

FIRE

PREVENTION AND CONTROL AN INSTRUCTIONAL PACKAGE MEMBER'S GUIDE

- HOW A FIRE BURNS
 - CLASSES OF FIRE
 - FIRE EXTINGUISHERS AND THEIR USE
 - IDENTIFICATION OF COMMON FIRE HAZARDS
 - DEVELOP AN ESCAPE PLAN
 - HEAT & SMOKE DETECTORS
 - YOUR FIRE DEPARTMENT



NAME _____
 CLUB _____
 BIRTHDATE _____
 YEARS IN PROJECT _____
 YEARS IN 4-H _____



FLORIDA COOPERATIVE EXTENSION SERVICE

Institute of Food and Agricultural Sciences
 University of Florida
 Gainesville, Florida

John T. Woeste - Dean for Extension

FIRE

PREVENTION AND CONTROL

AN INSTRUCTIONAL PACKAGE

MEMBER'S GUIDE

- How a Fire Burns
- Classes of Fire
- Fire Extinguishers and Their Use
- Identification of Common Fire Hazards
- Develop an Escape Plan
- Heat & Smoke Detectors
- Your Fire Department

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FIRE PREVENTION AND CONTROL

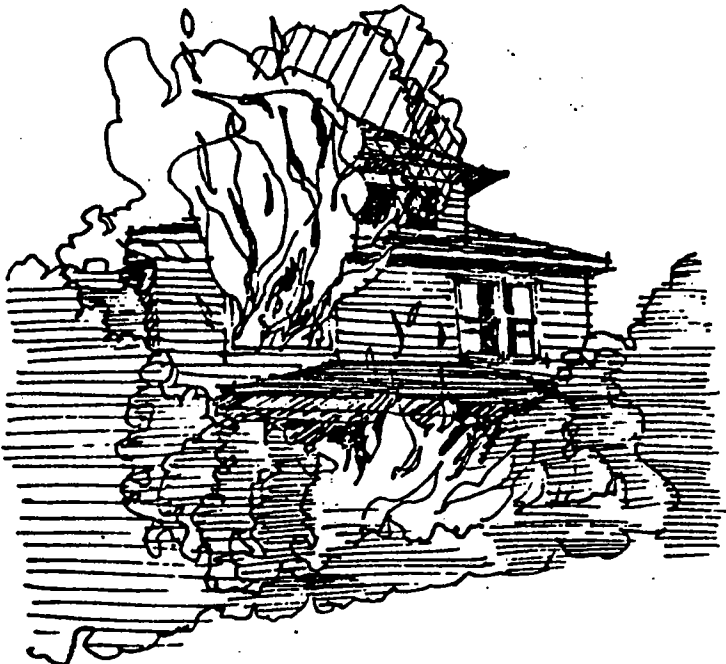
MEMBER'S GUIDE

Preface

This instructional package in Fire Prevention and Control is designed for 4-H and other youth. The authors are pleased that this package has found its way to you.

Fire when controlled, is one of man's most valuable resources. But fire when out of control can be deadly and can cause serious, very painful and costly injury to people and result in millions of dollars in loss of property. We don't want this to happen to you or your family and that's why we ask you to study the seven lessons in this package carefully. We want you, your family and your home to be fire safe.

Your leader or teacher for this program in Fire Prevention and Control will assist you with these lessons, but it will be your responsibility to study and complete these lessons. We urge you to complete all the worksheets and hope many of you will do some or all of the extra projects. You can make yourself, your family and your home "Fire-Safe".



William J. Becker
John Rutledge

Fires cause
Property losses
Injuries
Deaths

FIRE PREVENTION AND CONTROL

MEMBER'S GUIDE

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FIRE PREVENTION AND CONTROL

MEMBER'S GUIDE LESSON I

HOW A FIRE BURNS

This lesson is designed to help you understand the three elements of a fire and how, by removing one or more of these essential elements, a fire can be prevented or extinguished.

OBJECTIVES:

1. Recognize and name the three elements necessary for a fire.
2. Draw and label a fire triangle.
3. Collect five solids which will burn and three solids which will not burn.
4. Name three liquids and two gases which will burn.
5. Name a common liquid and common gas which will not burn.
6. Demonstrate how to extinguish a fire by removing the fuel.
7. Demonstrate how to extinguish a fire by removing the air.
8. Demonstrate how to extinguish a fire by removing the heat.

INGREDIENTS FOR A FIRE:

Homes and Farms in Florida use devices and fuels to provide heat, light and power. These devices and fuels will cause out-of-control fires if they are misused. It is important to prevent fires, and to know what to do if one should occur.

For a fire to start and continue burning, three things must be HEAT, AIR, and FUEL. If these three things come together in the correct amounts, a fire starts.

Gases are all around us: Oxygen, hydrogen and carbon dioxide are in the air we breathe. Not all gases burn. Carbon dioxide is used to

extinguish fires. Oxygen doesn't burn but it is an essential element to support a fire. But some gases do burn. The natural gas used in kitchen stoves, water heaters and furnaces burns. So does butane in lighters, propane in torches, acetylene in oxy-acetylene welders. These gases can be very dangerous. Unlike solids and liquids they do not have to be heated and changed to a gaseous state. They are already gaseous, just add oxygen and heat and they burn - even explode.

