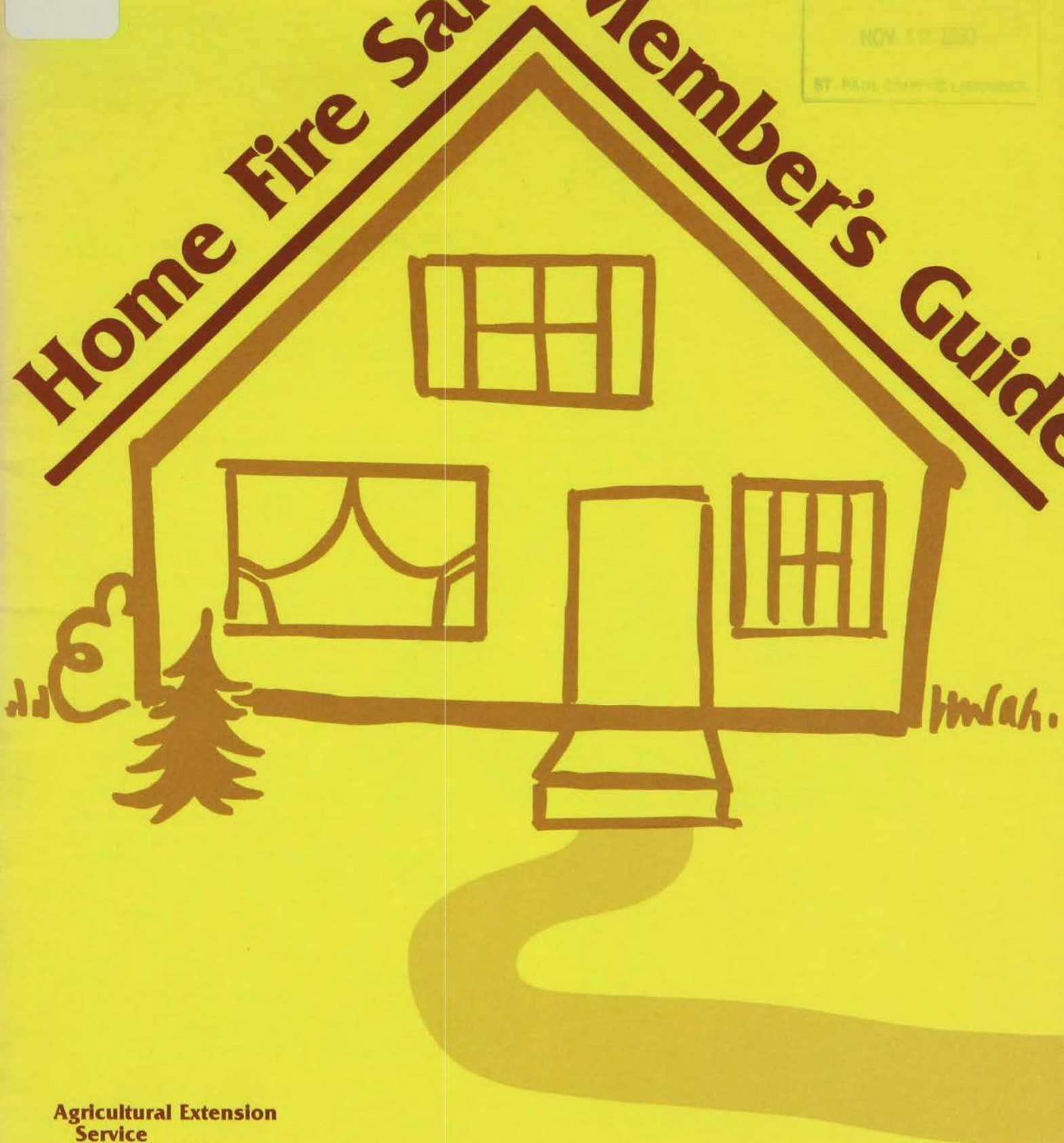


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# Home Fire Safety Members's Guide



Agricultural Extension  
Service  
University of Minnesota

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## Introduction

Each year, some 100 Minnesotans die in fires. Billions of dollars in property is destroyed. In almost every case, something could have been done to prevent the fire. In many cases, the fire could have been controlled or put out before it did major damage.

Why weren't these fires prevented or put out? Because most people know very little about fires—how they start, how they can be put out and how they can be prevented.

This project will help you to learn how to prevent and control fire. You will learn how you can decrease the chances a fire will destroy your home or cause serious injury to you and members of your family.

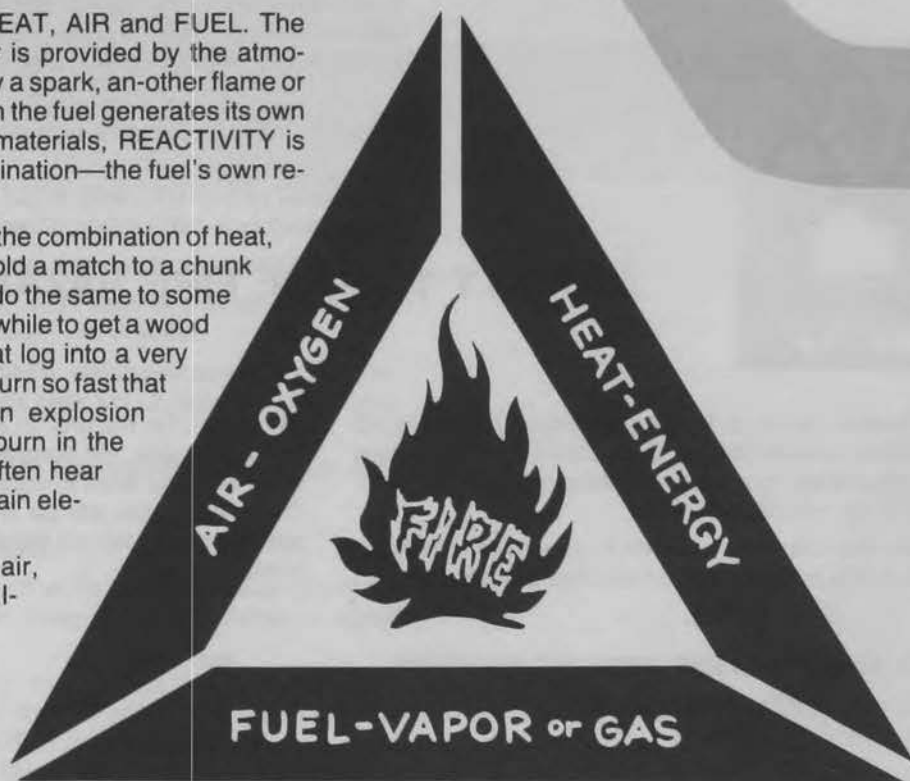
Prepared by Robert A. Aherin, Safety Specialist, and Tom Powell, Extension Specialist, 4-H Youth Development.

