SAFETY IS FOR YOU!

UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE

4-H SAFETY PROJECT — FIRST YEAR

SAFETY
IS FOR
YOU!

HI THERE! OUR JOB IS SAFETY IT'S UP TO YOU AND ME!

In these pages, you will notice that each work unit is arranged so that if you read the white pages, then do what it says in the yellow pages, you should have no trouble in selecting the right answers on the green quiz pages. Simple, isn't it?

If you want club activities in addition -- hazard hunts, safety courts, or some demonstrations you can do -- see the back pages of this book. Extra pages can be added anywhere you like for reporting other things you do. Use any blank spaces you find for making notes or sketches.

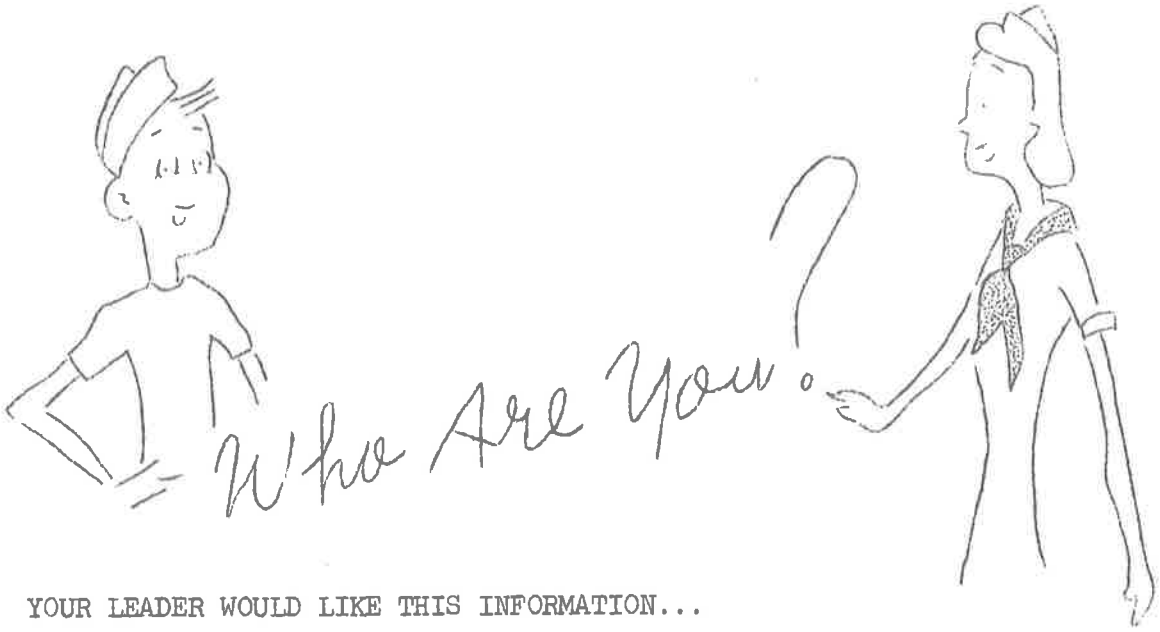
If you can take pictures of unsafe things you find and photograph them again after they have been corrected these will make good additions to your completed book. But for now we hope you complete the work on each of the yellow pages and finish all the quiz sheets on the green pages as you come to them.

Then be sure you get your book in on time. There are trips and prizes, but the real goal is a job well done in your community to make it safer for everyone. This is a project that will serve the community. We would like to have a record of what you do in it.

We have a plan for two years of work and fun. Here are the subjects for the first year work units in this book--use of tools...animal care...falls... electricity...and bike riding.

At the end of the units, you'll find more information on--hazard hunts... safety courts...safety displays...and safety information.

The author is Ralph R. Parks, agricultural engineer for the Agricultural Extension Service.



YOUR LEADER WOULD LIKE THIS INFORMATION...