Flammable liquids will not burn until they are vaporized or changed into gas. Some knowledge of common flammable liquids is essential for safe handling. Kerosene does not vaporize at room temperature, but does if heated. Gasoline vaporizes at normal temperature and is hazardous when exposed to the open air and a source of heat. Can you name other flammable liquids?

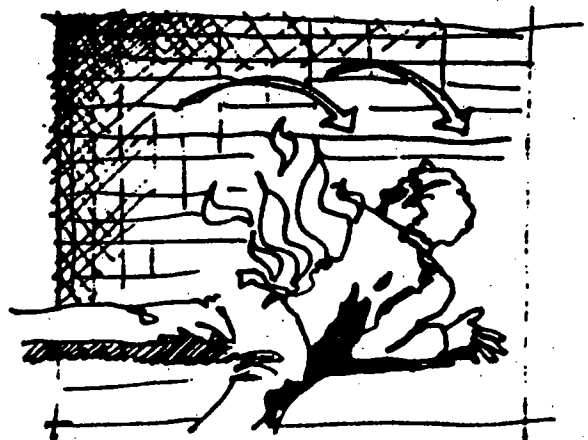
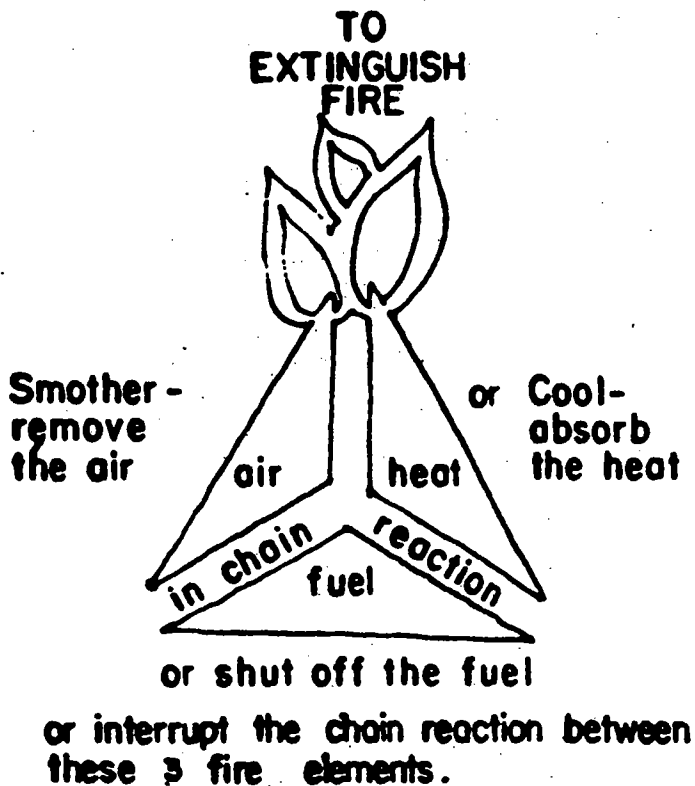
A block of wood does not burst into flame, but if it is ground into a fine dust it burns easily. Did you know solids turn to gases and then burn? A piece of steel is hard to burn, but when it is in the form of steel wool it will burn easily. When solids are divided into fine particles and sufficient oxygen (from the air) surrounds the particles to support combustion, then, with enough heat the solids will begin to burn. Heat of combustion is the amount of heat needed to cause a fuel to begin burning.

Combustible solids not only burn more readily if finely divided, but their position also makes a difference. Wood in a vertical position burns more rapidly than that in a horizontal position. The unfortunate person whose clothes catch fire should lie down. The fire will burn more slowly than if one remains standing.

The drop and roll procedure is recommended should your clothes ever catch on fire. Roll slowly and the lack of oxygen between you and the ground will extinguish the fire. Small areas can be put out by clamping your hand over the fire for a second or two. Rolling up in a carpet, heavy blanket or coat will also help put out the fire.

You are familiar with brush, grass, rubbish, and camp fires. At times certain conditions can cause these fires to get out of control. High winds, high temperature, and low humidity are factors which one should be aware of and consider before starting outdoor fires. You have probably noted the difference which weather makes in the ease of building campfires - wet wood simply does not ignite easily.

The three elements - heat, air, and fuel - necessary for a fire to burn create what the fireman refers to as the fire triangle. If one part of the fire triangle is removed, the fire will go out.



Drop and roll if your clothes
catch fire

**THE
FIRE
TRIANGLE**

WORKSHEET

LESSON I

HOW A FIRE BURNS

1. Draw and label a fire triangle.

2. List the five solid materials you collected which will burn.

1.

2.

3.

4.

5.

3. Which material on your list will burn easily? Why?

4. Which material is hardest to light? Why?

5. Name three liquids and two gases which burn.

Liquids

Gases

1.

1.

2.

2.

3.

6. Name a liquid and a gas which will not burn.

Liquid -

Gas -

7. You were asked to collect solids which would and would not burn. Why were you not asked to collect liquids and gases which would or would not burn? Can you list three reasons?

1.

2.

3.

8. Demonstrate for your leader or parents how a fire can be extinguished by removing the fuel. Explain what you did.

9. Demonstrate for your leader or parents how a fire can be extinguished by removing the air. Explain what you did.

10. Demonstrate for your leader or parents how a fire can be extinguished by removing the heat. Explain what you did.

EXTRA PROJECT

1. Construct a colorful fire triangle that could be used to teach others.
2. Develop a collection of flammable solid materials found around the home or farm. Mount and label small amounts of these materials on an 18" x 30" board in an attractive manner.
3. Develop a picture collection of flammable materials, (solid, liquid or gas) found around the home or farm. Develop an attractive, informative poster using these pictures.

