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ABSTRACT

Designed for a community fire education effort, particularly in which local volunteers present general information on fire safety to their fellow citizens, this workbook contains nine lessons. Included are an overview of the household fire problem; instruction in basic chemistry and physics of fire, flammable liquids, portable fire extinguishers, detection equipment, and home escape planning and inspection; a final review lesson; and instructions on preparing and presenting a fire safety talk. Each lesson provides introductory information on the topic of the lesson, definitions, and test questions. (BM)

# Fire Safety Training Handbook

Prepared by the
Montgomery County Department of Fire & Rescue Services
Division of Fire Prevention
Public Education Section
Rockville, Md.

**David B. Gratz**
Director

**Robert B. Smith**
Fire Marshal



for the
National Fire Prevention and Control Administration
Public Education Office

U.S. DEPARTMENT OF COMMERCE

# INTRODUCTION

Public fire education programs can have great impact when community resources are effectively utilized. This "Fire Safety Training Workbook" is designed for a community fire education effort in which local volunteers present general information on fire safety to their fellow citizens.

This Workbook was developed under the general direction of Lt. Earle B. Poole, who heads the Public Education Section of the Division of Fire Prevention, Montgomery County Department of Fire and Rescue Services. Faced with a limited budget for fire education activities, he launched a pilot program designed to utilize local volunteers. To participate in the first Household Fire Safety Training Program, he chose the Ladies Auxiliaries from local fire departments. After taking the course, the women enthusiastically translated their training into teaching others in Montgomery County.

Although Montgomery County used the information in the Workbook to emphasize household fire safety, the information can be applied to other uses, as well. For example, an elementary or junior high school teacher might use the information as the basis for a fire safety unit in science classes, in health classes, etc.

The Public Education Office of the National Fire Prevention and Control Administration is making this Workbook available as part of its Resource Exchange Program. The Office encourages and supports the exchange of ideas and programs on public fire education.

Richard Strother

Richard Strother
Associate Administrator for Public Education

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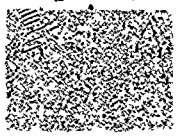


# HOUSEHOLD FIRE SAFETY PROGRAM

## BACKGROUND

The Montgomery County Department of Fire and Rescue Services presented a Household Fire Safety Training Program to members of the Ladies Auxiliaries of local fire departments. Class participants, in turn, presented the information on a voluntary basis to other members of the community after completing their training. Montgomery County did not intend to train experts on all aspects of fire, but rather to train resources in the community to present information on household fire safety.

## OBJECTIVE

To provide instruction to members of the Ladies Auxiliary of the local fire service on fire safety in the home on an instructor's level. To prepare and encourage these members to give lectures and or demonstrations on home fire safety within their respective communities.

## PURPOSE

To develop a substantial resource of women speakers who can relate to the everyday common causes of home fires and their prevention and control. To educate people to prevent fires in the home. To inspect their homes and remove fire hazards. To plan escape routes in advance. To equip their homes with early warning smoke detector . and thus save lives and property.

## COORDINATION OF PROGRAM

The coordination and development of this program is provided by the Public Education Section, Division of Fire Prevention, Department of Fire and Rescue Services, Montgomery County, Maryland.

## INSTRUCTIONAL PERSONNEL

To be provided by the Department of Fire and Rescue personnel and other fire and rescue personnel within the local units.

## PREREQUISITE

A member in good standing of the Ladies' Auxiliary who has registered for the program or a person associated with Montgomery County Fire Service who has been approved by the Auxiliary or the Department of Fire and Rescue Services.

# HOUSEHOLD FIRE SAFETY PROGRAM

## CERTIFICATION OF COMPLETION

Each member who successfully completes the course of study will be awarded a "Certificate of Completion" by the Department of Fire and Rescue Services.

## CLASS LEADER

Each Ladies' Auxiliary must provide a "Class Leader" who will be responsible to supervise registration of the class. She should also provide coordination and communication for the instructor. She will notify members of the class in the event of classes being changed due to inclement weather, sickness, location change, etc.