Name _____

Address _____

County _____

Age _____ Birthdate: Month _____ Day _____ Year____

Name of parent or guardian _____

Size and type of farm or home where you live _____

_____

Date you started this project: Month_____ Day _____ Year _____

Date you finished this project: Month _____ Day _____ Year _____

Other projects this year _____

_____

How many years have you been in 4-H Club work? _____

Name of 4-H Club _____

Name of leader _____

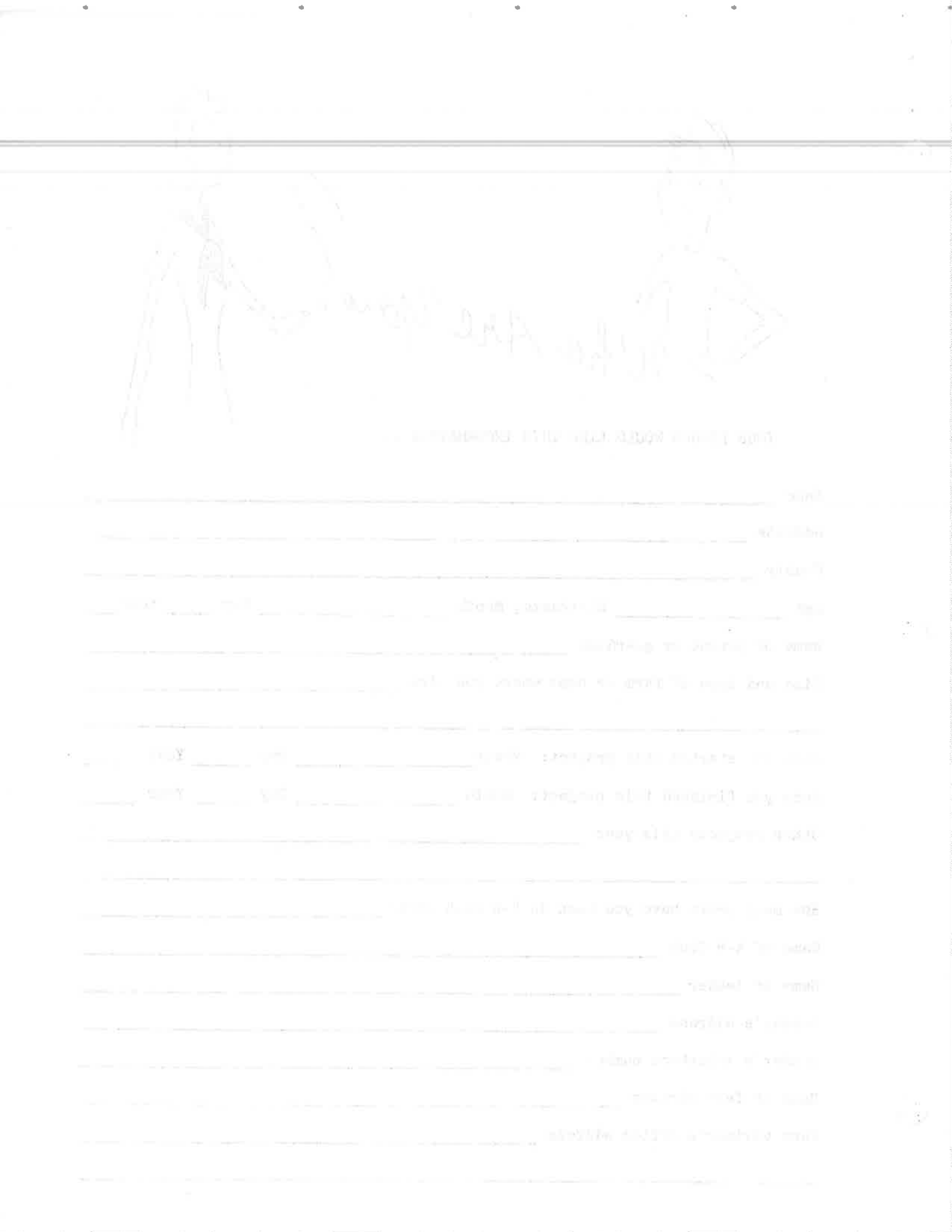
Leader's address _____

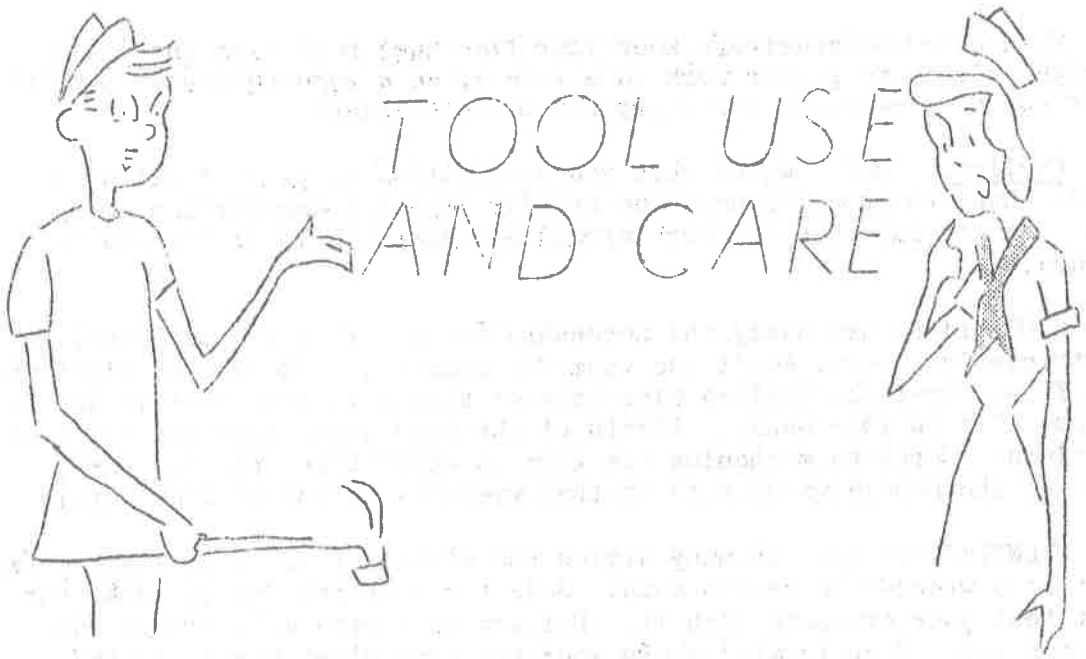
Leader's telephone number _____

Name of farm advisor _____

Farm advisor's office address _____

_____





Why do we need to learn the right care to be given hand tools and show how to use them properly? Accidents from hand tools cause up to 1/10 of all disabling injuries on the farm. These accidents mean time lost and medical expenses. Faulty tools and their careless use reduce the amount and quality of work that can be done with tools. Every good workman takes pride in the tools he owns, and the way he uses them.

HAVE A PLACE to keep tools when you are not using them. If they are just thrown around in a truck or building, they become a nuisance and prevent others from working safely. They also become dirty, broken, or lost and are not ready when you need them most.

A WALL SPACE for hanging tools near your work bench is ideal. If you need to carry a few tools with you on your work, have a box or pocket that will hold the tools and prevent them banging against each other. A piece of old blanket or folded rag will pad your tool box nicely.

TWO HAMMERS, at least, are quite desirable in a set of tools...one for nail driving and carpentry work, the other for metal work. Carpenters' hammers will break easily if used for pounding metal. Metal-working hammers are not built for nail driving. Wooden handles in hammers require some tightening occasionally and can be broken if not used the right way. When pulling large nails remember to block the hammer to get the best leverage on the nail head. Keep the hammer clean and replace the handle when it is cracked or broken.

A SCREWDRIVER is also a useful farm tool. See that the blade is ground straight so it will fit the milled slot in the screw head. If the blade is too thick or too thin it might slip out of the slot. A well-equipped tool kit has screwdrivers of different sizes and different blades to fit a variety of screw heads.

When using screwdrivers keep your free hand away from the blade. It might slip. Keep your work in a vise or on a workbench when possible. Don't use a screwdriver for a pry bar or cold chisel.

Caution: Wear goggles when you are fitting tools on a grinding wheel. Hang the goggles near the grinder when you are through using them. Be careful when you work around any shop equipment that is not guarded.

GOOD PLIERS are handy and necessary tools. If you have a pair of electrician's pliers, don't use them for hammering. Keep them oiled and rust free. Wrap the handles with tape so they will stay cool in the sun and not slip in your hands. Pliers of the slip joint type are too handy sometimes. Careless mechanics use them as substitutes for wrenches, spoiling the shoulders of nuts so that wrenches cannot be used safely.

WRENCHES are made in many styles and sizes for heavy or light work. Don't be a wrecker of wrench sets. Select the wrench for the job, but don't test your strength with it. Pulling on a wrench is always safer than pushing. Keep in mind where your knuckles might strike if the wrench slips. If a nut is "frozen" in place, try hammering to jar it loose. Even cut it off with a cold chisel rather than spoil a wrench trying to remove it.