FIRE PREVENTION AND CONTROL

MEMBER'S GUIDE LESSON II

CLASSES OF FIRES

This lesson is designed to help you identify the classes of fire, common fuels for each class, safety practices to prevent each class of fire and ways to put out each class of fire.

OBJECTIVES:

1. Show materials or pictures of materials which burn, identify which class of fire each material would cause.
2. Give three examples of how one class of fire can change to another class of fire.
3. List two safety practices to follow in order to prevent each of the four classes of fires (a total of eight).
4. Explain how:
 - water can put out a fire.
 - a fire blanket can put out a fire.
 - CO₂ or chemicals can put out a fire.
5. Explain why:
 - water should never be used on a Class B fire.
 - water should never be used on a Class C fire.

CLASSES OF FIRES:

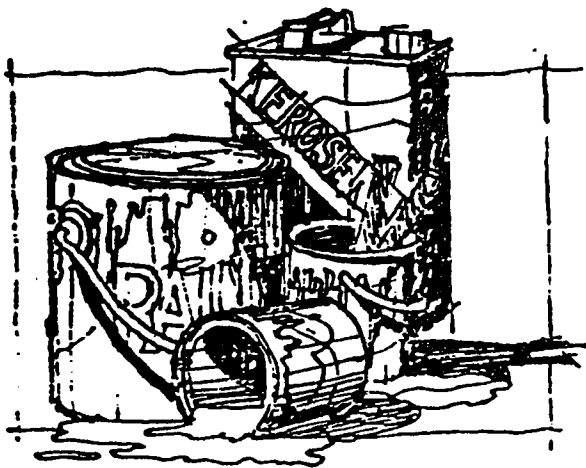
There are four classes of fire. Any one may occur in or around the home or farm. Knowing the classes of fires will help you to prevent or fight such a fire.

Class A Fires

Wood, paper, cloth, grass and trash are common fuels for Class A fires. To prevent these fires, keep these materials from collecting and from coming in contact with a source of heat. Neatness and cleanliness around the home and farm are good fire prevention practices. Get rid of waste paper, wood, grass and trash. Don't keep food for a fire!

Water is effective in fighting these fires. It works by lowering the temperature below the combustion point of the wet material. Wet materials need more heat to burn.

Class B Fires



PRODUCTS WHICH CAUSE
CLASS B PETROLEUM FIRES



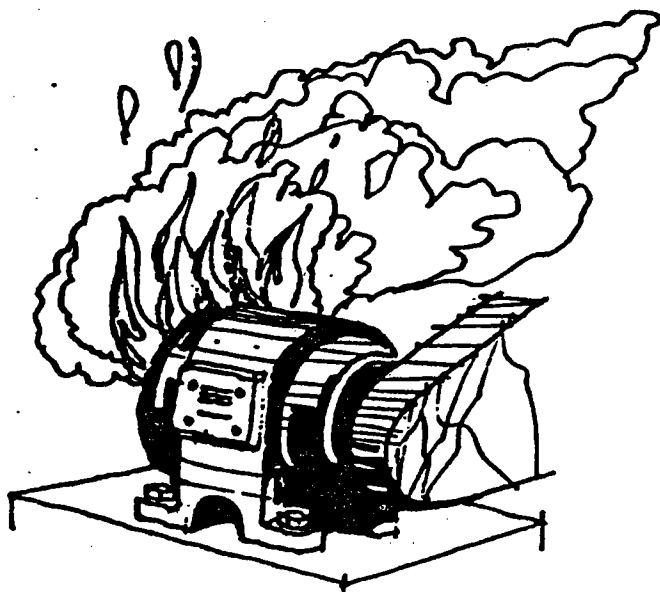
CLASS A
TRASH FIRES
WOOD PAPER CLOTH GRASS

Gasoline, gas, kerosene, fuel oil, oil, grease, oil base paints, varnishes and stains, cleaning fluids, solvents and lighter fluids are the fuels for Class B fires. These are petroleum products.

Proper storage of these materials is the best method of preventing Class B fires. Keep the products away from heat and provide good air circulation. Smoking around these products is an absolute No-No!

These fuels float on water, therefore water is not effective in fighting Class B fires. Indeed, water will often cause these fires to spread. The result is a bigger and more dangerous fire. To fight these fires you must remove either the fuel from the fire or the source of air. Fire and chemicals which remove the air are used to fight these fires. A wet blanket or even dirt or sand can be used to control or extinguish a Class B fire.

Class C Fires



**CLASS C
ELECTRICAL FIRES**

Fires caused by electricity are Class C fires. A gasoline fire started with an electrical spark is first a Class C fire; then as the gasoline burns, it is a Class B fire. Light switches, electric motors and other electrical equipment can ignite dust or flammable vapors. Light bulbs, electric motors, toasters, electric stoves and other electrical appliances and equipment can cause fires if they are too hot and too close to material which will ignite.

Electrical fires are prevented by using electrical appliances and equipment properly and by keeping combustible materials away from these appliances and equipment.

Electrical fires are extinguished by turning off the electrical power and smothering the fire with CO₂ or dry chemicals. Never use water. Water will conduct electricity and you could easily be electrocuted. Fighting electrical fires with water is a "once in a lifetime experience!"

