatment depends on reaction: Mild → apply ice, soap and water, antihistamine to help with itching. Severe reaction → Epi Pen; Call 911. For scorpion, black widow, brown recluse spider bites, call physician.
Poisoning		Call local Poison Control.
Possible heart attack	Heavy pressure mid sternum Pain radiating down left arm, jaw, extreme heart burn	Call 911. Have person rest, take nitroglycerin tablets as directed if prescribed.
Seizures		Protect from injury. DO NOT RESTRAIN or put anything in mouth. Make sure breathing is restored after the seizure.
Shock	Nausea, low pulse, cool clammy skin, restlessness	Call 911. Position of comfort, elevate extremities 10 inches, cover with blanket.
Stroke	Weakness or drooping on one side of the body or face, slurred speech	Call 911. Critical to have individual seen in ER within 2 hours of onset of symptoms.

C. FALLS

- According to the Centers for Disease Control and Prevention (CDC), more than one-third of adults age 65 and older fall each year.
- In 2005 more than 1.8 million persons age 65 and older were treated in emergency departments for fall-related injuries. More than 400,000 were hospitalized.
- Among older adults, falls are the leading cause of injury deaths and the most common cause of nonfatal injuries and hospital admissions for trauma.



All men and women are at risk for falling. Women fall more often than men, but men are more likely to die from a fall (CDC 2005). Women are more at risk for hip fractures. For both men and women, age is a risk factor for hip fractures. People age 85 and older are 10 times more likely to break a hip than at age 60 to 65.

Researchers have identified a number of risk factors:

- Weakness of the lower body.
- Problems with walking and balance.
- Poor vision.
- Diseases such as arthritis, diabetes, Parkinson’s disease, and dementia.
- Medications or alcohol.

1. Responding to a Fall

- If you are able, when the individual starts to fall, attempt to lower the individual gently to the floor. Take care not to injure yourself in the process.
- Have the individual lie still while you look for any injuries.
- If the individual is not complaining of any pain, you may assist the individual in getting up.



Some agencies want staff to call the paramedics after every fall. Ask your supervisor about agency protocols before going out on assignments.

If the individual has already fallen when you find him/her, or is complaining of pain after falling:

- Do not move the person. Make the person comfortable without moving any affected body parts.
- Call 911. The paramedics will evaluate the individual when they arrive.
- Call your supervisor for any further instructions.

If the individual is not responsive, call 911 immediately

2. Fall Prevention

Because older adults spend most of their time at home, one-half to two-thirds of all falls occur in or around the home. Many injuries occur when a person trips and falls. Therefore, it makes sense to reduce home hazards and make living areas safer.

To make living areas safer, seniors and people with disabilities should:

- Remove tripping hazards such as throw rugs and clutter in walkways.
- Use non-slip mats in the bathtub and on shower floors.
- Have grab bars put in next to the toilet and in the tub or shower.
- Have handrails put in on both sides of stairways.
- Improve lighting throughout the home. Keep a flashlight near the bed or wheelchair.

Useful tip: Keep the telephone within reach of the bed or wheelchair for emergencies.

- Exercise to improve strength and balance. Tai Chi is one type of exercise program that has been shown to be very effective.
- Have their eyes checked at least once a year.

Ask the person's doctor or pharmacist to review all the person's medicines (both prescription and over-the-counter). The goal is to reduce side effects and interactions and perhaps reduce medications. This particularly includes tranquilizers, sleeping pills, and anti-anxiety drugs, also Benadryl.