A quick way to learn safety with tools is to demonstrate a safety practice to your club. What the members miss in pointing out to you, your leader will see.

There are many things to be learned about safe use of tools. This is just a starter for you.

Good references on hand tools:

ABC's of Hand Tools, by General Motors Corp., Detroit

Safety on the Farm, California Farm Bureau Federation, 2223 Fulton St., Berkeley 4, Calif.

HAND TOOL HUNT

See how many unused tools you can find around home, in the family car, and in the tractor tool box or other storage places. You'll be surprised how many good tools have been neglected or discarded when you help straighten up a shop or tool box. If the owners will allow you to rescue them, clean the tools and arrange them on a board rack or in an orderly tool box.

Here are some things to do--

1. Find a couple of old hammers, one for carpentry, one for metal work. Clean them and replace the handles if necessary. There are liquids available to clean rust. You can also use grit papers and other abrasives to clean your loot. If you have a favorite color of paint use it to mark all your tools so you can identify them.

2. Assemble a set of screwdrivers you can find. Dress the blades. (Don't sharpen them.) Clean and finish the handles.

3. Pliers are another item that can be salvaged and made workable. Add a few to your kit of tools. See that they are clean and workable.

4. Wrenches are always in demand in any shop or tool box yet many good ones are discarded because of broken sets. See how many you can recover and how much of a set you can put together. Probably, you will find and clean an adjustable wrench. This could fill in the set so that you would have a wrench to fit any nut size.

5. Add what other tools you can find and learn to demonstrate the safe way to handle and use them. You might have to visit a number of scrap piles over a period of time to gather the tools you need for a good set. But this will be fun and cost you little. You will have demonstrated to others the thrift and advantage of keeping tools and taking good care of them.

6. You might want to tell about certain new safety practices you have learned with tools. Use the blank spaces you can find here, or add additional sheets to your book.

HAND TOOL QUIZ

Place correct letter in box (A or B)

1. A box or rack is needed for hand tools (A. to keep the tools sharp) (B. for safety and convenience). ☐

2. Safe use of tools means (A. working slower) (B. greater efficiency). ☐

3. A hammer with a loose handle is a hazard (A. only when other workers are present) (B. any time it is used). ☐

4. You should (A. hold your work) (B. put your work on a bench or in a vise) when using a screwdriver. ☐

5. When using a wrench it is safer to (A. push away from you) (B. pull toward you). ☐

6. A carpenter's hammer is unsafe for pounding on metal work (A. because the hammer might be broken) (B. because the claws might catch in your clothing). ☐

7. Pliers should not be substituted for a wrench because (A. the pliers might be broken) (B. rounding shoulders on a nut might make it unsafe for the next fellow with a wrench). ☐

ANIMAL CARE

Farm animals like good care. Learn to enjoy animals but respect their habits and feelings. Most animals can be trusted at times, but not always. Their instinct is to protect themselves and their young. They may be dangerous when startled or threatened. Even when you feel confident that you can trust an animal it may let you down and hurt someone, even you. The smart thing is to take no chances around them.

A DOG IS A MAN'S BEST FRIEND, some say, but the best of dogs will attack strangers, even children, when you least expect it. See that your dog is kept under close control when strangers are present. Have a pen where he can be shut in when necessary. Even a chained dog can be a hazard to persons not used to farm animals. If your dog chases cars, learn how to break him of the habit or keep him confined when not being worked. A dog is very anxious to learn things from you but you must use patience in teaching what you want done.

A HORSE ALSO IS ANXIOUS to do what you want and likes kind words and encouragement. A friendly horse wants your company, will even follow you around if petted. But don't startle a horse by yelling and making loud noises close by. If you whip a horse, you can expect it to pull back and try to get away. As you go near a horse, let him know you are around by talking to it gently. Go first to its head, when possible.

You should see that the horse's bridle and harness or saddle fit properly and are not adjusted too tightly. When you mount, do so from the left side of the horse. Take up any slack and hold the reins in the left hand as you mount. Be ready, and restrain the horse from wheeling away from you to the right.

SOME RIDERS STAND CLOSE and ahead of the left stirrup when they mount. They know that horses may start quickly; in this position they can swing into the saddle as the horse moves forward.

As you ride, always hold the reins with your left hand and use the right hand to pull out the slack, or do what else you need to hold on or balance. Learn to ride erect and with the toes, not the instep, in the stirrup. It is safer, easier on you, and easier on the horse. Learn to relax your body and ride with the motion of the horse, not against it. Keep the horse under control at all times by tightening and loosening the reins in the left hand. Most horses will "neck rein" with one hand so you do not need to use a rein in each hand.

Do not permit horses to stand alone when harnessed or hitched to implements. They are easily startled. One runaway can ruin a good horse or team and possibly hurt someone. Do not wrap tie ropes or reins around your hand or around your body. You might be seriously injured by not being able to turn loose when it is necessary. When leading any animal walk beside it, not in front.

SOME ANIMALS HAVE DISEASES that can be passed on to humans. If you suspect an animal is sick, keep your distance and tell your parents. Don't make pets out of calves and sheep. They can be dangerous, particularly to youngsters. Bulls need to be kept in safety bull pens where gate operation and feeding can be done from the outside. Boars and rams may attack without warning. Don't trust them. Even cows may be dangerous, particularly at calving time, and can kick seemingly in all directions at once.

LEARN ANIMAL MANNERS

1. Meet the owners of three or more dogs in your neighborhood. Make a list, including for each dog: name, breed, age, use, where kept, and habits (good and bad). How about the safety of strangers or children around the dog? _____

2. Find the owner of a horse you can ride or drive, or inquire about. Tell what you learned about safety with horses from this experience.