# What Is Fire?

"Fire" is a combination of HEAT, AIR and FUEL. The fuel is whatever is burning. Air is provided by the atmosphere. Heat can be supplied by a spark, another flame or spontaneous combustion (when the fuel generates its own heat). In the case of certain materials, REACTIVITY is added to the heat-air-fuel combination—the fuel's own reaction helps spread the fire.

Almost anything will burn—if the combination of heat, air and fuel is just right. If you hold a match to a chunk of steel it won't burn. But if you do the same to some steel wool, it will burn. It takes a while to get a wood log burning, but if you grind that log into a very fine sawdust, the sawdust can burn so fast that the burning will seem like an explosion (wheat and other grain dusts burn in the same way, which is why you often hear about fires and explosions in grain elevators.)

This combination of heat, air, and fuel is called the FIRE TRIANGLE:



The object of fire prevention and fire control is to "break" one of the legs of the Fire Triangle—or to keep that Triangle from forming in the first place. If you can keep heat or air or fuel away from the fire, the fire will go out.

Other things can help the Fire Triangle to form. High temperatures and low humidities dry out fuels like grass, brush and trees. This is one reason why there are so many wildland fires in drought years. You've probably noticed that a piece of wood burns more quickly when standing on end than when lying on its side—the position of the fuel can help the fire, too.

# Preventing Fires

Preventing a fire is a lot easier than fighting one. Prevention is also a lot less expensive.

According to the National Fire Protection Association, the most frequent causes or types of building fires are:

- Electrical
- Careless smoking and use of matches
- Heating and cooking equipment
- Arson (people setting fires)
- Sparks and open flames
- Children playing with matches

- Flammable liquids
- Lightning
- Chimneys and flues
- Spontaneous ignition

As you can see, very few fires start by themselves. One expert in fire protection says that the main causes of fire are "men, women and children."

Look around your own home and see how many fire hazards you can find—then correct them.



## ACTIVITY 1: HOME FIRE HAZARD HUNT

A fire breaks out in a home approximately every 45 seconds in the United States. Over 500 people lose their lives and thousands more are severely injured each year. HOW SAFE IS YOUR HOME?

Check for the following hazards in your home. In those areas where you answer "no" briefly indicate what you did

to correct the hazard. In almost every home you will find some hazards. By completing this activity you can learn what hazards exist in your home and learn how to correct them. Also, you will be preventing a fire from starting in your home. Cross out those items that don't pertain to your home.

### MATCHES AND CARELESS SMOKING HAZARDS

- |   | Yes   | No    | What did you do to correct the hazard? |
|---|-------|-------|--|
| 1. Are all the matches and cigarette lighters in your house kept out of reach of children?<br>Kids are naturally curious—but if they get hold of matches or lighters, their curiosity can cause a fire. | _____ | _____ |  |
| 2. Do you make sure all matches and cigarette butts are OUT before putting them in the garbage?<br>It is better to let your ashtrays sit overnight and make sure cigarette butts and matches are out.   | _____ | _____ |  |
| 3. Does someone in your family smoke in bed?<br>Ask them to stop. Many people die each year after they fall asleep while smoking.   | _____ | _____ |  |

### ELECTRICAL HAZARDS

- |  |       |       |  |
|--|-------|-------|--|
| 1. Is any of your electrical wiring "homemade?"<br>Electrical wiring that hasn't been inspected by your local electrical inspector or electrician can cause a fire you might not even see at first (like inside a wall). | _____ | _____ |  |
|--|-------|-------|--|



Yes No

2. Is your electrical wiring up to date?    
 Some older wiring can be very dangerous—the insulation (protective overcovering) might be falling off. Your local electrical inspector or electrician can help you with this.
3. Do you have enough electrical plug-ins?    
 You shouldn't turn your outlets into "octopuses" with extension cords. Extension cords can overheat and cause fires. NEVER run cords under rugs or through doors.
4. Do you have the right fuses in your fuse box?    
 A fuse that's too big (a "30-amp" fuse for a "15-amp" circuit) is worse than no fuse at all—it lets wires get too hot. Keep spare fuses that are the right size on hand. NEVER use a penny instead of a fuse.
5. Are your "big" appliances (refrigerators, stoves, air conditioners, etc.) plugged into special outlets that are just for them?    
 You should make sure that your outlets can handle the heavy electricity needed for big appliances. If those appliances keep blowing fuses, they're probably too big for the outlet you're using.
6. Do you pay attention when your appliances "tell" you there's something wrong?    
 Appliances that spark, get hot or give off a strong "electrical" smell may be trying to tell you to check them and avoid a fire!
7. Do you keep your TV set away from wall and other furniture?    
 Sparks or fire from a TV can start walls and other furniture on fire. Your TV set needs "room" to breathe.
8. Does your electrical equipment—extension cords, appliances, TV sets, and all other devices bear the UL label (Underwriters' Laboratories, Inc.)?    
 This guarantees that the cord and appliance have met strict testing requirements.