## MEETING DATES AND TIMES

The meeting of the classes will be determined by the instructor in cooperation with the Class Leader. All meetings will be scheduled before the program will begin. Students will be notified by the Class Leader of meeting time and dates, etc.

## LENGTH OF PROGRAM

The program will consist of ten (10) hours of instruction. This will be accomplished in five meetings of two hours each during weekday evenings.

## ABSENTEES

Students may be excused one night (2 hours) during the first four weeks. The fifth meeting will be the final review of all material and all must attend the last meeting.

## CONCLUSION

Upon successful completion of this program, the students will be prepared to conduct a talk and/or demonstration on home fire safety. Keep your notes and workbook for future reference and review as often as needed. Lesson VIII will develop a general outline for a talk on home fire safety. Use this outline as a base to develop your own presentation. You have now joined a team of "experts" on fire safety in the home. Good Luck!

# COURSE OF STUDY

**Lesson I.** **Overview of the Household Fire Problem**

**Lesson II.** **Basic Chemistry and Physics of Fire**
- A. Fire Triangle
- B. Rate of oxygen
- C. Types of fuel
- D. Sources of heat
- E. Heat movement

**Lesson III.** **Flammable Liquids**
- A. Flash point
- B. Ignition temperature
- C. Flammable or explosive limits
- D. Specific gravity
- E. Vapor density

**Lesson IV.** **Portable Fire Extinguishers**
- A. Definitions
- B. Use
- C. Limitations

**Lesson V.** **Detection Equipment**
- A. Fire Detection
- B. Smoke Detectors
- C. Heat Detectors
- D. Detection Systems
- E. Conclusion

**Lesson VI.** **Home Escape Planning and Inspection**
- A. Inspection
- B. Warning System
- C. E.D.I.T.H.

**Lesson VII.** **Final Review**

**Lesson VIII.** **Home Fire Safety Talk**
- A. Outline Lesson Plan

**Lesson IX.** **Presentation**
- A. Preparation
- B. Speaking

# OVERVIEW OF THE HOUSEHOLD FIRE PROBLEM

**LESSON I**

Lesson I will be a detailed review of the "Highlights of the National Household Fire Survey" produced by the U.S. Department of Commerce, National Fire Prevention and Control Administration. This survey was co-sponsored by the National Bureau of Standards of the Department of Commerce and the Consumer Product Safety Commission and was carried out by the Bureau of the Census.

The following subject matter will be covered during this lesson:

How many fires occur?
Where do fires occur?
Where do fires start?
When do fires start?
Who discovers fires?
When are fires discovered?
What catches fire first?
What are the activities connected with fire?
What is the involvement of flammable liquids?
Who gets hurt?
What is the dollar loss?
Who puts out the fire?
How is the fire put out?

## QUESTIONS—LESSON I

Circle Correct Answer.

T F 1. The National Household Fire Survey was conducted to obtain an overview of the national household fire problem.

T F 2. More fires were reported in kitchens when cooking was not being done.

T F 3. The greatest number of fires in homes occur when people are asleep.

T F 4. Most often a male will discover the fire because he is awake later at night than the female.

T F 5. Over 60% of all fires involved appliances; more than half of these involved the ignition of grease or other foods.

T F 6. Grease and food were the first items to ignite in nearly one-third of all reported fires.

T F 7. The young and middle-adult-age groups show a relatively high rate of injury.

T F 8. About 90% of the residence related fires were put out by a member of the household, most often by a female.

T F 9. Cooking was involved in nearly three-quarters of all fires in which any human activity was involved.

T F 10. Flammable liquids were involved in a majority of residence related fires.

## STUDENT'S NOTES

# BASIC CHEMISTRY AND PHYSICS OF FIRE

**LESSON II**

This lesson deals with the chemistry and physics of fire. A first step might be to identify the word "fire" as it relates to fire prevention and control. It is difficult, if not impossible, to state a single meaning. Numerous texts have different descriptions, most of which describe what fire does or refer you to other terms which you are familiar with; for example, heat, light, flame, combustion, chemical change, decomposition, oxidation, etc. For this reason, we will use "fire" for the remainder of the program to mean "visible flame which gives off light and heat."