3. Where have you observed other farm animals being kept? What safety precautions did you notice being taken in housing or working with the animals? _____

ANIMAL QUIZ

Place correct letter in box (A, B, or C)

1. A dog (A. can be trained not to attack strangers) (B. cannot be trusted when strangers are around). 

2. A dog (A. should be fenced in or tied for safety) (B. should run loose or he will become mean). 

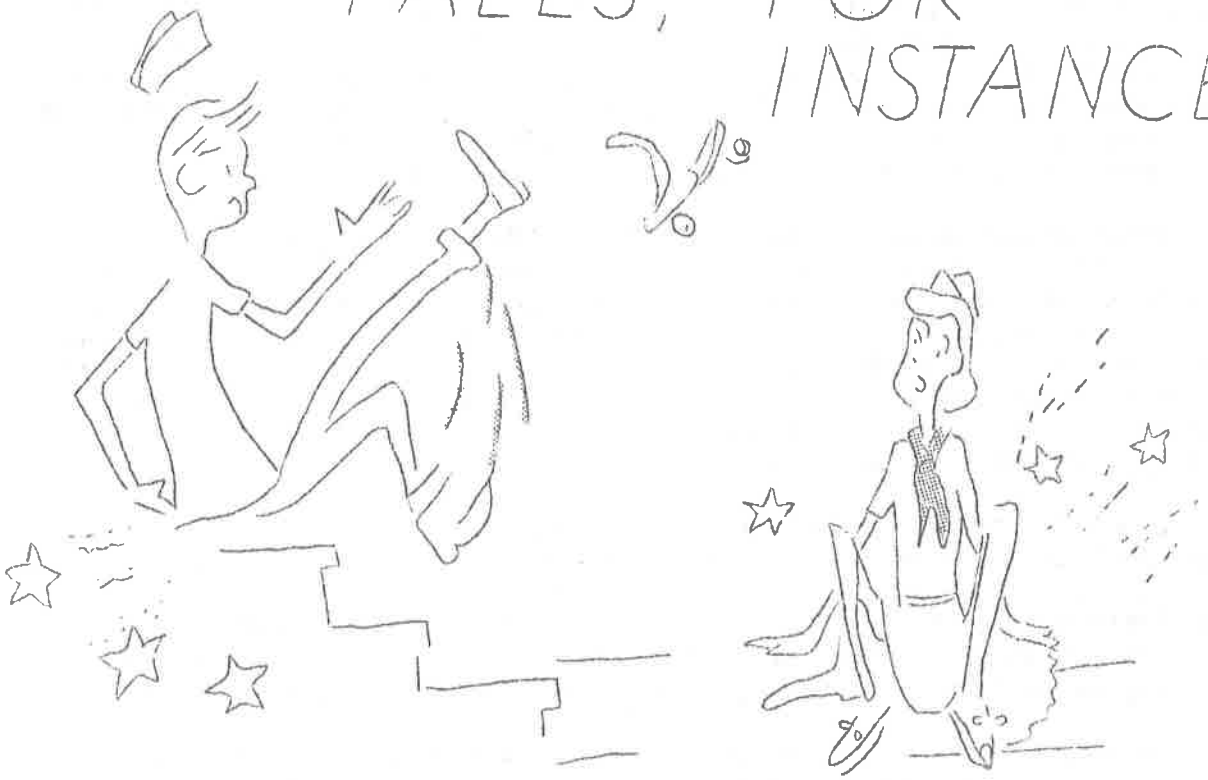
3. A horse (A. may kick if you approach him from the rear) (B. will not kick if you have his confidence) (C. will not kick if you speak his name). 

4. A horse (A. should normally be handled from his left side) (B. should be held by you standing in front of him). 

5. A bull (A. is safe to be around if a ring is in his nose) (B. is safe when kept in a safety bull pen when you are on the outside). 

6. Animals (A. treated kindly can be trusted) (B. with newborn young cannot be trusted). 

FALLS, FOR INSTANCE



Do what you can to reduce falls by looking for the causes and removing them. Falls are the cause of nearly half of all farm home accidents and 1/6 or more of all farm industrial accidents. This puts fall accidents on top in all accidental death causes recorded. Falls usually result from "poor housekeeping" and poor balance of the very young, and folks past middle age. Trying to step over boxes or toys, climbing on chairs, standing in bath tubs, walking on slick floors, using ladders improperly, and doing other such things cause a lot of "accident" falls.

LOOK FOR ANY TOYS OR UNUSED EQUIPMENT lying around where folks will walk. Let's pick them up. Supply a box or place where such items can be kept when not in use. Also, remember to park bicycles properly; place boxes out of the way; keep handrails in repair; and keep equipment in good order.

MANY WORKERS USE LADDERS IN A CARELESS WAY. Each type of ladder is designed for a certain job and should be used that way. Ladders should, of course, be kept in good repair and users should be taught how to care for them. If a ladder is placed too straight against the tree or building the ladder may fall backward with the climber. If he leans out too far, particularly with a loaded bucket or picking bag, he is likely to fall. The user should know a little about the mechanics of climbing a ladder to avoid accidents. Remember, too, that boxes and rickety stools make poor substitutes for ladders.

Step ladders are usually safe if the climber stays off the top step, using it for a brace instead of a platform. He must also remember that leaning too far means a fall. True enough, moving the ladder now and then takes time, but so do accidents.

Fruit ladders, because of their three legs instead of four, are more apt to fall. Too, the climbers may feel more secure because the tree hides the ground. The fruit bag also may cause trouble. Having been almost filled with short close-in reaches, the bag now swings out as the climber makes that final long reach. Down comes the bag with fruit picker attached. One solution is to tie the bag to the picker's waist as well as his shoulders. This will keep the bag closer to the ladder.

STEPS AROUND HOME AND FARM BUILDINGS CAUSE ACCIDENTS, too often. Having a rail to grasp if one stumbles on a step will help. Hand rails over bath tubs have saved many hard falls. Hand holds for climbing on and off farm machinery have prevented many scraped shins and tumbles. Remember, older age groups have the greater number of falls. Try to make things safe for them; suggest they use the safety equipment you have provided. See that rugs they use do not slip. Don't make it necessary for them to climb or step over things left on the floor.

GOOD LIGHTING IS AN IMPORTANT AID in preventing accidents. Avoid heavy shadows. For example, a stair light usually works best at the bottom, not the top of the stairs. All lights should give some general illumination besides lighting a particular piece of work or area. See that the light is shaded from the person's eyes. Where it is not convenient to have lights or light switches, provide flashlights for night movement.

WATCH HOW PEOPLE LIFT AND CARRY LOADS. Show them the proper way to lift with the legs, not the back. When you are carrying a load, make certain the load does not keep you from seeing where you are going.

Reference: How to Lift, State Compensation Insurance Fund, 450 McAllister Street, San Francisco 1, California

REDUCE FALLS

What can you do to make your farm and home safe from falls?

1. Remove obstacles from walks or walkways. This means repairing walkways, steps or ramps where necessary.

2. Look for places where step rails or hand rails are needed and put them on. Do any other construction that will prevent falls.

3. Watch to see who is climbing and where it is necessary to climb--in reaching things on high shelves, making repairs, working on windows which cannot be reached from the floor or ground. For such reaching, help provide ladders or step stools, and discourage the use of tables, benches or chairs.