Class D Fires

Metals which burn are Class D fires. You have seen these fires. Whenever a flash picture is taken with a flash cube, a Class D fire occurs. Metal burned inside the flash cube. Have you seen fireworks, the kind used on the Fourth of July? Fireworks are burning metal compounds.

This type of fire is uncommon around the home and farm. However, if the flash cube was improperly constructed, damaged or used incorrectly it could cause burns and fires. The same is true with fireworks. Each year careless fireworks causes many injuries and costly fires.

Special chemicals which coat the burning metal are used to extinguish metal fires.

WORKSHEET

LESSON II

CLASSES OF FIRE

1. Shown ten combustible materials, list the class of fire each could cause, or collect ten combustible materials and list the class of fire each could cause.

	MATERIAL	CLASS OF FIRE		MATERIAL	CLASS OF FIRE
1.	_____	_____	6.	_____	_____
2.	_____	_____	7.	_____	_____
3.	_____	_____	8.	_____	_____
4.	_____	_____	9.	_____	_____
5.	_____	_____	10.	_____	_____

1. Give an example of:

1. An "A" fire changing to a "B" fire.
2. A "C" fire changing to an "A" fire.
3. A "C" fire changing to a "B" fire.

2. List two good practices to follow to prevent:

Class A Fires

1.

2.

Class B Fires

1.

2.

Class C Fires:

1.

2.

Class D Fires

1.

2.

4. Give two examples of putting out a fire by removing the fuel.

1.

2.

5. Give two examples of putting out a fire by removing the source of oxygen.

1.

2.

6. Give the most common method of putting out a fire by raising the heat of combustion of the material.

7. Water should not be used on class B fires because:

8. Water should not be used on class C fires because:

EXTRA PROJECTS

1. Collect pictures of different classes of fires. Develop an attractive display.
2. Take pictures of potential fire locations around your home and/or farm. Put them in a scrapbook and explain why each is a potential fire location, the class fire each would be and practices which will keep these fires from ever happening.

FIRE PREVENTION AND CONTROL

MEMBER'S GUIDE
LESSON III

FIRE EXTINGUISHERS AND THEIR USE

This lesson is designed to help you learn about different types of fire extinguishers and how to properly use the correct extinguisher for the class of fire.

OBJECTIVES:

1. Name five common items found around the home or farm which can be used to extinguish fires.
2. Show five different types of fire extinguishers:
 - identify which ones could be used for:
 - a trash fire
 - a gasoline or oil fire
 - an electrical fire
 - identify which extinguisher would be best for:
 - a paper or wood fire
 - a car or tractor engine fire
 - a grease fire on an electric stove
 - a stuffed chair or sofa fire
 - identify which extinguisher would put out the largest:
 - class A fire
 - class B fire
 - class C fire
3. Name three businesses in your area which sell and service fire extinguishers.
4. Demonstrate ability to use one type of fire extinguisher to extinguish fires.

TYPES OF FIRE EXTINGUISHERS:

Fire extinguishers are all around your home and farm. How many can you think of? Examples are garden hoses, pails or waste containers for water, brooms, shovels and rakes, sand or dirt, blankets and baking soda. If you have a grease fire in a frying pan, would a tight-fitting cover be a good fire extinguisher? What other fire extinguishers can you think of and how could they be used to put out a fire? We need to be aware of these fire extinguishers that we have all around us and know when and how to use them. Can you think of a situation when a coat you might be wearing could serve as a fire extinguisher?

Most of the time when we think of fire extinguishers we think of tanks or cans mounted on the wall, sitting on a shelf, or attached to a tractor. These are commercial fire extinguishers specifically designed for fire fighting. There are many kinds, but for our purposes around the home or farm there are four major types of fire extinguishers:

Type A - Use on class A fires, wood, paper, grass, etc.

Type B - Use on class B fires, oil, gas, paint, etc.

Type C - Use on class C fires, electrical fires

Type D - Use on class D fires, metal fires

Combination - AB; BC; ABC

Quality fire extinguishers should be purchased from reputable dealers. Read the label before purchase. Is the extinguisher approved by the Underwriter's Laboratories, Inc., or the Factory Mutual Engineering Corporation? If not, don't buy it! Is it the right type for your need? Which symbols does it carry - A, B, C? Is it the right size?

You see fire extinguishers labeled 4-A: 16-B: C. What does this mean? First, it can be used on A, B, or C fires. The 4 and 16 indicate

that it will extinguish 4 square feet of a class A fire or 16 square feet of a class B fire. Could you determine the value of a fire extinguisher from this information?

Finally, check how to use the fire extinguisher. Is the mechanism easy to use and safe? Or will the fire be out of control before you can make it work?

Type A Fire Extinguishers

These extinguishers are normally filled with water. The water may contain an anti-freeze or a dissolved salt. Compressed air or CO₂ gases create a pressure, causing the water to spray. The most common size is 2 1/2 gallons.

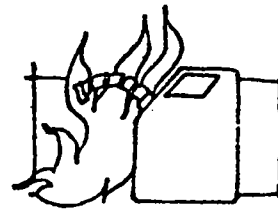


CLASS A FIRE
Ordinary Combustibles



Type A&B Fire Extinguishers

These extinguishers are either loaded stream or foam type. Both can conduct electricity and should not be used on electrical fires or sprayed onto equipment or electrical appliances which are energized.