**FLAMMABLE LIQUID HAZARDS**

1. Do you keep gasoline and other flammable liquids out of the house and store them far away from any flame or spark source?    
 Gasoline fumes are heavier than air—and they can travel a long way. If they get to any flame or spark (like a water heater pilot light), they'll explode. NEVER keep or use gasoline in the house. Gasoline and other flammable liquids should be kept in safety cans.
2. Do you use gasoline for cleaning?    
 You shouldn't—gasoline fumes can explode. Use non-flammable cleaners.
3. Do you keep paint, varnish and thinner cans tightly closed?    
 Paint, varnish and thinner fumes can be just like gasoline fumes. Don't let them out of the can. Also, they should be stored in a metal or heavy wood cabinet (if a fire occurs in the home this will help prevent the containers from exploding).

- |  | Yes   | No    | What did you do to correct the hazard? |
|--|-------|-------|--|
| 4. Do you let your lawn mower, tiller or tractor or other gasoline-powered equipment cool off before refilling with gas?<br>A hot motor can start spilled gasoline on fire.  | _____ | _____ |  |
| 5. Do you refill your heating oil or LP tanks outdoors and during the day?<br>Filling these tanks can be dangerous—they should never be filled from inside the house, where fumes could catch fire. Filling these tanks during the day—when you can see what you're doing—is safest.   | _____ | _____ |  |
| 6. After using oily rags or waste, do you destroy them or place them in covered metal cans?<br>Rags that have flammable material on them can cause a chemical reaction with the material and, in turn, start a fire. By keeping rags in a metal can with a tight fitting lid you eliminate oxygen which is needed for a fire to start. | _____ | _____ |  |

## HEATING EQUIPMENT

It's important to keep a close eye on gas and oil furnaces for hazards. Do you use portable heaters in your house? Portable heaters can be very dangerous.

- |  | Yes   | No    | What did you do to correct the hazard? |
|--|-------|-------|--|
| 1. Do you check your heating system every year to make sure it's OK?<br>An oil or gas leak could cause a fire. Faulty electric furnace motors can also cause fires.  | _____ | _____ |  |
| 2. Do you keep things that can easily burn far away from portable heaters? Do you keep your portable heaters out of everyone's way?<br>Portable heaters are easy to knock over—and if there are burnable things near the heater, they could catch fire.  | _____ | _____ |  |
| 3. Do you keep your furnace room door closed?<br>If there's a fire in the furnace room that closed door could keep it from spreading.  | _____ | _____ |  |
| 4. Do you keep the areas around the furnace, stove, oven and fireplace clear of wood, paper and other burnable materials?<br>If these materials are close enough to catch fire, they'll really spread a fire.  | _____ | _____ |  |
| 5. Do you keep your stove and oven from getting greasy?<br>Grease in a stove or oven (or in a pan) can catch fire very easily.   | _____ | _____ |  |
| 6. Are all flue pipes, vent connectors, gas vents, and chimneys inspected each fall, and cleaned and repaired if necessary?<br>If there is a crack in the chimney or a loose connection, toxic gases could spread throughout the house. Also heat and sparks could reach flammable materials in your walls and cause a fire. | _____ | _____ |  |
| 7. Are curtains near stoves and heating equipment arranged so as not to blow over them?<br>They could easily catch fire.   | _____ | _____ |  |

Because of the energy shortage, many people are using wood stoves for heat—just like in the old days. Unfortunately, we've forgotten many of the safety measures to take when these types of stoves or fireplaces are used. Do you have a wood stove or fireplace in your house? If you do, see if there are some hazards you didn't know about before.

	Yes	No	What did you do to correct the hazard?
8. Does your stove have any cracks or broken parts? Cracks or broken parts could let hot ashes fall, which can start fires. Smoke could also escape—and smoke can suffocate people.	_____	_____	
9. Is the floor under the stove properly protected? The floor under the stove should be nonburnable, or covered with a nonburnable surface. This protection should extend six inches out from the sides and back of the stove, and eighteen inches from the front where the wood is loaded in.	_____	_____	
10. Is the stove at least three feet away from the nearest burnable materials in the room? Walls closer than three feet from the stove should be nonburnable, or covered with nonburnable materials and have a 1" air gap between the covering and the wall. This will provide insulation and prevent heat from being transferred to the burnable materials in the wall.	_____	_____	
11. Is there an airtight fireproof connection between the stove pipe and the chimney? Escaping heat or smoke could cause a fire or allow poisonous gas to escape into the house.	_____	_____	
12. Does the stove pipe pass through a floor, closet, or hidden space? Your stove pipe shouldn't, without proper protection; if it does, the heat from the stove pipe could cause a fire.	_____	_____	
13. Is your chimney clean and in good repair? A dirty chimney, full of creosote, can catch fire and start other fires around it. Your chimney should be inspected once a month if used continuously and cleaned as needed. A chimney with cracks in it can also spread a fire—and a cracked or blocked chimney can allow poisonous gas to get into the house.	_____	_____	
14. Has your local building inspector or insurance representative had a chance to check your stove and chimney assembly over for problems? They may spot problems you missed.	_____	_____	
15. Do you have a safe container to store hot ashes in? A metal container with a tight-fitting lid should be kept outside for ash disposal.	_____	_____	
16. Does your fireplace have doors? Fireplace doors can keep hot sparks from falling on the floor and starting a fire.	_____	_____	
17. Has everyone in the family been warned never to use kerosene, or other flammable liquids, to start a fire in the stove, fireplace or furnace? It could cause an explosion or fast-spreading fire.	_____	_____	
18. Do you burn only dry wood in your stove or fireplace (wood that has been cut and allowed to dry for 12 to 18 months)? By burning dry wood you will keep flammable creosote from building up in your chimney.	_____	_____	



## LIGHTNING HAZARDS

1. Is your TV antenna grounded?

Yes      No

What did you do to correct the hazard?