4. Inspect the ladders on the farm and notice how they are used. See if the persons using the ladders know how to place and use them. See what happens when they walk down ladders with loads. Could loads be carried and balanced so that both hands are free to hold on to the ladder? When we see mistakes, we can write them down and discuss them with those in charge of the work.

5. No two accidents happen in exactly the same manner. Your situations are a little different than those on a neighboring place. Study them and make your own plans against falls. Make a record of what you observe and what you do, particularly the demonstrations that you give on correct ways to use a ladder and correct ways to lift and carry a load.

FALLS QUIZ

Place correct letter in box (A, B, or C)

1. Falls are more frequent with (A. children and older persons) (B. middle aged persons). ☐

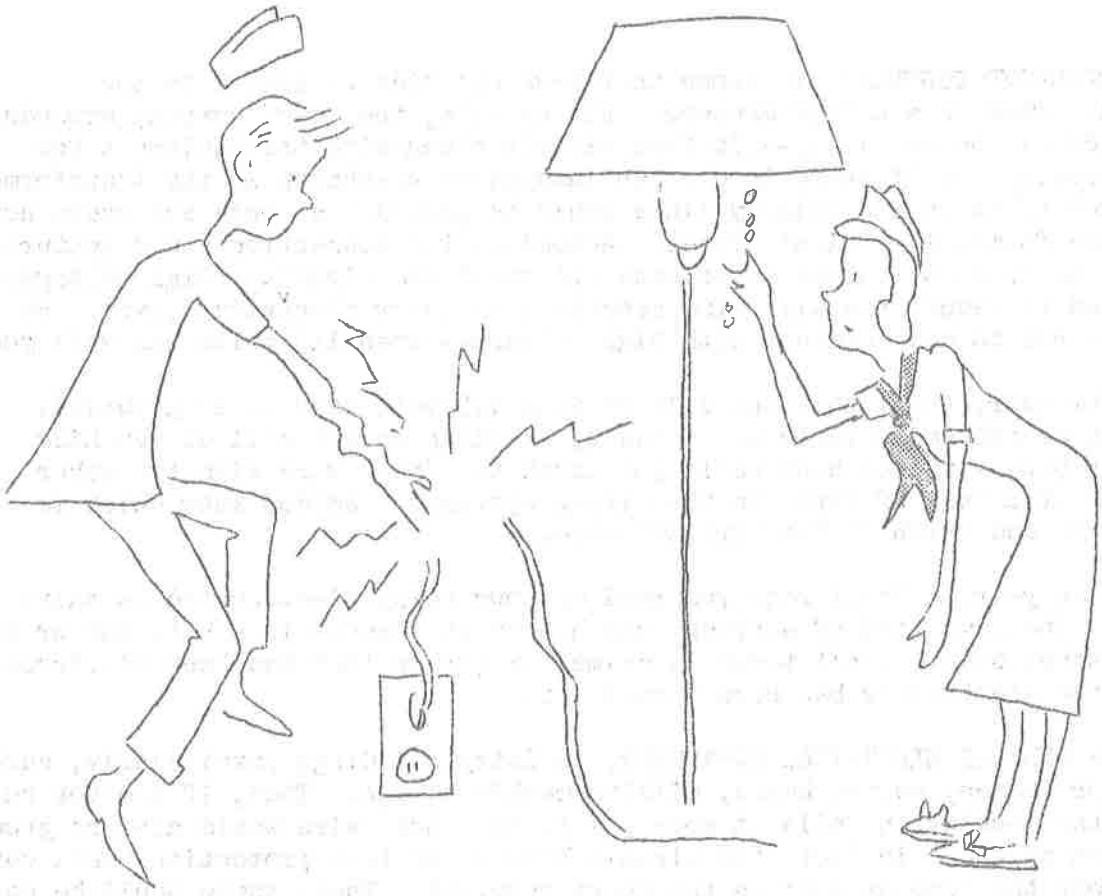
2. Ladder accidents occur because climbers (A. try to carry too heavy loads on the ladder) (B. become overbalanced). ☐

3. The best thing to stand on when washing windows is (A. a bench) (B. a step-ladder) (C. a chair). ☐

4. A stairway light should be placed (A. at the top of the stairs) (B. at the bottom of the stairs). ☐

5. When lifting (A. use your strong back muscles) (B. use your leg muscles and keep your back as straight as you can). ☐

6. If you have a load you can't see over (A. carry it in front of you so you can fall on it if you stumble) (B. don't carry it; take part of it at one time). ☐



ELECTRICAL SAFETY

Electricity, like fire, is a wonderful servant---if kept under control. Out of control it can kill persons and destroy property. Our job is to learn respect for this very useful power, and, by knowing how it works, to find answers for control and safety. You should have an experienced electrician or other person help you work on electrical safety.

THE KINDS OF ELECTRICAL HAZARDS you will most often meet are poor or no insulation on wires, improper fuses or none, lack of ground connections for the protection of equipment and persons in case of a short circuit, and improper use of wiring materials.

Electricity flows best through copper. It can flow through other materials including damp soil or concrete---even through animals if they are caught in its path. It does not flow easily through rubber, wood, plastic, glass or other such materials unless they are wet.

ELECTRICITY CANNOT BE STORED so it flows only in connected circuits. A circuit, for example, can lead the current from a battery or transformer through a light bulb and back to the battery or transformer. We call it a connected circuit when the switch is on and an open circuit when the switch is off, or when the circuit is otherwise disconnected. You see, it takes two wires to carry that current to the lamp or electrical device being served.

GROUNDED CIRCUITS are those that have one side connected to the ground. This is a safety measure. For example, the power company grounds one side of the usual 115-volt farm circuit along with the equipment for the service. So if there is ever an insulation breakdown in the transformer, the 6900 volts on the primary lines would be grounded at once and would not harm the farm's electrical system. Actually, the connection would rupture a fuse or cause a cutout to release and break the circuit. High voltages are used to reduce the wire size necessary to carry electrical power. Be careful not to make contact with high voltage---even 115 volts can kill you.

Remember, then, that one side of your 115-volt service is grounded. You can be shocked severly or killed by standing on wet soil or touching a water pipe with one hand while you touch the "hot" wire with the other. Looking at a pair of wires in the wiring system you seldom know which is the "hot" and which is the "ground" wire.

