FIRE SAFETY – Level 1

Fire is a gift from God. It can be a very useful tool when used properly. It can warm our houses, provide us with light so that we can see, and help to prepare the food that we eat. Fire can also be a very destructive force. It can cause the loss of our houses and it can injure us or worse, it can take life. Fire is neither good or bad. How we use it is what determines its usefulness to us. We are going to learn how to protect ourselves from fire, what to do in case a fire gets started accidentally in our homes or any place else we may happen to be when it starts. We will also learn how to use a fire extinguisher safely in the event a small fire starts and we are able to get it out quickly or control it until the Fire Department arrives. You will want to check with your local Fire Department for more information on what is discussed in this handbook.

HOME ESCAPE PLANS

Having a home escape plan is very important when it comes to fire safety. We can be the most careful person in the world and yet accidents can still happen. I have met many Christians who are strong in their faith tell me that they never worry about things that might happen to them. They put all their trust in the Lord and no matter what may happen they will just wait on Him. Well, that is one attitude that we have but at the same time we must do what we can to prepare ahead in the event of an emergency.

The first thing that needs to be done is for you to draw a simple floor plan of your home or apartment. It should show all the ways to get outside. You should also draw in where all of the windows are located because they can be used to make an escape to the outside. Once you have your drawing you will want to have a family meeting and discuss the plan with them, making sure that everyone in your family knows where all the exits are located. You will want to try to pick a meeting place outside where everyone will go when they have made their escape.

The next step is to make sure that everyone knows how to open their bedroom window and undo the screen. They should practice this with their eyes closed because in a smoke filled room you may not be able to see. It is also a good idea to get in the habit of sleeping with the bedroom door closed. A closed door has saved many lives and it will give extra time to make your escape to the outside from your window. If you are worried about sleeping with the bedroom door closed, you can try leaving a night light on to make you feel safer. If you are awakened in the middle of the night by the sound of your smoke detector going off, you should treat it as a real fire until you find out that it is a false alarm. Get out of bed, put your slippers on and go to your bedroom door and feel it with your hand. If the door feels warm or hot to you do not open the door. Instead, go to your window and leave the house. Wait for the rest of your family at the meeting place. Call 911 from a cell phone outside the house. If you leave the meeting place you must leave a note at the meeting place telling everyone where you went and return as soon as possible because others may go back in the house looking for you.

Sometimes you may find that your bedroom has filled with smoke. If this is the case, you should get down on your hands and knees and crawl low under the smoke. The air will be better down

near the floor as heated air, smoke will rise to the ceiling. Get out of the house as quickly as possible.

There are some other common problems that you may have to consider in making your plan. In some areas, people will have security bars on their windows. If you have bars on your windows, they should have a quick-release latch if they are on bedroom windows. These are called "Fire Escape Bars" and you should know how to work the latch so that you can open the bar and crawl out of your window in case of an emergency.

You may have to break a window to get out. The best way to do this is to quickly empty out a dresser drawer and use it to break the window or use a chair. Hold on to the drawer or chair, aim at the top of the glass and turn your face away from the window. Punch out the glass starting at the top and work towards the bottom. Try to knock all of the glass out of the window. When you have finished with that, place a blanket or a bedspread on the bottom of the window sill so that you will not get cut when you climb out.

A two-story house can present special problems when planning an escape route. If you decide that you have to jump from your bedroom you must be careful or you can get hurt. The proper way to exit the window is feet first on your stomach. Hang straight down from the window and just let go. This way your feet will only be about six or seven feet from the ground.

Of course there is a better way to escape than jumping. There are several fire escape ladders available that can be used safely. If you or your parents purchase one of these ladders, it is important to practice using it before you ever have a real emergency. If your window exits on to the roof of the first story then it is a good idea to keep a ladder on the roof so that you can get to the ground safely.

The last step to home planning is the most important and that is practice. You may have the best plan in the world but if you don't practice it will not do anything for you. Fire drills are the best way to practice. You should hold a home fire drill at least every two months until you are sure everyone can escape safely. Oh, by the way, have fun while you are practicing.

SMOKE DETECTORS

Smoke detectors are a very good early warning device for the home. Everyone should have them in their homes or apartment. They have been known to provide as much as three to five minutes in advanced warning when a fire has started to burn in the home. (see Figure 5-18)

Smoke detectors come in two types, battery operated and what is called hard wire. Hard wire means that they are wired into the electrical circuits of the house. The advantage to these type is that they may be wired so that if one sounds an alarm, they all will start to give warning. These type however, can cost a lot more than the battery operated detectors. The battery operated smoke detectors are the most common found in most households. They are easy to install and they continue to work even if you lose the electricity to your home.

It is recommended that detectors be located in each bedroom and in the hallways going to those bedrooms. For example, if you lived in a three bedroom home, you would need four smoke detectors. One in each bedroom and one in the hallway. If you have a bedroom on an upper level floor then there should be a detector mounted at the center of the ceiling at the top of the stairway.

Proper maintenance and testing of the smoke detectors are very important. If the detector is not working properly, it will not warn you when a fire occurs. It is important to test the detector at least once every six months. Most detectors will have a test button that you can push and this will cause the alarm to sound. There are other ways that they can be tested and by reading the instructions that come with the detector you will get more information on how this can be done. You must make sure that you do not allow the battery to go dead on the battery operated detectors. Most batteries will last about a year. They also will start to "chirp" when the battery gets low. You will want to keep spare batteries on hand so that you can change them right away if they do get low. Cleaning is also important. If you don't clean the detector you will get a lot of false alarms. Again, you can learn how to do this by reading the instructions that come with the alarm.