## FIRE TRIANGLE

To better understand fire, we diagram a triangle. By doing this, you will learn what it takes to make a fire. Fuel, oxygen, and heat are necessary to make a fire and are identified as the three sides of the fire triangle.

## RATE OF OXYGEN

The air we breathe is 21 percent oxygen. If we reduce the percent of oxygen to 15 percent, we can not live. The same thing happens to fire. When fire is not supported by more than 15 percent oxygen, it goes out. We refer to this as smothering the fire.

The opposite will happen when fire is exposed to more than 21 percent oxygen. A good example of this is when a welder's torch cuts through steel. By supplying oxygen at a greater rate, the fire is intensified.

## TYPES OF FUEL

The fuel side of the triangle denotes what is burning. Fuels are one of three types: solid, liquid, or gas.

List three solid fuels found in a household.

1. _____
2. _____
3. _____

List three flammable liquid fuels found in a household.

1. _____
2. _____
3. _____

List two gases found in a household.

1. _____
2. _____

# BASIC CHEMISTRY AND PHYSICS OF FIRE

## SOURCES OF HEAT

We are all familiar with the heat side of the triangle. Without heat we could not live. Heat is all around us. It warms our building, runs our car, cooks our food, and sends astronauts to the moon. The question about heat is whether it is controlled heat or uncontrolled heat. When enough heat, controlled or uncontrolled, heats a fuel to its ignition temperature, and the available oxygen is in excess of 15 percent, a fire is imminent. This will have completed the fire triangle. Four sources of heat are spontaneous ignition, chemical action, friction, and electricity.

## HEAT MOVEMENT

It is important to understand how heat moves. We call these movements convection, conduction, or radiation. *Convection* is the upward movement of heat. This is visible each time you watch smoke from a fire going up. *Conduction* is heat moving through something. A metal spoon which feels hot on one end when the opposite end is held over a flame will demonstrate this. *Radiation* is best described as heat you feel from a campfire even though you are not over it or touching anything involved with the fire.

List two examples of each type of heat movement.

*Convection*

1. _____

2. _____

*Conduction*

1. _____

2. _____

*Radiation*

1. _____

2. _____

## QUESTIONS—LESSON II

1. What are the three parts of the fire triangle?

   A. _____ B. _____ C. _____

2. List three types of fuel.

   A. _____ B. _____ C. _____

3. A household candle flame will extinguish at what percentage of oxygen?

   _____ %

4. List three sources of heat.

   A. _____ B. _____ C. _____

5. List three types of heat movement.

   A. _____ B. _____ C. _____

## STUDENT'S NOTES

STUDENT'S NOTES

# FLAMMABLE LIQUIDS

**LESSON III**

Flammable and combustible liquids are found in various forms and their improper use and handling cause many fires with resultant loss of life and property. Strictly speaking, flammable and combustible liquids are not a fire cause, though often referred to as such. More correctly, they are contributing factors because a spark, flame, electrical arc or some other source of ignition may cause fire or an explosion in the presence of flammable vapors.

It is the vapor from flammable or combustible liquids, when mixed with air, that burns when ignited, rather than the liquid itself.

## STUDENT'S NOTES

# FLAMMABLE LIQUIDS

## FLASH POINT

Flash point of a liquid is the lowest temperature at which the liquid gives off vapor sufficient to form an ignitable mixture with the air near the surface of the liquid.

## IGNITION TEMPERATURE

Ignition temperature of a substance, whether solid, liquid or gaseous, is the minimum temperature to which the substance must be heated in order to initiate or cause self-sustained combustion independent of the heating or heated element.

Ignition temperatures observed under one set of conditions may be changed substantially by a change of conditions. For this reason, ignition temperatures should be looked upon only as approximations.