Each year in California you read of cows being electrocuted in dairy barns. The same kind of accident can happen to someone in a bath tub or at the kitchen sink. Don't touch an animal or person that has been electrocuted until the electricity has been turned off.

GROUND ALL ELECTRICAL EQUIPMENT, in dairy buildings particularly, such as motor frames, switch boxes, milking machines, etc. Then, if a motor burns up or the insulation fails at some point, the "hot" wire would also be grounded and harm no one. In fact, the circuit breaker or fuse protection would cut the power off the line as soon as the short occurred. Then, there would be no energized pipeline or stanchions to kill cows or people.

In your electrical safety inspection, you are looking for at least three things--proper grounds, good insulation, and protection devices for equipment.

OVERHEAD WIRING SHOULD BE SECURELY HELD IN PLACE on good insulators and be high enough over traffic ways to be out of reach. Check overhead lines to see that no towers or poles are used near them.

LOOK FOR GROUNDS ON INSTALLATIONS where they are needed to protect the equipment and you.

WATCH FOR IMPROPER FUSING OF WIRES or poor protection for equipment that might cause trouble. Pennies behind fuses may cost dollars to repair the damage later.

PORTABLE SHOP MOTORS NEED PROTECTION AND GROUND WIRES TOO. Otherwise a short to the frame may occur and the operator will find himself between 115 volts from the hot connection and the ground on which he is standing. Look for similar hazards in the house. Someone in a bath tub reaching for a hair drier or metal equipment can be electrocuted. The same thing can happen around the kitchen sink or out in the yard with electrical equipment. Take a look in the laundry room. All washer frames should be grounded.

FUSES ARE THE SAFETY VALVES OF AN ELECTRICAL WIRING SYSTEM. For every size and use of wire there is a safe working load in amperes (current flow). The fuse guards against overload and burns out when an overload occurs. Breakers, while sometimes used for protecting wiring, are more generally considered protection for motors and similar appliances. In case of overload, they trip and protect the equipment.

Motors require a high current flow to start, yet operate with perhaps half the starting current. The wire and fuse size must be large enough to start the motor. But though the breaker or other motor protection device must hold when the motor starts, it must also protect the motor from overload when it is running. So you should find both fuse protection on the motor circuit and overload protection at the motor switch itself, sometimes built into the motor.

CHECK ALL CORDS TO SEE THAT THE INSULATION IS STILL GOOD. Temporary wiring should not be run under rugs or hung over nails on the wall. Wiring intended for inside use should not be used outdoors.

SEE THAT WIRE SERVICE ENTRANCES FOR ALL BUILDINGS ARE GROUNDED or have ample grounded protection nearby. Have some trained person examine the fuses of the wiring system with you to see that they are the proper size to protect wiring being used. When in doubt, ask your local electrician to help you with the inspection.

DON'T MAKE A HAZARD OUT OF YOUR HAZARD HUNT.

WIRING INSPECTION

1. List the buildings you inspected for wiring and proper use of electricity.

2. How many grounds did you find and where?

3. List the fuse or breaker-protected circuits you found in the house.

4. Tell of any interesting experience you had in making your farm electrical inspection. What expert help did you have?

ELECTRICAL QUIZ

Place correct letter in box (A or B)

1. Why is electricity transmitted with high voltage? (A. to make it more powerful) (B. to save on wire size). ☐

2. Why are grounds used? (A. to take electricity out of the ground) (B. to take electricity into the ground in case of mishap). ☐

3. Why do large motors have both fuse and overload protection? (A. to give double safety) (B. to protect the wiring and motor separately). ☐

4. Why should you avoid standing on damp ground or touching a water pipe when operating electrical equipment? (A. you might find yourself part of a 115-volt circuit) (B. the ground might shock you). ☐

BETTER BIKE RIDING

Bike riding is a lot of fun. Every boy and girl should learn to ride, but a bicycle also has its hazards. You can run over someone if you are not careful where you go. You can be run over by someone else in a car or truck. A fall from a bike can bruise and skin you badly. But we are interested here in safe bike riding. To be safe you need to know more about a bike than how to balance yourself or push the pedals with your feet.

THE BIKE MUST FIT YOU BEFORE YOU CAN BE SAFE. Don't ride one too large or too small. You might not live to ride one that does fit. The height adjustment on the seat and handle bars can be changed to alter the size a little.

BE SURE THE HANDLEBARS AND SEAT ARE SECURELY TIGHTENED after adjustment. Socket wrenches are better than crescents or end wrenches for loosening and tightening these hexagon nuts on a bicycle. Some of them are quite small, which means their shoulders can be damaged easily with poor fitting wrenches or pliers. Don't turn your handle bars upside down like a racing bike or reverse the seat post to give you an odd riding position. If you do, you will not be able to see ahead well or to balance yourself well when riding in traffic. Wheels and chains, too, must be serviced and adjusted from time to time to keep them safe. When you make adjustments, have an older person help you check them before riding.

The instructions that follow are not intended to teach you how to overhaul your bicycle. But they will point out how a bicycle is put together and adjusted to give you the greatest pleasure. A bike that rattles, squeaks or runs hard due to neglect is no fun to ride.

THERE ARE FOUR MAIN SETS OF BALL BEARINGS in your bike, besides the pedal bearings. They are in the front and rear wheels, the crank part, and the steering assembly. The balls run in a light weight grease about like vaseline. Between the times you repack the bearings with fresh grease, oil can be added to wheel bearings to keep the grease from drying and becoming hard.

Usually the threads on shafts and bolts of your bicycle are right hand. That is, they turn clockwise to tighten and counter-clockwise to loosen. One of the exceptions to this is the left pedal shaft, where it screws into the crank arm. This is a left hand thread. Also, the left hand cone of the pedal crank has left hand threads. This is to prevent the cone from tightening as you ride.

YOUR COASTER BRAKE NEEDS VERY LITTLE ATTENTION. If it starts slipping or fails to stop you as it should, better take it to a service shop. Its working parts are rugged and will last a long time with reasonable care. An experienced mechanic can quickly take apart a coaster brake, clean it, and put it back with proper lubricant in a few minutes. Repair parts seldom are needed, and they are inexpensive.

CHECK THE AIR PRESSURE in your tires to make them last longer, operate safely, and ride smoothly. On a rough road, lower pressures -- (about 22 pounds on a balloon tire) will make the going smoother. On a hard road, high pressures will make the going easier. Remember, though, that with the hard tire on a wet road your danger of slipping is greater. This is also true on loose gravel.