Information adapted from: CDC Website: Falls Among Older Adults – an Overview, <http://www.cdc.gov/ncipc/factsheets/adultfalls.htm>, and <http://www.strengthforcaring.com/articles/safety-and-mobility-preventing-falls-and-injuries/risk-factors-for-falling/>



Good Intentions But Made a Mistake

My Mom was living by herself in an assisted living unit. My Mom was quite independent but changes were starting to happen. One change was my Mom was having toileting accidents. She had around ten feet to go from her bed to the bathroom. I thought I would help. Again, I had good intentions. I thought it would be a good idea for me to get some plastic runners to put down, leading from the bed to the bathroom. This way if Mom had an accident it would be easy to clean up. Caregivers work so hard and I just thought I would make it a little easier for everyone. It was not long after I put the plastic runners down that I got a call from one of the aides at the facility stating that my Mom tripped on the runner and that they were removing them. I really felt bad. I was lucky my Mom only bruised her head. It could have been so much worse. Today, when I see someone trying to have the same good intentions, I share my story. Rugs and runners do not mix when it comes to safety in the home of anyone!

Rose P.



Did you know?

- | | | |
|--|------|-------|
| 1. Falling is a big safety issue for older adults | True | False |
| 2. A fall can lead to more serious health issues..... | True | False |
| 3. Keeping rugs and runners helps to soften the fall | True | False |
| 4. Poor vision can lead to more falls. | True | False |

D. FIRE SAFETY

1. Responding to a Fire

Three key elements of a fire

- **Oxygen:** It is always present in the air.
- **Heat:** It is present in sources such as heaters, stoves, appliances, electrical connections, fireplaces and lighted cigarettes.
- **Fuel:** Anything combustible—like cloth, paper, wood, upholstery, and gasoline—that will burn when exposed to heat.

A fire needs all three elements to ignite and burn. To extinguish a fire you need to take at least one of the elements away. You can put out a very small flame with a heavy blanket. If there is a fire in a cooking pot or a garbage can, put a lid on it. Use a fire extinguisher. Without fresh oxygen, the fire will go out.

Fire extinguishers

Fire extinguishers are categorized by the type of fire they put out (Class A, B, or C fires). If only one extinguisher is available, make sure that it is an ABC type that will put out most types of fires.



- **Class A** extinguishers are for ordinary combustible materials such as paper, wood, cardboard, and most plastics.
- **Class B** fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil.
- **Class C** fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish electrical fires—there is a serious risk of electrical shock! The C classification means the extinguishing agent is non-conductive.



If you are in immediate danger from flames or smoke, GET OUT and stay out. Call 911.



Procedure: How to Use a Fire Extinguisher

Supplies

- Fire extinguisher

Description of procedure

1. Ensure client is safe and free from possible injury/smoke damage.
2. Determine if the fire is fightable.
3. Do not fight the fire if:
 - The fire is spreading.
 - The type or size of the extinguisher is wrong.
 - The fire is too large.
 - If you do not know how to use a fire extinguisher.
4. Retrieve the fire extinguisher.
5. Use the **P.A.S.S.** acronym:
 - **P**ull the pin from the handle area at the top of the Fire Extinguisher and remove the hose from the clamp (if applicable).
 - **A**im the hose nozzle at the base of the fire. (You should be at least 10 ft. from the fire).
 - **S**queeze the lever in order to release the chemical.
 - **S**weep the hose nozzle from side to side at the base of the fire. (You will have about 10 seconds of extinguishing power.)

Practical tips

- Know the location of the fire extinguisher.
- Know the type of fire extinguisher to use (ABC puts out *most* types of fires).
- Check to see if the fire extinguisher is fully charged.
- Remember the extinguisher is heavy and only blasts for a few seconds.
- Stand at least 10 feet from the fire.
- Aim the spray of the extinguisher at the base of the fire. Aiming high spreads the fire.

Don't forget!

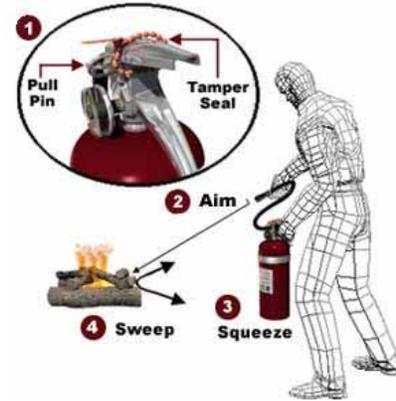
- Use the P-A-S-S acronym.
- **Don't forget the client.** Where is the client? Is the client safe and free from smoke contact? Do you need to assist or rescue the client?