## FLAMMABLE OR EXPLOSIVE LIMITS

In the case of gases or vapors which form flammable mixtures with air or oxygen, there is a minimum concentration of vapor in air or oxygen below which propagation of flame does not occur on contact with a source of ignition (too lean). There is also a maximum proportion of vapor or gas in air above which propagation of flame does not occur (too rich). These boundary-line mixtures of vapor or gas with air which, if ignited, will just propagate flame are known as the "lower and upper flammable or explosive limits" and are usually expressed in terms of percentage by volume of gas or vapor in air.

The range of combustible vapor or gas-air mixtures between the upper and lower flammable limits is known as the "flammable range," also often referred to as the "explosive range."

## SPECIFIC GRAVITY

The specific gravity of a substance is the ratio of the weight of the substance to the weight of the same volume of water. The specific gravity of water is one (1.0). A liquid with a specific gravity of less than one will float on water. Most flammable liquids are lighter than water.

## VAPOR DENSITY

Vapor density is the relative density or weight of a vapor or gas (with no air present) as compared with air. A figure less than 1 indicates a vapor is lighter than air, and a figure greater than 1 that a vapor is heavier than air. Most flammable liquid vapors are heavier than air.

STUDENT'S NOTES

## QUESTIONS—LESSON III

1. Define the term "flash point."

2. Circle the one correct answer: which is the flammable liquid most likely to ignite when placed near a lighted candle?

   Motor Oil  Turpentine  Fuel Oil  Gasoline

3. List 5 household products which are flammable and/or combustible liquids.

   A. _____

   B. _____

   C. _____

   D. _____

   E. _____

4. List 5 household appliances or fixtures which could be a source of ignition when a flammable liquid is suspended in the air.

   A. _____

   B. _____

   C. _____

   D. _____

   E. _____

# PORTABLE FIRE EXTINGUISHERS

LESSON IV

## DEFINITIONS

In this lesson, you will learn about the maintenance, use and limitations of portable fire extinguishers. To completely study all of the types and models of the various manufacturers would be impossible in this lesson. We will concentrate on the fundamentals of fire extinguishment and general characteristics by which fire is extinguished with portable hand carried devices. It has been said by Frank Brannigan, Professor at Montgomery College, Rockville, Maryland," that a fire extinguisher is an approved extinguishing device in the hands of a well trained person, who is ready, able and willing to extinguish a fire which has not exceeded the limitations of the extinguishing device." Although Professor Brannigan's definition is valid, for the purpose of this program, we will use the term "fire extinguisher" as meaning all portable fire extinguishing devices which bear the label of the Underwriters' Laboratories (UL).

In Lesson II, you will remember it took three things to create a fire: oxygen, fuel and heat. In technical language, fire is referred to as a chemical reaction. To extinguish a fire, we must stop this reaction. This is done by removing, eliminating or separating any one of the three sides of the fire triangle.

## USE

For the purpose of identification, we classify fires by types using the designations A, B, C and D.

Class "A" fires occur in ordinary combustible materials such as wood, cloth and paper. The most commonly used extinguishing agent is water, which cools and quenches. Fires in these materials are also extinguished by special dry chemicals for use on Class A, B and C fires. These provide a rapid knock down of flame and form a fire retardant coating which prevents reflash.

Class "B" fires occur in the vapor-air mixture over the surface of flammable liquids such as greases, gasoline and lubricating oils. A smothering or combustion inhibiting effect is necessary to extinguish Class "B" fires. Dry chemical, foam, carbon dioxide and water fog all can be used as extinguishing agents depending on the circumstances of the fire.

Class "C" fires occur in electrically energized equipment. Nonconducting extinguishing agents must be used. Dry chemical and carbon dioxide are suitable. Because foam, water (except as a spray) and water-type extinguishing agents conduct electricity, their use can kill or injure the person operating the extinguisher, and severe damage to electrical equipment can result.