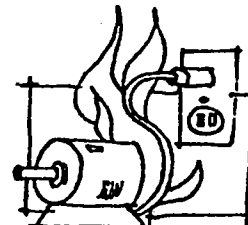


CLASS B FIRE
Flammable Liquids

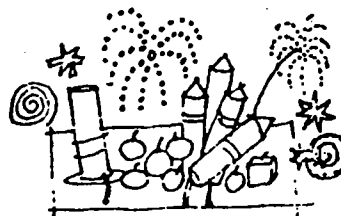


Type B&C Fire Extinguishers

These are chemical extinguishers and there are several kinds. Carbon Dioxide and halogenated compounds are used for class B and C fires. Most of these extinguishers can be used on Class A fires, but because most of them discharge in 8-25 seconds, they are only effective with small class A fires.



CLASS C FIRE
Electrical Equipment



CLASS D FIRE
Combustible Metals



With electrical fire, always shut off the electrical appliance or equipment or the fire may restart after the effects of the extinguishers are gone.

USING THE FIRE EXTINGUISHER:

There are many types of fire extinguishers and they work in different ways. Always read the instructions on the extinguisher before it is used. Don't wait for a fire to start to learn how to use the extinguisher! Learn to use it now.

With Class A fires, direct the stream at the base of the fire, working from side to side or around the fire.

With Class B fires, use a "fanning" action, rapidly moving from side to side beginning well in front of the fire and beyond the sides.

With Class C fires, aim the extinguisher at the electrical appliance or equipment which is on fire.

Always have fire extinguishers recharged immediately after they have been used. Forgetting this could result in a costly fire the next time. Reliable fire extinguisher dealers and many fire departments provide this service.

LOCATING THE FIRE EXTINGUISHERS:

Fire extinguishers should be located near, but not in, areas where the fire danger is high. Some of these places are the kitchen, furnace room, garages, tractor and fuel storage areas. Can you think of other dangerous areas in or around your home or farm? Fire extinguishers should be located where they are easily seen and reached, NOT in the back of the broom closet, behind the stove or in a locked cabinet!



Know how to use a
FIRE EXTINGUISHER

WORKSHEET
LESSON III

FIRE EXTINGUISHERS AND THEIR USE

1. List five common items found around a home or farm which can be used to extinguish fires. Give an example of how each could be used.

TOOL OR ITEM	EXAMPLE OF USE
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

2. Study the label on a fire extinguisher and then fill in the following blanks.

Manufacturer _____ Type _____

Charged weight or size _____ Date of inspection _____

Has the extinguisher been used? _____ How can you tell? _____

On what kind of fires can this extinguisher be used? _____

How is this fire extinguisher operated? _____

3. You will be shown 3-5 fire extinguishers numbered 1-2-3-4-5. Which of these extinguishers could be used:

- on a gasoline mower fire _____
- on a trash barrel fire _____
- on a kitchen grease fire _____
- as an all around extinguisher for the home _____
- on a fire in a car or on a tractor _____
- on a bed fire _____
- on an electric motor fire _____
- on a Class A fire _____

4. Name one place in your area where you can purchase fire extinguishers and have them serviced.

5. If you could purchase three fire extinguishers for your home or farm, what types would you purchase and where would you locate each one?

	<u>TYPE</u>	<u>LOCATION</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____

EXTRA PROJECT

1. Develop a poster showing the types of fire extinguishers and use of each.
2. Develop a list of businesses in your area who sell and service fire extinguishers.
3. Make a chart listing (6-10) or more types of fire extinguishers sold in your area, indicating type, size, price and cost of refilling each.

TYPE	SIZE	COST OF PRICE REFILLS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

FIRE PREVENTION AND CONTROL

MEMBER'S GUIDE LESSON IV

IDENTIFICATION OF COMMON FIRE HAZARDS

This lesson is designed to assist you to learn how to identify common fire hazards found around the home and/or farm. You should complete one or more home and/or farm inspections as a result of this lesson.

OBJECTIVES:

1. Given a room, building and/or area with 12-15 prearranged fire hazards, locate a minimum of ten hazards.
2. Complete a fire hazard survey of a home and/or farm.

HAZARD IDENTIFICATION:

The best way to prevent fires is to identify fire hazards and then correct or remove the hazards. It is smarter to prevent a fire than to fight one. You certainly don't want members of your family or friends to be among the 7,500 killed or 300,000 injured this year.

Common fire hazards in and around the home and farm are:

- roofing materials that burn
- poor heating systems and chimneys
- careless smoking, smoking in bed
- improper use of flammable fabrics
- overload electrical circuits, use of oversized fuses
- improper use or storage of gasoline and other flammable liquids
- misuse of electrical appliances or unapproved appliances
- papers and rubbish in attics, basements, halls and stairwells



- improper storage of hay and other combustible materials
- failure to protect buildings and antenna from lightning

The secret to fire prevention is to keep flammable materials - things which burn easily - away from a source of heat, fire or spark.

Flammable Liquids

Flammable liquids need only a spark to ignite. The igniting can be so fast that there is an explosion. What does this tell us about the use and storage of these materials?