When you fight a fire, remember P.A.S.S.:

1. **PULL...** Pull the pin. This will also break the tamper seal.
2. **AIM...** Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire.

Note: Do not touch the plastic discharge horn on CO₂ extinguishers, it gets very cold and may damage skin.

3. **SQUEEZE...** Squeeze the handle to release the extinguishing agent.
4. **SWEEP...** Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.



Source: United States Department of Labor, www.osha.gov/SLTC/etools/evacuation/portable_use.html

When not to fight a fire:

- If the fire is spreading too quickly!
- If the fire could block your only exit!
- If the type or size of the extinguisher is wrong!
- If the fire is too large!
- If you don't know how to use your fire extinguisher!

! If you have the slightest doubt about your ability to fight a fire, **EVACUATE IMMEDIATELY!**

- Leave the building as soon as possible.
- Do not gather any personal possessions.
- Stay low because the air above the flames can be extremely hot. Crawl and stay under the smoke if you are able. If not, try to cover your nose and mouth to avoid breathing toxic fumes.
- Once out, **do not go back inside**. Call 911 from a cell phone or a neighbor's home.

2. Fire Prevention

Preventing a fire is better than fighting fires. Fire alarms and safe handling of fire and other heat sources are important. The U.S. Consumer Product Safety Commission has targeted these principal consumer products associated with fires:

- Home heating devices
- Upholstered furniture
- Bedding
- Cigarette lighters
- Matches
- Wearing apparel (clothes)

The most important **fire safety measure** is to make sure the client has at least one working fire alarm on every floor preferably near the bedrooms and/or kitchen. **Test the battery monthly.**



Safety Tips for the Direct Care Worker

How to be prepared for a fire

- Identify the nearest emergency exit. Be familiar with the escape route.
- Have an emergency plan and practice leaving the building. Practice in darkness or using blindfolds.
- Install smoke alarms on each floor and next to sleeping areas. Check batteries monthly and replace them every six months.
- Have a fire extinguisher and know how to use it. Keep it near the kitchen.
- If someone uses a wheelchair, consider extra steps: Mount a small personal-use fire extinguisher on the wheelchair and/or keep a flame-resistant blanket nearby.
- Live or sleep near an exit. Try to sleep on the ground floor.
- Keep a phone near the bed or wheelchair.

Cooking

- Never leave the stove unattended while cooking. If you need to step away, turn it off or carry a large spoon with you to remind you that food is on the stove.
- Wear tight-fitting clothing when cooking over an open flame. Keep towels and potholders away from the flame.
- If food or grease catches fire, smother the flames. Slide a lid over the pan and turn off the heat. **Do not try to use water to extinguish a grease fire.**
- Make sure the stove is kept clean and free of grease buildup. When deep-frying, never fill the pan more than one-third full of oil or fat.

- Turn pot handles away from the front of the stove. Then they cannot be knocked off or pulled down.
- Never put foil or other metals in the microwave.

Smoking

- A person should not smoke in bed. Make sure the client is alert when smoking.
- Do not smoke near oxygen or an open flame.
- Do not smoke while under the influence of alcohol or if you are taking prescription drugs that can cause drowsiness or confusion.
- Never leave smoking materials unattended, and collect them in large, deep ashtrays. Soak the ashes in the ashtray before discarding them.
- Check around furniture, especially upholstered furniture, for any discarded or smoldering smoking materials.