Class "D" fires occur in combustible metals such as magnesium, titanium, zirconium and sodium. Specialized techniques, extinguishing agents and extinguishing equipment have been developed to control and extinguish fires of this type. Normal extinguishing agents generally should not be used on metal fires as there is danger in most cases of increasing the intensity of the fire due to a reaction between some extinguishing agents and the burning metal.

# PORTABLE FIRE EXTINGUISHERS

## LIMITATIONS

An important reminder about a portable fire extinguisher is that it is first aid equipment only. You must recognize the type and size of fire to be put out. To help you determine this, you can read the Underwriters' Laboratories label on the name plate of each fire extinguisher. On this plate, you will see the word "class" or "classification" to be followed by a series of numerals and letters. The numerals identify the area (size) of fire which may be extinguished and the letters identify the type of fires it is approved for: for example, 2A; or 2A,5BC; or 5BC; or 2A, 10BC, etc. Remember the larger the number in any given class, the larger area of fire which may be extinguished.

## STUDENT'S NOTES

## QUESTIONS—LESSON IV

1. What are the four types of fires?

_____ _____ _____ _____

2. Explain briefly each type by giving an example of each.

A. _____

B. _____

C. _____

D. _____

3. Circle the one correct answer which identifies the fire extinguisher label on the fire extinguisher which will extinguish the greatest area of a flammable liquid fire.

2A, 5BC  2A, 10BC  4A  20 BC

4. All fire extinguishers require a maintenance check: (Circle)

Once each year  Once each six years  Every six months  Each one may vary

## STUDENT'S NOTES

# DETECTION EQUIPMENT

**LESSON V**

Early discovery. Those are the key words in saving lives and property from the effects of a fire. Before any life saving steps can be taken, before any fire suppression activities can begin, a fire must be discovered. And, it must be discovered before the fire has reached a stage that prevents effective action.

There are several ways a fire can be discovered. One, of course, is by human action. A person or persons inside or outside the building could conceivably discover a fire early enough to warn occupants in the building.

Another way in which a fire can be discovered and, perhaps, a more efficient way, is by mechanical or electrical means. This can be accomplished by properly installed fire detection devices.

## FIRE DETECTION

When a fire burns, it creates products of combustion. These products of combustion include heat, light, water, other vapors, gases and particles. A fire detector is simply a device which senses one or more of these products of combustion when they are present in an abnormal quantity. In commercial and other specialized applications, detectors have been developed that sense each of these separate categories of products. In residential fire detection applications only heat and smoke (particles) detectors are normally used.

## SMOKE DETECTORS

A smoke detector is a device which detects visible or invisible particles of combustion. Essentially, two different smoke sensing methods are used in residential smoke detectors: (1) photoelectric and (2) ionization chamber. These methods will be discussed in class.

All residential smoke detectors need some source of electrical energy to operate. This may be supplied through permanent wiring to the electrical system of the dwelling. Detectors are also available with a cord and plug arrangement which can be plugged into an outlet in the dwelling. Ionization chamber smoke detectors, because of their extremely low electrical power consumption, often utilize an internal battery as a source of electrical energy. In new construction in Montgomery County only detectors which are permanently wired into the electrical system are acceptable. In existing buildings plug-in and battery detectors are also acceptable.

Battery operated smoke detectors have two advantages and one disadvantage when compared to detectors operated from the dwelling's electrical power. One advantage is that if the electrical power in the dwelling should be off, either due to an interruption from the utility company or an interruption caused by a fire within the dwelling, the detector will still function.

The other advantage is that, if it is decided to install a smoke detector in an existing dwelling and an appropriately placed electrical outlet is not available, this is of no consequence to the battery operated detector. The major disadvantage is that the batteries will need periodic replacement, generally once a year.

One of the most critical factors in early warning fire detection is the proper location of the smoke detectors. The Department has prepared a handout describing proper location with which you will be supplied. In any discussion of location, it is important to remember that the purpose of these detectors is to warn the sleeping occupants of a dwelling before the fire reaches such magnitude that they can no longer escape. Therefore, the detectors must be located between the sleeping occupants and the various areas where the fire may occur. That is why the area outside the sleeping rooms and the area at the head of the various stairways is so important.