If your TV antenna isn't "grounded"—also wired into the ground, so electricity from a lightning strike can be led into the ground—a lightning strike could start a fire in your TV, or in other appliances.

2. Do you have lightning rods on your house and on other buildings on your property?

If your house stands out in the open—or if there have been lightning strikes near your house or outbuildings in the past—"lightning rods" might be a good idea. They carry electricity from lightning around your house, into the ground. Make sure a dealer with a good reputation installs them.

## WILDFIRE HAZARDS

1. Are mufflers and exhaust pipes on your farm equipment in good shape?

Sparks from a bad muffler or tailpipe—or from a backfire—can ignite dry weeds, grass or stubble. These fires can spread and burn down your house.

2. Do you hold off on outdoor burning when the weather is windy or very dry?

Wind can spread sparks and fire. If nearby grass or brush is ignited, the fire can spread.

3. Do you keep weeds and brush trimmed short at least 200 feet out from your house?

Keeping weeds and brush trimmed short can keep a wildfire from getting to your house or other buildings.

4. Is your electric fence in good working order? Are weeds around it kept short?

Faulty electric fences (especially "weedcutter" types) can start wildfires.

## SPECIAL HAZARDS

1. Do you keep gasoline storage tanks at least 100 feet from nearby buildings?

If there is a fire involving the gasoline, there will be less chance of the fire spreading to the buildings.

2. Are light bulbs in the barn and hay mow protected by guards?

Guards protect a light bulb from sudden impact that could break the bulb and start a fire.

3. Is all welding or other work involving fire sources done in a "safe" area, away from burnable materials?

You can keep a sudden fire from spreading by working in a safe area.

## FIRE AWARENESS

1. Does your home have smoke detectors?

2. Does your family have an escape plan?

3. Do you have fire extinguishers available around the house, barn, machine shed and garage? On each vehicle?

4. Do you know what to do if there's a fire? If your own or someone else's clothing catches fire?

# Smoke Detectors

Fires kill more people during the night, when everyone's asleep, than any other time. Smoke detectors, if properly installed, can assure that you and your family will be alerted to a fire in your home in time to escape. Smoke detectors can "smell" smoke, and when they do, they sound an alarm. This alarm can wake you and your family, and give you time to get out. Fire safety professionals say that smoke detectors are the biggest advancement in home fire protection in the last 50 years.

Once a fire breaks out into flames it increases approximately 11 times in size every 4 minutes. This is why it is extremely important that you and your family are alerted to a fire while it is small.

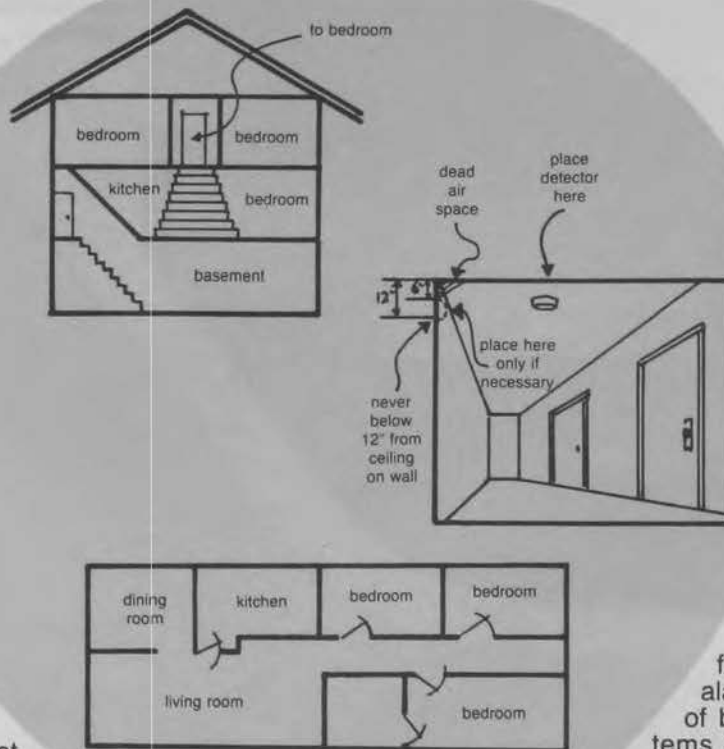
## Cost

Smoke detectors aren't very expensive. The cost to install enough smoke detectors to provide basic protection for the average home is normally under \$100. Considering the average life of a smoke detector is about 20 years, this averages out to be only a few dollars each year to provide life saving protection to your family.

Make sure the detector your family buys has a label on it that says UL (Underwriters Laboratories) LISTED. This means that the smoke detector your family is buying has passed "smoke tests."

## Battery Powered vs House Current

Smoke detectors operate either on house current or batteries.



House current detectors operate as long as they receive electricity. The chances are unlikely that the electricity in a home will be disrupted in a fire because the power fails in less than 10 percent of all home fires. Battery powered alarms are independent of building electrical systems and need not be installed near an electrical outlet. You also avoid dangling, unsightly, power cords. Batteries weaken with age, however, and must be checked and replaced at least once a year to assure reliability.

## Installation

Every new detector comes with instructions on proper installation and maintenance. Follow these instructions carefully.

A smoke detector should be installed outside each bedroom area in the home and at the top of each stairway leading to an occupied area. This will provide basic protection for the average home.



## ACTIVITY 2: DESIGN A PLAN FOR YOUR HOME

Draw a floor plan for each level of your home. Indicate with a dot (●) where smoke detectors should be located.

Attach a copy of the plan you developed for your home to the Safety Project Report. In a brief summary describe what you did in developing your plan and what you discussed with your family.

A 4-H family works out a rough sketch of their fire escape plan together.