If you are having trouble with a tire not holding air, check the valve core first. All valves should have dust caps. Keep them down firmly to take the pressure off the valve core. Don't ride a leaky tire. Have it patched, or patch it yourself without delay.

RIDING A BIKE AT NIGHT IS HAZARDOUS. Don't do it except when necessary. Red reflector tape on the rear, and white tape on the front, will help others see you on the road. Light clothing will also help. Lights on your bicycle are even better but when you need them most, they often fail to work properly. A flashlight makes a good spare to help out. But remember, a car driver may not see your small light because of his strong automobile light.

AS A VEHICLE, A BICYCLE SHOULD OBSERVE ALL THE RULES OF THE ROAD, including giving pedestrians the right of way, stopping at stop signs, and slowing where traffic is heavy. Stay on the right side of the road. Learn to use arm signals but don't expect the other fellow to know them or pay any attention to you. That is defensive riding. Cross the street only at intersections. When you cross an intersection, stay on the right. Don't cut corners. Wait until traffic has cleared or stopped before you cross. Courtesy always pays dividends in such cases.

BE SURE YOU CAN SEE BOTH WAYS BEFORE CROSSING AN INTERSECTION. If you are not sure of yourself, get off and walk, pushing your bicycle from the side. The fellow who takes chances winds up in the hospital.

WATCH CAREFULLY WHERE YOU ARE GOING--yet don't be a "tunnel rider' either. Know what is happening at each side and behind you. Before passing a parked vehicle on the road be sure nothing is coming from behind that might crowd you off the road. When on the road don't change directions or stop quickly without letting others know what you plan to do. Again that is defensive riding.

WHEN YOU GO ON TRIPS, take a canteen of water with you. Wear a hat or cap and take protective clothing against the sun of the day and the chill of the evening. Look for shade, and rest frequently. When you are with others, ride single file on the right side of the road as cars approach. Don't carry riders. Today, bikes are built for one person at a time only. Enjoy your ride. Do it safely.

SAFETY-CHECK YOUR BIKE FOR ADJUSTMENT

Date _____

	Adjustment	
	Poor	OK
1. Stand beside your bike and hold the handle bars as you do when riding. If you can turn the handle bars up and down, put a check in the "poor" square. If you can't, check "OK."		
2. Lift the weight from the front end while in this position to see if the cones in the front end of the frame are in proper adjustment. Put a check in the poor or OK square.		
3. Hold the front wheel with one hand and the handle bar with the other. See if you can twist the handle bar post out of position. Give it an OK if you can't, poor if you can.		
4. Steady the bike with one hand while you grasp the tire or rim with the other, near the front fork. Do the wheel hub bearings feel quite loose or is the front wheel held securely? (Be sure the wheel nuts on each side of the fork are firm when you make this test.)		
5. Test the rear wheels the same way		
6. The chain should have about 1/2 inch of movement up and down. If it is too tight, the bike will run hard and tire you. If it is too loose, it will wear rapidly on the sprockets. How is your adjustment, poor or OK?		
7. How about the seat? Is it held firmly in place? You will tire less if you keep the ball of your foot on the pedal rather than your instep. Try the seat for height. Your leg should be about straight when the pedal is in its lowest position. How is the seat for height?		
8. Now turn your bike over and let it rest on the seat and handle bars. Hold to the frame with one hand and the pedal crank near the end with the other. Is there much looseness in your crank assembly?		
9. While you have the bike in this position, read the serial number which is usually on the crank housing and mark down so you can identify your bike later if necessary.		
10. While your bike is in this position, turn the wheels to check them for wobble. Also, try the coaster brake to see how it works. (Caution: Don't be rough on it, you can slip a tire and cause a valve stem to be cut or do other damage, if you apply the brake too suddenly.)		
11. Are your wheels in good alignment? Are the rims straight and do they run in the center between the forks? (If any spokes are broken out, their replacement will help straighten the rims again. The wheels can be centered in the fork by a simple adjustment.)		
12. Are the pedals in good condition? (They are usually easier to replace than to repair if they are bent and weathered badly.)		

SAFETY CHECK FOR A BIKE RIDER

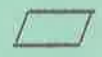
BALANCE IS ALL IMPORTANT to the rider of a bicycle. Any obstacle course on which you can practice and be tested will help you gain balancing skill. In addition, you need practice in giving arm signals before turning or stopping on a highway. Learning to stay on the right edge of the road is also important to safety and requires balance and good riding skill.

Here is something that will give you practice in balancing. Get a 20-foot piece of string and a piece of chalk. Select a center mark on which a helper can hold one end of the string. Make bulls eye circles, 8 12, 16, and 20 feet in diameters. For the rider who can stay in the 8-foot circle, give a score of 5; for staying in the 12-foot circle, 4; for the 16-foot circle, 3; and for the 20-foot circle, 2. You may set up your own scoring system and circle size. Then, using the same circle, give arm signals and have the rider turn in the shortest right angle turn possible at the circle. To do this you might want to make straight lines at right angles for a corner.

A STRAIGHTAWAY COURSE can be set up in the same way. A carpenter's chalk line works best here. Have two persons hold the ends of the line while you chalk it. Then snap the line against the pavement to make the line you want. Make two lines, about 4 feet apart and 50 feet long with a cross line at the end. Add to this pair, two more lines, 3 feet apart and 50 feet long. Add a third pair 2 feet apart, 50 feet long. Have the rider stay inside the lines, giving a stop signal and stop within 1 foot of the cross line. Then start from there and stay in the second pair, stopping again at the 50 foot cross line, etc. You can select any width to fit the experience and skills of the riders. It is good practice. If the riders can stay on such a course, they have good control.