Heating

- Keep electrical space heaters at least 3 feet from anything that can burn, including people. Turn them off when you leave the room or go to sleep.
- Make sure kerosene heaters are never run on gasoline or any substitute fuel. Check for adequate ventilation to avoid the danger of carbon monoxide poisoning.
- The heating systems and chimneys should be checked and cleaned once a year by a professional.
- Open fireplaces can be hazardous; they should be covered with tempered glass doors and guarded by a raised hearth 9 to 18 inches high.
- Never store fuel for heating equipment in the home. Keep it outside or in a detached storage shed.

Electrical safety

- Never use an appliance with exposed wires. Replace all cords that have exposed or broken wires.
- If an appliance begins to smell suspicious or you see smoke, unplug it immediately.
- Never overload extension cords or outlets: Don't plug in several items. Keep extension cords out of traffic areas.
- Electric blankets or heating pads should conform to the appropriate standards and have overheating protection. Do not wash electric blankets repeatedly. This can damage their electrical circuitry.

- Use only tested and UL-listed electrical appliances.
- Consider using new heat generating pads or blankets in place of electric ones.
- Turn heating pads off when the person falls asleep.

Using oxygen

- Oxygen should not be flowing near open flames or a heat source.
- Don't smoke near oxygen. A client using oxygen should not smoke with tubing in place and oxygen on.
- Oxygen should be at least three feet from an electric space heater.
- Put up signs stating that oxygen is in use and asking visitors not to smoke.
- Secure oxygen tanks so that they cannot be knocked over or be bumped into. Strap the tank to a closet wall or into the backseat of a car in the upright position.
- To move an oxygen tank, carry it or use a cart. Don't knock over or bump the oxygen tank. Don't put the tank on its side to roll it. If the valve is damaged, the tank can act like a torpedo.



E. Activity: What Would You Do?

Break into groups. Review the situations below and decide the course of action.

A Call 911, and then call your supervisor as soon as possible

B Call Supervisor

Put the letter of the action above next to the situation:

1. _____ Onset of fever of 101 degrees or higher
2. _____ New or sudden onset of incontinence
3. _____ Rash lasting several days or getting worse
4. _____ Bleeding that cannot be controlled
5. _____ Severe sore throat/difficulty swallowing
6. _____ Infection at injury site
7. _____ Unusual difficulty in arousing
8. _____ Scratching/holding one or both ears
9. _____ Diarrhea or vomiting lasting more than four hours
10. _____ Has a seizure lasting 5 minutes or continuous seizures, paralysis, confusion
11. _____ Onset of limping, inability to walk, or difficulty in movement
12. _____ Intense itching with no other symptoms
13. _____ Has trouble breathing or is breathing in a strange way
14. _____ Is or becomes unconscious not related to seizure
15. _____ Has no pulse
16. _____ Has symptoms of pain or discomfort
17. _____ Has chest pain or pressure
18. _____ Severe injuries as a result of accidents such as broken bones
19. _____ Has injuries to the head, neck, or back
20. _____ Has gone into shock

Did you know?

1. Mrs. Brown put her cigarette in the ashtray. A piece of paper is catching fire.
 - a. You cover it with a blanket or a pot.
 - b. You try to blow the fire out.
2. Mr. Jones asks you to bring his oxygen tank.
 - a. You carry it upright and gently set it down.
 - b. You lay it flat and kick it forward with your foot.
3. Mr. Kranz uses a wheelchair. Where can he probably escape a fire more easily?
 - a. On the second floor.
 - b. On the ground floor.

F. RESOURCES

- Banner Poison Control Center for Arizona 1-800-222-1222
- First Aid Guide, Mayo Clinic, <http://www.mayoclinic.com/health/FirstAidIndex/FirstAidIndex>
- First Aid Kit, Kids' Health for Parents, http://kidshealth.org/parent/firstaid_safe/home/firstaid_kit.html
- Information on fire safety and prevention:
 - www.firesafety.gov/index.shtm
 - www.emd.wa.gov/preparedness/videos/video_using_a_fire_extinguisher.shtml
 - www.hanford.gov/fire/safety/extingrs.htm