## Escape

Most individuals and families have never experienced a fire in their home. If no one has ever discussed with each family member about how to react in time of fire, the initial reaction will be panic. In order to avoid panic and to assure that everyone gets out of the home safely in time of a fire, it is important that your family has a fire escape plan.

The following Operation EDITH (Exit Drill in the Home) activity illustrates in detail the importance of a fire escape plan in your home and discusses how you can develop this plan for your family. Once you have developed your plan, it is very important that you practice it at least once every six months to keep the plan fresh in everyone's mind.



## ACTIVITY 3: OPERATION EDITH

*EDITH stands for Exit Drills In The Home  
It trains families to escape from fires.*

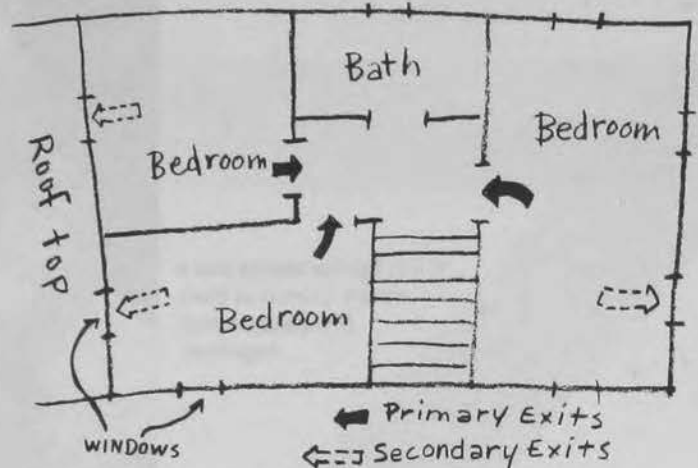
### The ABC's of the need for EDITH:

- A. An average of 800 fires strikes residential buildings each day in the United States. More than 10,000 persons die each year from fire—more than half of them children and old people. The majority of these deaths are in home fires.
- B. Although fire drills are required by schools, hospitals and many places of employment, they are neglected in the American home.
- C. It is proved that exit drills reduce chances of panic and injury in fires and that trained and informed people have a much better chance to survive fires.

### Develop a Plan

1. Call your family together and stress the need to develop an exit drill plan for your home.
2. Stress that all doors should be closed at night. It takes fire 10 to 15 minutes to burn through a wooden door.
3. Next, visit each bedroom and figure out two escape routes—one the normal exit, the other a different exit—door, or a window.
4. Plan how each member will reach the outside or ground using both exit routes.
5. Next, decide on a meeting place outside the house. During a fire you need to know if everyone is safe.
6. Plan how you will notify the Fire Department. As soon as everyone is out of the house then notify the Fire Department. Your house phone may be out of reach or wires burned. Plan to use a neighbor's phone. When reporting a fire speak slowly, plainly. Say "My name is \_\_\_\_\_, I want to report a fire at \_\_\_\_\_." Then wait to answer questions.
7. Now make a floor diagram of each floor in your home. Mark the regular and emergency routes, as well as the location of windows, doors, stairs, halls. Put copies of this diagram in places where they will be a constant reminder.

The following is an example of a floor plan and the procedures for developing your own:



#### STEP 1 (basic floor layout)

- A) Make an outline of entire floor area. Dimensions and details need not be exact.
- B) Now add each bedroom and label it.
- C) Locate windows, doors and stairway as shown on above sample. If on upper floor, shade in any rooftops that could be used as a fire escape.

#### STEP 2 (room inspection)

- A) Go to each bedroom. Select the best window for an emergency escape.
- B) Test the window, screen or storm sash to see that they work easily . . . and are large and low enough to use.

#### STEP 3 (complete "escape plan")\*

- A) Black arrows show *normal exit* through hall or stairway.
- B) Broken line arrows show *emergency exit* in case fire blocks hallway or stairs.

Be sure EVERYONE has an emergency escape route (bedroom 2nd exit). If necessary, consider 1) installing an escape ladder 2) rearranging bedrooms—children in rooms with easy rooftop escape 3) cutting access door between bedrooms—possibly through closet 4) installing a hall door.

**NOTE:** If hall door can be closed all bedrooms can share the one best emergency escape exit.

\*You may use different colors rather than solids and broken lines.



Draw a fire escape floor plan for your home.

Outside Meeting Place \_\_\_\_\_

### Conducting Your Fire Escape Drill

Your home fire drill should not be scary. Make it a game for young children. In an emergency, they will follow directions instead of hiding under a bed or in a closet. To be more realistic, pick a time when it's dark—if possible.

#### All set? Drill begins . . .

1. Everyone is in his or her bedroom—doors closed.
2. Sound the ALARM (possibly give a child the practice—the alarm may be a whistle, bell, someone yelling, etc.)
3. Everyone swings into action. Out of bed . . . to the door. Carefully test door before opening it.  
FIRST DRILL: Escape through normal exit (hall or stairway).  
SECOND DRILL: Imagine doors are hot—hall is blocked by fire! Now, everyone must test his emergency escape exit. Depending on age and capability, you need not actually go out on roof. BUT, be sure everyone can open windows and screens easily, position an emergency escape ladder quickly, etc.
4. Everyone gather at outside meeting spot. All accounted for?

5. Be prepared to carry out any duty assignments:
  - \*Notify Fire Department (know procedure).
  - \*Have special help for infants, elderly, 3rd floor occupants—such as raising an outside ladder that is kept nearby.

*Special Note:* If caught in smoke and heat . . . KEEP LOW. Heat rises, so air is better closer to the floor. Take short breaths. Cover face with cloth.

### At the Time of a Fire . . . .

1. It will certainly take a moment or two before you can think clearly. But force yourself to react according to your escape plan.
2. Doors—May be your salvation. The natural reaction is to leap out of bed, fling open the door to see what is wrong. But—DON'T.