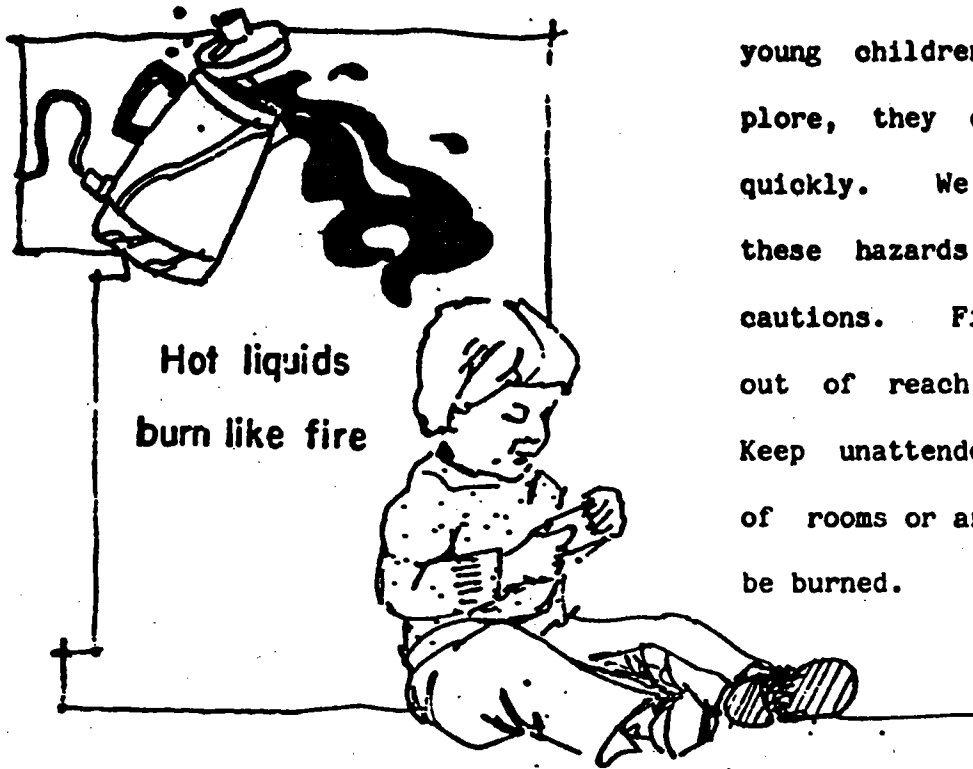
- Use flammable liquids far away from sources of flames, sparks or heat.
- Use flammable liquids for their intended use only. Gasoline is intended for burning in engines, not for starting an open fire or for cleaning purposes.
- Use flammable liquids only in airy, open areas. Outside is best.
- Lawn mowers and tractors must be shut off and the engines cooled before refueling.
- All flammable fluids must be stored in proper containers in well ventilated areas away from any source of heat or sparks.



Allow engines to cool before refueling

Hot Liquids

Fire is not the only cause of burns. Hot water, coffee, and grease are causes of serious burns. Have you ever had a burn? Remember the pain? But hot liquids are not the only problem. Hot pans, stoves, ovens, space heaters, fireplaces and light bulbs are other causes of burns.

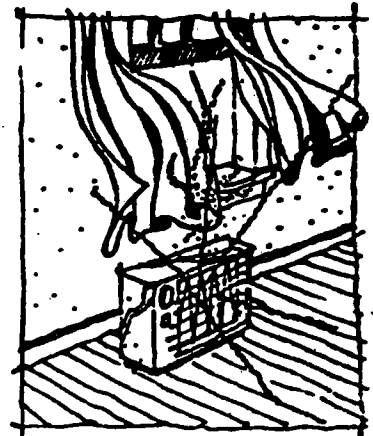


These burns are common to young children. They like to explore, they climb, grab and move quickly. We need to be aware of these hazards and follow two precautions. First, keep hot items out of reach of small children. Keep unattended young children out of rooms or areas where they could be burned.

Hazardous Materials

It is also important to use caution with hazardous materials. Hazardous materials can start fires and cause burns. Some examples of common dangers are:

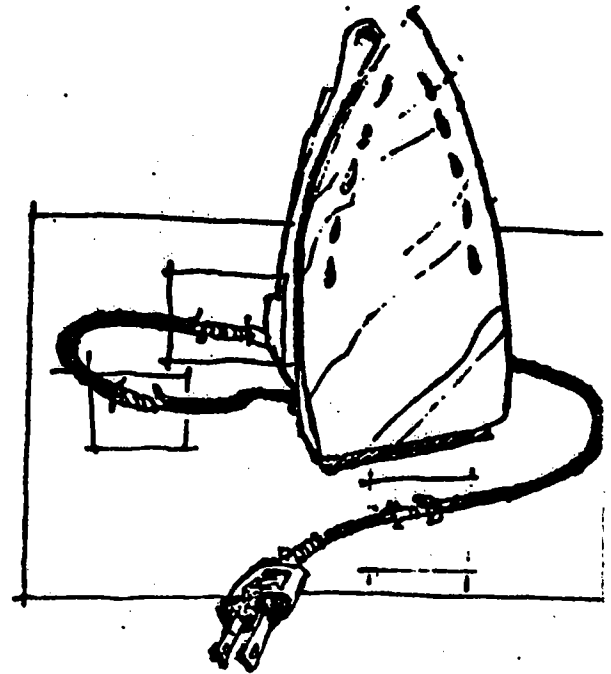
- Children getting so close to open fires, heaters, or charcoal grills that their clothing might catch on fire
- Adults working over or around open fires while wearing flammable clothing
- Cigarettes falling off ash trays onto paper, floors, furniture or bedding
- Dropping of hot cigarette butts in dry grass, trash or waste containers
- Placing hazardous materials too close to a source of heat, kitchen range, space heater or fireplace



Keep heat away from flammables

Electricity

Electricity is a major cause of fires. It is estimated that there are 75,000 home fires each year started by faulty electrical wiring, appliances or incorrect use of wiring. It takes special knowledge to check many electrical installations around the home or farm. If you have any question about the safety of any electrical wiring or appliance, have it inspected by a qualified electrician. Lights that dim or flicker, motors which spark and start with difficulty or overheat are all clues to problems. That is the time to call an expert to correct the problem.