## STUDENT'S NOTES

# DETECTION EQUIPMENT

## HEAT DETECTORS

Self-contained heat detectors are available which are mechanically operated as opposed to the electrical operation of self-contained smoke detectors. These devices can provide a valuable addition to the coverage provided by smoke detectors alone. However, heat detectors should never be used without the basic smoke detectors. While heat detectors are simple and reliable in the vast majority of cases, the smoke detector will function before there is sufficient heat to activate the heat detector unless the fire should happen to start directly beneath the heat detector.

## DETECTION SYSTEMS

In lieu of using individual detectors in a dwelling, it is possible to install a fire detection system. A fire detection system consists of at least a control panel, an alarm sounding device such as a bell or horn, and two or more smoke and heat detectors. In some installations, the noise-making device may be included as part of the control panel. In a system installation each of the detectors is wired back to the control panel so that the sensing of a fire by any detector in the house causes the central alarm to sound. The system has certain advantages over the individual detectors which were previously discussed. However, the cost of a system is usually considerably higher than the cost of individual detectors unless individual detectors are installed throughout all spaces in the structure.

## CONCLUSION

A look at local, state or national fire statistics will quickly show that the majority of citizens that lose their lives in fire die in residences. While there may be a number of approaches which may reduce this appalling condition, fire officials throughout the country agree that the installation of early warning fire detectors is the most promising approach for short term dramatic reduction in life loss. At the present time, all residences constructed after July 1, 1975, in the State of Maryland are required to have installed smoke detectors. However, there are more than one hundred and fifty thousand existing dwelling units in Montgomery County that do not have this protection. A major portion of the fire service public education program for Montgomery County is directed at convincing the occupants of those existing dwellings to install smoke detectors. On the basis of available information, it is concluded that the installation of smoke detectors coupled with pre-fire home escape planning and the practice of some common sense fire prevention techniques will save lives in the homes in Montgomery County, or for that matter, anywhere in this country.

STUDENT'S NOTES:

## QUESTIONS—LESSON V

1. List 2 principal methods used in smoke detection devices.

   A. _____

   B. _____

2. Circle the 2 *most* important locations in a household where smoke detectors should be installed.

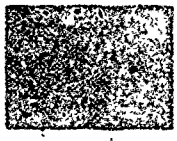
| | |
|---|---|
| Furnace Area | Kitchen |
| Sleeping Area | Top of Stairs |
| Over Fireplace | Garage |
| Attic | Living Room |

3. Each type of smoke and heat detector sold in the State of Maryland must have been approved by the State and County Fire Marshals.

   True False

4. The installation of an approved smoke detector will protect the occupants from all fire hazards.

   True False



# HOME ESCAPE PLANNING AND INSPECTION

**LESSON VI**

Fire is the third leading cause of accidental death. Residential occupancies account for most fire fatalities and most multiple fire deaths occur at night during sleeping hours.

Most fire injuries also occur in the home. Of the 300,000 Americans who are injured by fire every year, nearly 50,000 lie in hospitals for a period ranging from six weeks to two years. Many never resume normal lives. The chances are that the average family will experience one serious fire every generation. "Reasonable fire safety" can be produced through a three point program as follows:

1. Minimizing fire hazards through a complete home inspection and taking corrective action to eliminate fire hazards found.
2. Providing an approved smoke detection system which is properly maintained.
3. Having and practicing an escape plan with all the members of the household.

## INSPECTION

To conduct a home inspection, it is preferable to have each member of the household take part. First, you need a home inspection check list. Use the inspection check list to guide you through the inspection. Also, keep the check list as a record of fire hazards to be corrected. Review this list periodically to see if the corrected hazard(s) reappear. As people tend to be creatures of habit, it is likely some hazards will reappear until such time as the members of the home condition themselves to the corrected means. On some occasions, assistance should be requested where special problems exist. Local fire station personnel as well as the Division of Fire Prevention can assist as needed. A home fire safety inspection report will be reviewed in class. Take it home and practice in your own household.