Check for smoke seepage around door cracks. Feel the inside door surface . . . if it is hot, DON'T OPEN. Use your alternate escape route.

If the door seems cool, cautiously open it. If it is safe, proceed but remember to close all doors behind you.

3. IF TRAPPED—Seal up cracks around the door. Use a sheet, clothing or whatever is handy. This will keep smoke and gases out.

Open the window slightly from the top and bottom (may have to break top of window—use a drawer, shoe or whatever is handy—be careful with broken glass). This lets in some fresh air and lets out bad air. Hang a sheet out the window to signal rescuers.

4. Your family should have a ladder that is tall enough to reach the top floor windows in your home so that if someone is trapped, you can get them out.

Attach a copy of the evacuation plan you developed for your home to the Safety Project Report. In a brief summary describe what you did in developing your own plan. Also, keep a copy of your plan for your own use.

Most Minnesota departments are volunteer departments. When you report a fire, the person answering the phone turns on a siren or a special radio to alert the firefighters. Some firefighters will go to the fire station to bring the fire trucks to the fire. Others will go directly to the fire.

Firefighters spend many hours in training to learn how to fight fires. They learn to operate pumpers (the trucks that pump water onto a fire), and tankers (trucks that carry their own water to a fire). In larger cities, the firefighters learn to operate other equipment, like ladder trucks (trucks that carry special automatic ladders) and rescue trucks (trucks that are sent to help at car accidents, or when people are sick and need first aid).

Your firefighters must learn how to fight a fire with ladders and hoses, how to search a building to rescue people trapped inside and many other jobs. Firefighters must know more than how to put out fires—they must know first aid and many other skills. Firefighting is the most dangerous job in the United States, but firefighters get a lot of satisfaction out of what they do.

You can learn a lot about fires and fire safety by visiting your fire department. These visits can be set up by calling the Fire Chief (the boss of the department) or the Fire Marshal (the person in charge of preventing fires).

## Fighting a Fire

If you have a small fire in your home, you might be able to put it out if you have the proper type of fire extinguisher available—and you know how to use it. Fires spread very fast once they break out into a flame. You may have a very good chance of putting the fire out if your home is properly equipped with fire extinguishers. The following activity discusses with you the type, use, and location of fire extinguishers in your home. This guide will help you in selecting the proper type of fire extinguishers for your home and other buildings around your homesite and will give you basic information on the use of fire extinguishers.

**CAUTION**—always THINK TWICE before you try to fight a fire yourself. If you feel in any way that the fire is too large to be extinguished with a fire extinguisher or if the smoke is too thick to see through it, GET OUT and call the fire department or wait until it arrives if it has already been called. Property can be replaced in most cases but you and your family can't.

## Your Fire Department

There are over 750 fire departments in Minnesota. Some departments have paid firefighters (firefighters on duty at the fire station all of the time). Other departments have volunteer firefighters (firefighters who come from their homes or work when there is a fire). A few departments have both paid and volunteer firefighters.



Here are the three types of fire extinguishers. The water extinguisher is used in public buildings and where combustible materials are located. The CO<sub>2</sub> extinguisher is used on electrical and grease fires. The dry chemical extinguisher is the best for home use and good on all three types of fires.

## Extinguishing Fires

If you have a fire in your home the first and foremost thing is to alert everyone and get them to a safe place. If the fire could potentially spread very fast or is large at the time that you discover it, contact your fire department immediately. If the fire is very small or once the fire department has been contacted you may attempt to extinguish the fire yourself. But it is very important that you know what you are doing.

### Classes of Fires

Each fire has its own special characteristics. Some fires are easier to put out if the heat is removed; others, if the air is removed. Firefighters usually divide fires into four classes. Each class of fire is extinguished (put out) in a slightly different way:

**CLASS A**—Fires in wood, paper, cloth and other similar materials. These fires can be extinguished with water.

**CLASS B**—Fires in gasoline, grease, paint and other similar liquids. Most of these liquids float on water, so water would only spread the fire. These fires are extinguished by smothering with special chemicals ("dry powder" or "CO<sub>2</sub>" or carbon dioxide).

**CLASS C**—Fires in electrical equipment, or involving electricity. Water can't be used on these fires, because electricity can travel in water. The dry chemical and carbon dioxide extinguishers used on Class B Fires can be used on Class C Fires while someone cuts off the electrical power.

**CLASS D**—Fires in metals, such as magnesium. These fires turn water into "instant air" because they're so hot—water will make the fire burn even more, so firefighters use special chemicals or sand to smother these fires.

### Fire Extinguishers

You should have fire extinguishers located in your kitchen, basement, and if you live on a farm in every major building. Also, an extinguisher should be placed in your car, truck and any self-propelled farm equipment (tractors, combines, etc.).

The best all-purpose type of extinguishers is a Class A-B-C Extinguisher. This kind of extinguisher can put out small electrical, gasoline and combustible material fires (wood, paper, etc.).

How large of an extinguisher should I have? Normally, the larger the extinguisher the larger the fire it will put out. A small extinguisher will put out a small fire. You should have at least one five-pound A-B-C dry chemical extinguisher in

your home and in every major building around your home-site. Two and half pound extinguishers can be placed in other areas of the home and other buildings to provide you with additional protection. A 2½-pound dry chemical extinguisher is adequate for your car, trucks and farm equipment, if you live on a farm. Only buy fire extinguishers that are Underwriters Laboratories approved (UL). This assures you that the fire extinguisher meets stringent operating requirements.

Most fire extinguishers operate in basically the same way:

PULL the locking pin.

AIM the nozzle at the bottom or base of the fire.