Bad extension cords can cause electrical fires

There are many electrical problems which you can spot and have corrected. Fuses or circuit breakers should match the wiring size. The following table should help you determine if the proper fuse or circuit breaker is used. If fuses blow or the circuit breakers go off, there is a problem. Find it now and if you can't, have an electrician locate and correct the problem. Overloaded circuits cause hot wires and fires.

PROPER FUSE PROTECTION FOR COPPER WIRE

Wire Sizes Number	Maximum Fuse Size-Amps	Thickness or Diameter of Wire	How Wire is Used
14	15	1 penny	Lights and outlets
12	20	1 nickel	Lights and outlets
10	30	2 dimes	Water heater & clothes drier

Check the light switches and wall outlets. Are the covers on? Is there any evidence of overheating? If there are small children in the house, insert childproof plugs and outlets.

Extension cords are another source of danger. Check their condition and locations. Are they brittle, cracked, under rugs, in locations where they are stepped on, bent, pinched, or damaged in any way?

Are the cords on electrical appliances in good condition? Three-prong plugs must always be used in three-prong outlets.

All electrical appliances, devices and materials should be UL approved. Using unapproved electrical items is inviting a fire into your home.

Use waterproof or weatherproof electrical devices in all areas which are or may be wet. Water and electricity are a bad mixture and no one needs that type of shocking experience.

Dustproof or explosive-proof fixtures should be used in any areas where dust may collect. Woodworking shops, feed rooms, grain storage areas and haybarns are dangerous dust locations.

Summary

Fires find enough places to happen without our help. Survey your home and/or farm. Locate the potential fire hazards and correct all problems. Fires in fireplaces, dinner by candlelight, and July Fourth fireworks are enjoyable uses of fire, but there is nothing enjoyable about house fires. Do what you can to prevent them.

WORKSHEET
LESSON IV

IDENTIFICATION OF COMMON FIRE HAZARDS

1. You are going to be shown an area with 12-15 easily identified fire hazards. You are to survey the area and identify at least ten of these hazards. List them below.
 1. 9.
 2. 10.
 3. 11.
 4. 12.
 5. 13.
 6. 14.
 7. 15.
 8. 16.

2. Given a home or farm and the appropriate fire hazard report, survey the home or farm. Your leader will do the same. When the survey is completed, the results of your survey will be compared with your leader's survey. If either of you identified hazards not identified by the other, go back and point out where these hazards are located.

3. Complete a home and/or farm fire hazard report for your home or farm with your parents or other adult. Correct the fire hazards located or urge that they be corrected if you are unable to correct them. Return the completed report to the next meeting or fire safety class.

EXTRA PROJECT

As a community service, survey other homes or farms in your neighborhood. Why not make this a club project?



HOME FIRE-HAZARD PROJECT



Caution:

1. Complete hazard identification activities with parent, guardian or property owner present.
2. Do not handle or dismantle any electrical component during hazard identification activities.

ELECTRICAL

	Yes	No	Does Not apply	Hazard Corrected
1. Are all electrical outlets grounded so as to accommodate grounded (3-wire) appliances and equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all junction boxes, outlets, switches and fittings covered with no exposed wires or terminals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are electric wires firmly supported or in conduit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the wiring insulation appear in good condition, (not cracked, broken, or brittle)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are there enough convenience outlets throughout the home to eliminate the need for "makeshift" wiring and the use of long extension cords?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are all extension cords used in the home free of frays, broken areas or cracked plugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do all electrical appliances and equipment used in the home carry the "U.L." label?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If extension cords are used, are they properly located- not hung on nails, run through doorways or under rugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are there extra fuses of the correct size located near the fuse box.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEATING AND COOKING

1. Is the furnace maintained and adjusted by a competent serviceman at least once a year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the furnace room kept clean and free of combustible materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fuel oil tanks vented to outside of the building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are fuel oil tanks and fuel lines free of obvious leaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there a charged fire extinguisher readily available in the furnace room?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the door to the furnace room tightly fitted and kept closed at night?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEATING AND COOKING CONT.

- | | Yes | No | Does Not apply | Hazard Corrected |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 7. Is the area around the hot water heater kept free of combustible materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are LPG containers providing fuel for heating and cooking located outside of buildings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Are LPG containers located on solid foundations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Are LPG containers located at least 5 feet away from windows, doors, or other building openings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Are LPG valves and regulators covered for protection from weather or damage? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Is the fuel line for an oil or LPG burning stove, heater or furnace equipped with a shut-off valve near the fuel tank? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Are stoves and other cooking equipment kept clean and free of grease accumulations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Are storage compartments under or over stoves and ovens used to store only non-combustible items? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Are curtains near stoves arranged as to prevent their blowing over the burners or flames? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Is there a charged fire extinguisher of the appropriate type readily available in the kitchen? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

WOOD BURNING STOVES AND FIREPLACES

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Is the stove the correct size for the size of the room that will be heated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the stove free from broken parts or cracks that make it unsafe to operate? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has a layer of sand or firebrick been placed on the bottom and/or sides of firebox if suggested by the manufacturer? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is the stove located on a non-combustible floor or is there an approved floor protection material placed beneath the stove? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the floor protection extend out at least 12 inches from front opening? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is there a minimum of 36 inches between the stove and combustible materials? If not, is a fire-resistant material used to protect woodwork and other combustible materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

WOOD BURNING STOVES AND FIREPLACES CONT.