## WARNING SYSTEM

In Lesson V you received instruction about fire and smoke detection devices. By now you should be convinced and convincing to others of the need for such devices. The major point to be understood is that detection of a fire alone is not enough to be "reasonably" safe from fire. Some people may develop an attitude that if they have installed fire and/or smoke detection devices they need not take any other precautions against fire. Providing an approved fire warning system is but one of the three steps to being "reasonably fire safe."

## E.D.I.T.H.

Exit Drill In The Home (EDITH) is a name used in educating people to have a plan of escape. Many of the fire deaths and injury victims each year had prior knowledge of the fire in ample time to have taken the right life saving action. For one reason or another, they didn't. One major reason is that they had never planned what to do if

# HOME ESCAPE PLANNING AND INSPECTION

**E.D.I.T.H.**

they discovered fire in their household. A member in each home should assemble all of the occupants and draw an escape plan. The plan should be reviewed by everyone in the house. Each one should consider all of the possible escape routes from their sleeping area and become familiar with them. Everyone should agree on a specific meeting place outside of the house so all can be accounted for. Many people lose their lives by going into a building fire looking for persons who may have gotten out. The escape plan should also include all of the different means by which you can call the fire department. Many fire victims are the result of being trapped while trying to call the fire department from inside the building that is on fire.

Another common mistake is that people will open bedroom doors before checking the door to see if it is hot. If smoke and heat are on the other side of a door, keep it shut. Opening it will only feed more oxygen to the fire and intensify the burning and the fire will rapidly spread into your area. As you have already learned, heat and smoke will rise to the top of the room. Remember heat convection—the upward movement of heat? By now it is easy to associate why you will educate people to keep low in a building fire. *Crawl* to the nearest exit. The best air will always be near the floor. The coolest temperature will also be near the floor. It is important that you not only understand what to do in the event of fire, but be prepared to explain why you do a certain thing.

## STUDENT'S NOTES

## QUESTIONS—LESSON VI

1. Fill in the name for each of the following letters in the E.D.I.T.H. program.

E. _____

D. _____

I. _____

T. _____

H. _____

2. List four ways of escape from a second floor in case of a fire.

A. _____

B. _____

C. _____

D. _____

3. You should never exit a burning building until you have called the fire department.

True False

4. If you awaken to find your house on fire, you should open all the bedroom doors to let the heat out of the exitway so you can escape.

True False

5. Fire escape planning is not needed if you have a fire extinguisher and have installed a good smoke detection device.

True False

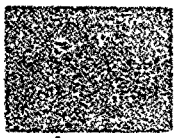
STUDENT'S NOTES

# FINAL REVIEW

## LESSON VII

During Lesson VII you will review the first six lessons. We will review in specific detail any areas in which you have questions. Read through all of the material that has been presented and prepare a list of questions you have. If anyone has missed a class, we will try to review that lesson in detail also.

## QUESTIONS



# HOME FIRE SAFETY TALK

## LESSON VIII

In this lesson the class will prepare a lesson plan for a fire safety talk on household fire safety. The instructor will help with the form provided. This will be a class project with coordination of ideas from the class to develop their own talk.

Fill in the lesson outline provided in the next pages and be prepared to discuss your ideas in class. A second copy of the lesson plan forms is provided for you to record the lesson plan developed in class.

## STUDENT'S NOTES

# HOME FIRE SAFETY TALK

MONTGOMERY COUNTY
DEPARTMENT OF FIRE & RESCUE SERVICES
DIVISION OF FIRE PREVENTION
PUBLIC EDUCATION SECTION

INSTRUCTOR'S LESSON PLAN

No. _____

SUBJECT. _____

TITLE OF LESSON: _____

TOTAL TIME PERIOD: _____

TRAINING AIDS: _____

OBJECTIVE(S): _____

INSTRUCTOR REFERENCES: _____

STUDENT REFERENCES: _____

DATE PREPARED: _____

INSTRUCTOR: _____

PREPARED BY: _____

COURSE TITLE: _____

TIME CUES _____

LESSON OUTLINE _____

KEY POINTS AND AID CUES _____

TIME CUES _____

LESSON OUTLINE _____

KEY POINTS AND AID CUES _____

# HOME FIRE SAFETY TALK

MONTGOMERY COUNTY
DEPARTMENT OF FIRE & RESCUE SERVICES
DIVISION OF FIRE PREVENTION
PUBLIC EDUCATION SECTION

INSTRUCTOR'S LESSON PLAN

No. ____

SUBJECT:

TITLE OF LESSON:

TOTAL TIME PERIOD:

TRAINING AIDS:

OBJECTIVE(S):

INSTRUCTOR REFERENCES:

STUDENT REFERENCES:

DATE PREPARED:

INSTRUCTOR:

PREPARED BY:

COURSE TITLE:

TIME CUES

LESSON OUTLINE

KEY POINTS AND AID CUES

TIME CUES

LESSON OUTLINE

KEY POINTS AND AID CUES

# PRESENTATION

LESSON IX

## PREPARATION

Before you attempt to accomplish any endeavor you must first have a systematic approach. The same applies to preparing to give a presentation, speech, demonstration, etc. The first thing you should do is investigate the activity at hand. You should know for instance how many people will be in attendance, their approximate ages, sex, affiliation to one another, purpose of their meeting, and why you are attending. You must also know what topic you are preparing for and what length of time is expected from you. Without a carefully designed plan you cannot expect more than minimum results.

Always try to be on time and never run overtime if possible. When this happens, you will inherently race through your material and the audience will not follow or keep up.

## SPEAKING

Never make excuses for not being prepared as this suggests your presentation is not going to be good. Many speakers have done this even when they were prepared, just in case they found the audience not very receptive.

Eye contact is important in keeping the attention of the audience. You should look at all of the audience during your presentation and not concentrate on any one individual or section. It is helpful to the listener if you position yourself in front of them where everyone can see you. Try and stay in or near that spot as much as possible. People taking notes, etc., will expect to see you in your same location instead of trying to chase you all around the room.

Always try and use some type of audio or visual aid when your presentation is one hour or more. No one wants to hear someone speak for over one hour at a time. When using aids be sure to program their use. If you want the attention on the aid then use it. If you want the audience to focus on the speaker, then remove or discontinue the use of the aid. Leaving the aid in place after you have finished with it will distract listeners from your speech.

Be careful of overpowering people who will seek permission to speak and take over the whole topic or will try and distract others from it. Many times this may be a person who disagrees with subject matter or just may like to talk. However, don't try to be overly superior in knowledge of the subject matter. If someone is adding to or supporting the topic allow them to comment.

Audio and visual aid equipment will be displayed and instruction on the use of each will be demonstrated in class.

# PRESENTATION

List 5 things on the lines provided below that *you think* would distract an audience from a speaker's presentation:

1. _____
2. _____
3. _____
4. _____
5. _____

## STUDENT'S NOTES

## QUESTIONS—LESSON IX

Circle Correct Answer.

T F 1. Without a carefully designed lesson plan, an instructor cannot hope to achieve more than minimum results.

T F 2. The best way to keep the attention of the group is to continuously move back and forth in front of the group.

T F 3. Only look at the center of the audience so the people seated to either side will not feel left out of the group.

T F 4. Never put up visual aids when you want the attention of the group focused on the speaker.

T F 5. Always offer an excuse for not being prepared and the audience will always be alert not to miss anything.

T F 6. If someone brings up another subject more interesting than your topic, help them as much as you can to discuss it at length.

T F 7. Try and run overtime on your talk as this is good proof that you were well prepared.

T F 8. Never make a lesson plan without a summary. This is the time to review important points you have made.

T F 9. Always be superior to the group and don't let any experts in the audience add to your knowledge on the topic.

T F 10. Always thank the group for letting you take their time and choosing you as their speaker.

## STUDENT'S NOTES