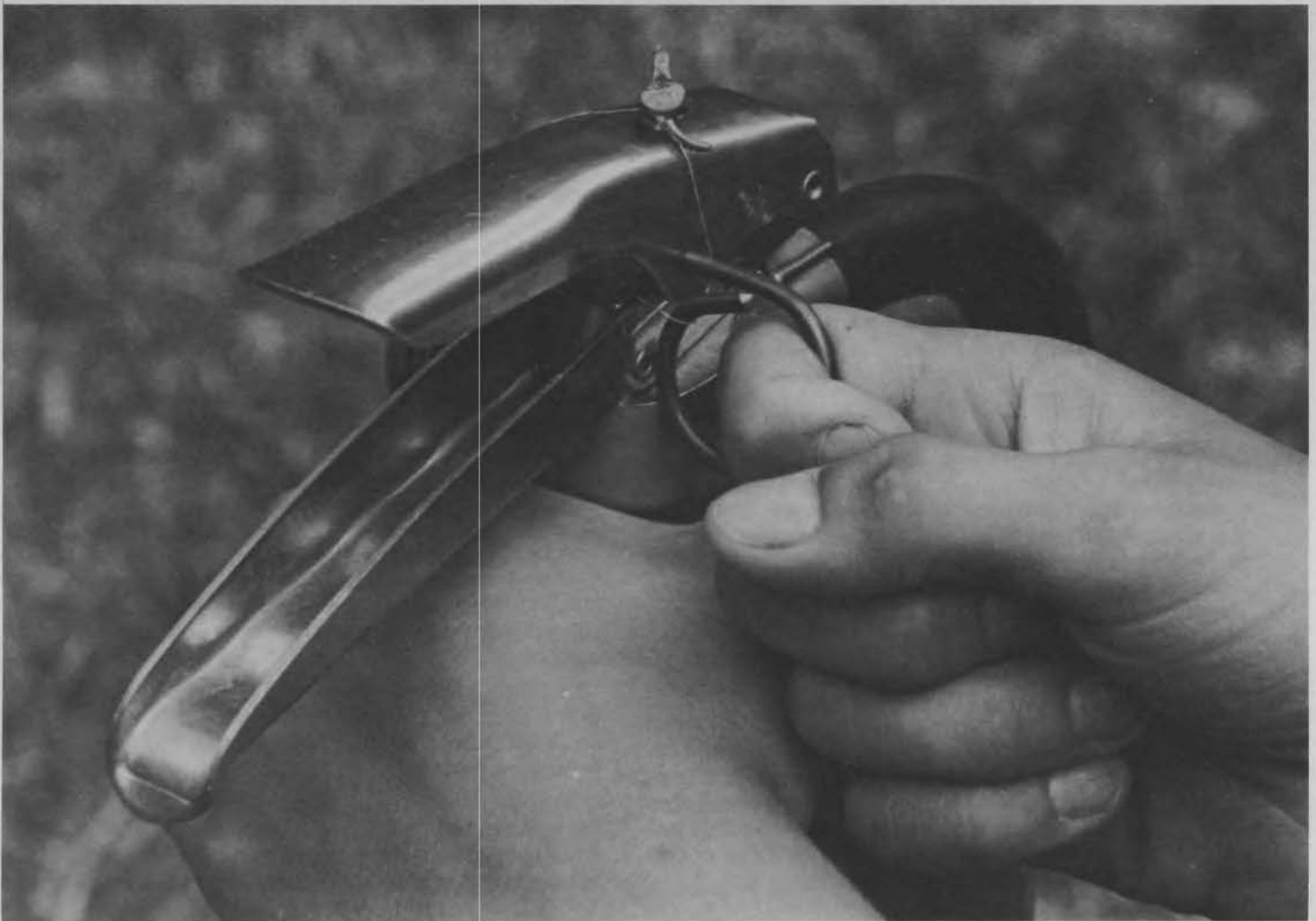
SQUEEZE or press the handle.

SWEEP the extinguisher back and forth at the base of the fire until it is extinguished or the extinguisher quits.

Remember to always read the directions on any fire extinguisher before operating it. Some extinguishers may require a slightly different method of operation.

Where should you place your fire extinguisher? You should locate the extinguisher near the exit from the home or the room where it is located. If there is a fire in the area you will be able to grab the extinguisher and still be between the fire and the exit. It is always important that you keep away out of the area open. You don't want to get trapped behind the fire. If you find that you can't put the fire out with the extinguisher, GET OUT and wait until the fire department arrives.

The locking pin in place indicates the extinguisher is full and ready for use. Pull the locking pin before using.







These two 4-H'ers are learning, in an outdoor staged fire demonstration, how to put out a fire. Stand back a safe distance from the fire. Slowly advance, aiming at the base of the fire.

It is also a good idea to keep a garden hose in the house, ready to be hooked up to a threaded fitting on your faucets in case of a fire. But you should remember that you **CAN'T** use water on a gasoline or grease fire or on any electrical fire. Small grease fires on the stove in pans can also be put out by sliding the pan lid (or a bigger pan) over the top of the burning pan. **NEVER** carry a burning pan of grease to the sink.

If you live on a farm and have a pond or water tank, a portable pump could be used with its own hose for fighting fires.

**REMEMBER**, always think twice before you try to fight a fire yourself. If the fire is too big for one extinguisher to put it out—or if you can't see the fire through smoke—**GET OUT AND CALL THE FIRE DEPARTMENT** or wait until they arrive if they have already been called.

On the floor plans of your home that you drew for the smoke detector location activity and/or the Operation EDITH Emergency Exit Plan mark the location of where fire extinguishers should be or are located in your home (Place a red \* in those locations). If you have other buildings around your home or farm, list the buildings and the number and type of fire extinguishers that should be or are located in them. As you complete this activity, discuss it with your family and the need for fire extinguishers around your home or farm.

Fire extinguishers can be purchased for approximately \$25 to \$40, each. When you consider the added protection that they provide you and your family in case of a fire—don't you think it's worth the small investment?



# Consequences of Fire

Fire hurts people and destroys property. Fire insurance can help replace destroyed property, but it can't replace lives—it's very hard to restore someone who's been hurt by fire.