	Yes	No	Does Not apply	Hazard Corrected
7. Is there a screen provided for use on open front type stoves and fireplaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is there a charged extinguisher of the appropriate type readily available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is small kindling or paper used to start fires rather than flammable liquids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is a metal container with tight-fitting lid available for ash disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. If the stove or fireplace has been recently installed, has the insurance company been notified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STOVE PIPES AND CHIMNEYS

1. Is 26 gauge or thicker stovepipe used on all wood burning stoves?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the total length of stovepipe used on a woodburning stove less than 10 feet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all stovepipe joints tightly connected by rivets, screws, or corrugated sleeve joints?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does stovepipe enter chimney without passing through a floor, closet, concealed space or the attic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is a multi-walled ventilated metal thimble used where the stovepipe goes through any interior wall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the stovepipe enter the chimney horizontally?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the stovepipe flush with chimney flu lining, not extending into the chimney?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is there an air-tight connection between the stovepipe and thimble?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is there no other equipment such as an oil or gas heater or furnace connected to the same chimney flue as the wood burning stove or fireplace?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the chimney extend at least 3 feet above the highest point where it passes through the roof and at least 2 feet higher than any portion of the building within 10 feet of it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the chimney in good repair with no loose bricks, masonry cracks or rotten mortar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the chimney flue lining free from heavy soot deposits, concrete coating, bird nests, leaves and other debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STOVE PIPES AND CHIMNEYS CONT.

- | | Yes | No | Does Not
apply | Hazard
Corrected |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 13. Are all unused stovepipe openings in chimneys closed with fireproof flu stops? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

ROOFS

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Is the roofing material fire resistant? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are eavespouts, troughs and roof valleys kept clean of leaves and trash? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

TV ANTENNA

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Is the TV mast or tower sturdily erected, supported with three or more guy wires, and not attached to the chimney? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the mast or tower located so that if it were to fall, it would fall clear of electrical wires? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the mast or tower grounded? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is a grounded lightning arrester installed on the lead-in wire to the television? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

GARAGES AND STORAGE AREAS

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Are garages, attics, closets and other storage areas kept free of unnecessary combustible materials or flammable fluids? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are oily, greasy or paint-soaked rags stored in a tightly covered metal container in a well-ventilated area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are all flammable fluids stored in the original containers or approved safety cans (never glass containers)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. If the garage is used for a work area, is there a charged fire extinguisher readily available? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

OTHER HOME FIRE HAZARDS

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Are matches kept in metal containers and out of reach of children? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the area around the home kept free of tall grass, weeds and rubbish? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is gasoline-powered equipment shut off and allowed to cool before refueling? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

FIRE EMERGENCY PLAN

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Are all sleeping area of the home equipped with an approved smoke detector? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|--------------------------|

FIRE EMERGENCY PLAN CONT.

	Yes	No	Does Not apply	Hazard Corrected
1. Has the family planned what each member will do in case of fire? (Exit routes, meeting places, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the Fire Department phone number posted prominently on each telephone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does each member of the family who is old enough to use the phone know how to call the Fire Department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the residence well-identified by either a special fire number or address sign so it can be located by the Fire Department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has information been made available to local firemen and neighbors concerning such things as bedrooms used by children or invalids, fuse boxes, LPG and gasoline storage, and water supply?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do all members of the family who are able to handle a fire extinguisher know how to use one?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LIST THE MAJOR HAZARDS IDENTIFIED

Corrected	
Yes	No

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
0. _____

PROOF OF COMPLETING HAZARD IDENTIFICATION ACTIVITY

_____ certify that _____
 (property owner, parent, guardian) (Name of Club member)
 as personally inspected my home for potential fire hazards _____
 (Date)



FARM FIRE-HAZARD REPORT



Caution:

1. Complete hazard identification activities with parent, guardian or property owner present.
2. Do not handle or dismantle any electrical component during hazard identification activities.

ELECTRICAL

	Yes	No	Does Not apply	Hazard Correcte
1. Are all electrical outlets grounded so as to accommodate grounded (3-wire) appliances and equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all junction boxes, outlets, switches and fittings covered with no exposed wires or terminals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are electric wires firmly supported or in conduit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the wiring insulation appear in good condition, (not cracked, broken or brittle)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are there enough convenience outlets to eliminate the need for "make-shift" wiring and the use of long extension cords?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are only heavy-duty rubber-covered cords used outside in damp locations and on motorized equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are all extension cords free from frays, broken areas, or cracked plugs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Do all electrical appliances and equipment items carry the "U.L." label?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are there extra fuses of the correct size located near each fuse box?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are heat lamps used only in porcelain receptacles, suspended at least 18 inches above flammable material, kept out of reach of livestock and equipped with a guard over the face of the reflector?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Are light bulbs protected by metal guards when exposed to livestock?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are electric motors located such that there is ample ventilation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Are electric motors kept free of dust, chaff, and other combustibile material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Are dust proof motors used in extremely dry areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