FIRE EXTINGUISHERS AND TYPES OF FIRE

(see Figure 5-19) Fire extinguishers can be a very useful tool to have around the home in the event a small fire is discovered. A person who is familiar with the extinguisher can put out a small fire safely if they are quick to act. However, remember that safety is the key word. In this section we are going to discuss the classification of fires and types of fire extinguishers available.

Fires are arranged into four classes so that they may be recognized and the proper method of extinguishment can be used. These classes give a convenient method of designating what kind or type a fire is and the kind of fire extinguisher to use on it. (see Figure 5-20)

Class "A" fires are fires on common combustibles such as wood, paper, cloth, plastic and rubber. The best thing to use is water because it will cool the fire and soak the material so that it will not continue to burn. Dry chemical may be used. However, make sure you cover the material fully. Because dry chemical is a powder it will not soak into whatever was burning. You should use water to make sure the fire is completely out. This is called overhauling the fire. You must wet everything completely. Upholstery must be torn apart if that is what was burning.

Class "B" fires are fires in combustible and flammable liquids such as gasoline, acetone, alcohol, fuel oil, grease, etc. These fuels only burn on the surface. Never use water because you may splash the liquid around causing the fire to get bigger. You may use a dry chemical which put the fire out chemically or CO2 which removes the air from the fire, or Halon. If the fire is in a pot on a stove you can put the fire out by simply turning the stove off and covering the pan with a lid or breadboard and let it sit until everything cools off enough so that it is safe.

Class "C" fires are fires that involve ENERGIZED electrical equipment. Never use water. In order to completely extinguish the fire you will have to disconnect the electrical flow via a fuse box or circuit breaker and unplug the equipment. Electrical fires are the one class of fire that indicates a type of heat source rather than a fuel type.

Class "D" fires are fires in metals such as magnesium, sodium, lithium, potassium, etc. Never use water, they react very violently. They burn with a bright white flame. Do not stare at it or your eyes will be damaged even if you have sun glasses on. This type of fire may occur in automobiles or trucks. It takes a special extinguisher to put this type of fire out. You will be safer by staying away and calling the fire department. Of course, you should do this for all fires.

Now let's take a look at some fire extinguishers. There are about three different types. They are called the water type, dry chemical and the CO2 or Carbon Dioxide extinguisher.

The Water type or "Water Gun" is stainless steel in color (bright silver) and it weighs about 35 pounds and holds 2-1/2 gallons of water. It will squirt up to about 35 ft. and will last 1 minute. It can be used on class "A" fires only. It will work better as a spray by putting your finger over the end of the nozzle. Remember it will reach up to 35 ft. so you don't have to get too close to the fire.

The Dry Chemical extinguisher is the most common found in use today. It comes in "ABC" (multipurpose) or "BC". It is available in different sizes. It has a range of 8 to 12 ft. It will empty in 10 to 20 seconds. This is an excellent choice for home use. It can be messy when it is used. It is very similar to baking soda.

The Carbon Dioxide (CO2) are rated for class "B" and "C" fires only. It is a gas that smothers the fire. They will not have a gauge. They reach about 2 to 5 ft. You have to get fairly close to the fire. For that reason always give a test shot before committing to the fire. Do not hold on the cone shaped nozzle because it will freeze to your hand. Look for the wood or plastic handle just behind the nozzle.

On most extinguishers you will see large letters written on the cylinder label telling you what kind of fires it will put out. Also, the newer extinguishers will come with pictures on them representing the different class fire. Each extinguisher is required to have a label from the Underwriters Lab., or Factory Mutual testing Lab. The label on the upper left is the old style (see Figure 5-21). The newer labels are identified by the letters UL in a circle (see Figure 5-22). Once you find the label look for the word "classification". On the right side, or just below this, you will see a series of numbers and letters. On the example you see "2-A:10-BC". Remove the numbers and what you have are the letters "ABC", this is the designation of the class of fires the unit is to be used on. The numbers may be different but, you still read them the same. For example: 60-BC would be for class B & C fires only.

One of the most important things to learn is when not to put the fire out. There are four basic rules that should never be broken if you are dealing with a fire in a building.

LEARN THEM!

1. If you are not sure of what to do or you are really nervous do not try to put the fire out.
2. If you are alone, don't fight the fire.
3. If you cannot see the fire and all you see is smoke, don't do anything except call the fire department.
4. Make sure that there is a way out behind you and never let the fire get between you and your way out.

5. Whenever you purchase a fire extinguisher, always take the time to read all the instructions carefully. So when an emergency arises, you know how to use the equipment.

Remember the word PASS.

“P" stands for pull the pin. (see Figure 5-23)

“A" is for aim at the base (bottom) of the fire. (see Figure 5-24)
The two "S's" stand for squeeze the handle and sweep the fire. (see Figure 5-25)

FLAMMABLE LIQUIDS

Today there are many liquids being used in the home and work place. It is important to be aware of the dangers that may be involved when they are not used properly.

Liquids come in two types, combustible and flammable. Combustible liquids are the safer of the two but keep in mind they will still burn. A combustible liquid has to be heated before it will burn on its own. If you strike a match and put the flame in the liquid the flame will go out at normal room temperature. Examples of a combustible liquid are grease, cooking oil, and diesel fuel. Flammable liquids will burn right away. Almost any flame or spark will cause them to burn. Examples of these are gasoline, alcohol, acetone and thinners. It is a good idea to read the warning labels on containers to learn what is flammable and which is combustible. In any case always read the instructions on the containers. Remember too, check hair sprays, deodorants and other commonly used products around the house. You may be surprised at what you find.

As we said when we began, fire is a wonderful gift from God. As a Christian you need to learn to use it properly and safely. You also need to learn how to help others when they have problems with fire. With your knowledge and skills you can help to make this a safer world for yourself, your family, your friends and your fellow-man.