Fire insurance is a system through which you and many other people pay *PREMIUMS* (money) to an insurance company. The insurance company pays for a fire you might have from all these premium payments equal to the value of your insurance *POLICY*. The amount of the premium your family pays depends on the cost of fires where you live. The fewer fires that occur where you live, the lower the premium will be.

The big problem is that very few people carry enough insurance to pay for all the losses from a fire. If your house burns, you not only lose the house, but a place to live and all the family treasures (pictures, records, clothes, gifts, etc.) that have been collected over the years. These can never be replaced.

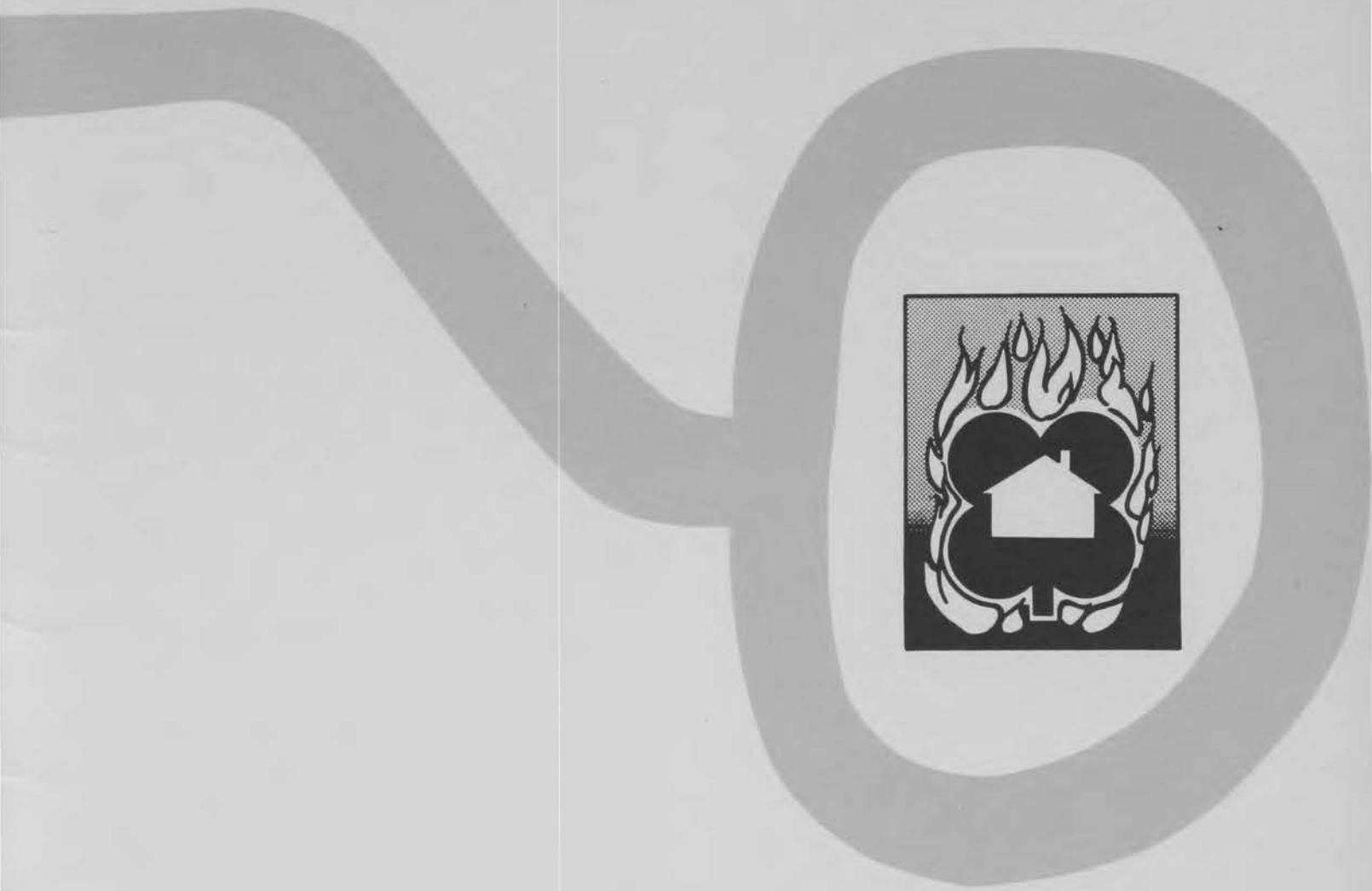
But the worst fire tragedy is the injuries that people suffer from fire. A person who suffers **FIRST DEGREE** (redness of the skin—like sunburn) or **SECOND DEGREE** (blisters and redness) burns may only have pain for a while. But someone who suffers **THIRD DEGREE** burns—burns where skin is actually burned away—may have to spend many months in the hospital. Scars from those burns may never go away. Smoke from fires can be even more dangerous. (A person may die in a fire, but never be burned—because the smoke kept that person from being able to breathe.)

If your clothes catch fire, the worst thing you can do is run. You should **STOP—DROP—**and **ROLL**. Stop running. Then drop to the ground. Roll around—this will help smother the flames. If someone else's clothing catches fire, **STOP** them. Cover them with a coat, a blanket—whatever is around—or make them roll on the ground. Bad burns should be covered with a clean sheet. Small burns should be soaked in cold (not ice) water for 20 minutes or so. If you don't know how bad the burn is, treat it like a bad burn.

By thinking and doing the right thing, you can keep your home from becoming an insurance "loss"—and your family and friends from being hurt or even killed by fire.

By completing this project you will have assisted your family in developing a sound home fire safety plan. Hopefully, you will be able to prevent a fire from ever starting in your home but if one does occur—after successfully completing this project and practicing what you learned—**YOU'LL BE READY!**





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