BIKE QUIZ

Place correct letter in box (A or B)

1. A safe rider (A. can ride any old bike and be safe) (B. will not ride a poorly adjusted bicycle). 

2. A night rider (A. is safe if he has a light) (B. is taking chances). 

3. A good rider (A. will not carry passengers) (B. will carry passengers). 

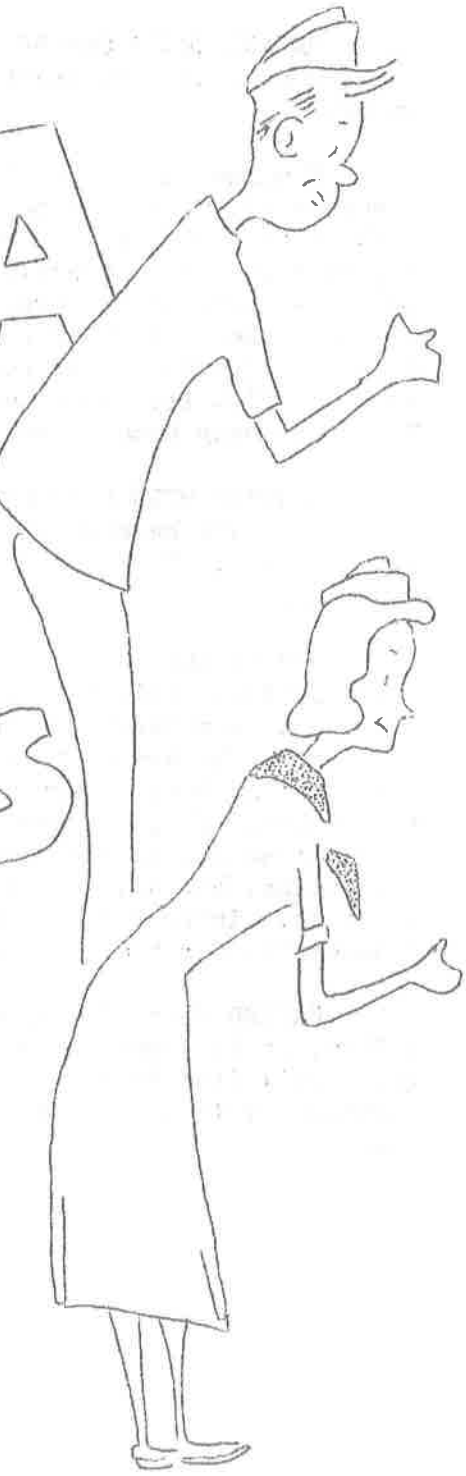
4. A careful rider (A. crosses streets in the middle of the block) (B. crosses streets at intersections only). 

5. A courteous rider (A. waits for traffic to clear out of his way) (B. signals and lets traffic wait). 

6. A smart rider (A. lets others take care of his equipment) (B. takes care of his own equipment). 

7. A cross-country rider (A. needs nothing for the trip) (B. takes water and extra clothing on a trip). 

EXTRA EVENTS



HAZARD HUNTS CAN BE MADE BY INDIVIDUALS OR BY GROUPS. If you are working by yourself, start off with a notebook or with a clipboard and paper.

Examine each piece of equipment as you come to it and list what you consider to be hazards to safe operations. For example, if you find the seat on the tractor is loose, list it as a hazard to be corrected later. If, on some piece of equipment, you find an open chain drive that might catch clothing or fingers, list that also. Look at the electrical equipment. You know that all motor frames and switch boxes around outside buildings should be grounded. If you do not find a ground wire connected for the purpose, list it. Steps and stairs without hand rails should be listed, too. There are many hazards around homes that can be added to your list.

HUNTING WITH A GROUP you can find more hazards and you can also talk about how such hazards can be corrected as you go. Quite often groups will take a supply of danger tags on such a hunt to tag the danger spots as they find them.

One of the most successful safety programs in California is run by young people. This is how it works. At Grange and Farm Bureau meetings, volunteer farm owners are selected to cooperate with the clubs. A date is set for the hazard hunt and a group of three or four members meet at the farm for the hunt. Usually a copy of the hazard list they make is left with the farmer. They may also leave tags on the hazards they have found, with suggestions for correcting them. At the hunt they make a date for a return inspection, hoping, of course, some of the hazards will be corrected in the meantime. Their records show that over half the hazards are corrected between the first and second calls.

HAZARD HUNTS CAN ALSO BE MADE INTO GAMES. At any meeting in a home, on a farm, or in a meeting place you can plant a few hazards to see how many the group will find in a given time. You can award small prizes to recognize the winners. This gives you practice in finding hazards at home or on other hunts.

HAZARD HUNT: LIST

Where found	Hazard	How would you correct it?

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

SAFETY COURT

SAFETY COURTS CAN BE FUN AS THEY TEACH. They can be as simple or complicated as you want. At camp for example, you can give a "judge" a hammer for a gavel and dress him up in a black "robe" with a pair of glasses to hang near the end of his nose.

Anyone in the audience can be accused of unsafe practices. (If you know something about his home life, camp life or his equipment, the charges can be made even more real and funnier.)

Without giving "the accused" much opportunity to plead "guilty or not guilty" he or she can be declared "guilty" and sentenced to "hard labor" or whatever you have in mind as a punishment for the breach of a safety practice you have seen or imagined. For example, if the accused was guilty of carelessness with tools, make him drive spike nails into a board or log with a tack hammer.

If he was guilty of starting a fire with kerosene give him a folder of matches and have him burn each match down to a 1/4-inch length to remind him that fire is dangerous. If he is accused of operating a tractor without a power takeoff shield, have him roll his pant legs up and down 50 times to remind him that unguarded shafts and drives can catch clothing and injure people.

You might want to add a "bailiff" to your court to keep order and look after the prisoners. You can also have "attorneys" for the "state" and the "defense" to argue the cases.

With all the fun there will be a note of seriousness to each "case." The teaching can be made very effective. Especially at camps, a safety court can be used to stress such rules as "have a swim buddy," "do not run on the dock," "pick up all broken glass," etc., etc.

SAFETY DISPLAY

SAFETY DISPLAYS CAN BE USED AS EYE CATCHERS at meetings of any kind. In the course of looking over such a display, discuss other points that help fill in the minutes and add to a socially good time.

Some things to display are: Safety goggles along side a broken pair of eye glasses. Put a card up for the goggles labeled, THIS, and a card for the broken glasses, NOT THIS. Grease pencils make good letters for such signs. Perhaps you can find green for THIS and red for NOT THIS to point up the difference.

To show proper storage of kitchen knives put a THIS card behind some knives in a scabbard or fitted tray for knives. Put NOT THIS behind a pile of cutting and case knives thrown together.

For children, put a THIS card behind some round nose scissors and NOT THIS behind a sharp pointed pair.

Behind a good ladder or step stool put a THIS card. Behind a loose broken ladder or box put a NOT THIS card.

You can think of a great many comparisons in pictures and objects for such a display. For that matter, a display does not need comparisons. Any display of safety equipment or clothing will attract attention.

SAFETY INFORMATION

In order to know what you are doing or working for, you need some facts and figures to support your safety program. Country-wide statistics presented by the National Safety Council are a big help in illustrating the problem and what we should do about it.

The National Safety Council has a reporting form for recording accidents as they occur in the neighborhood.

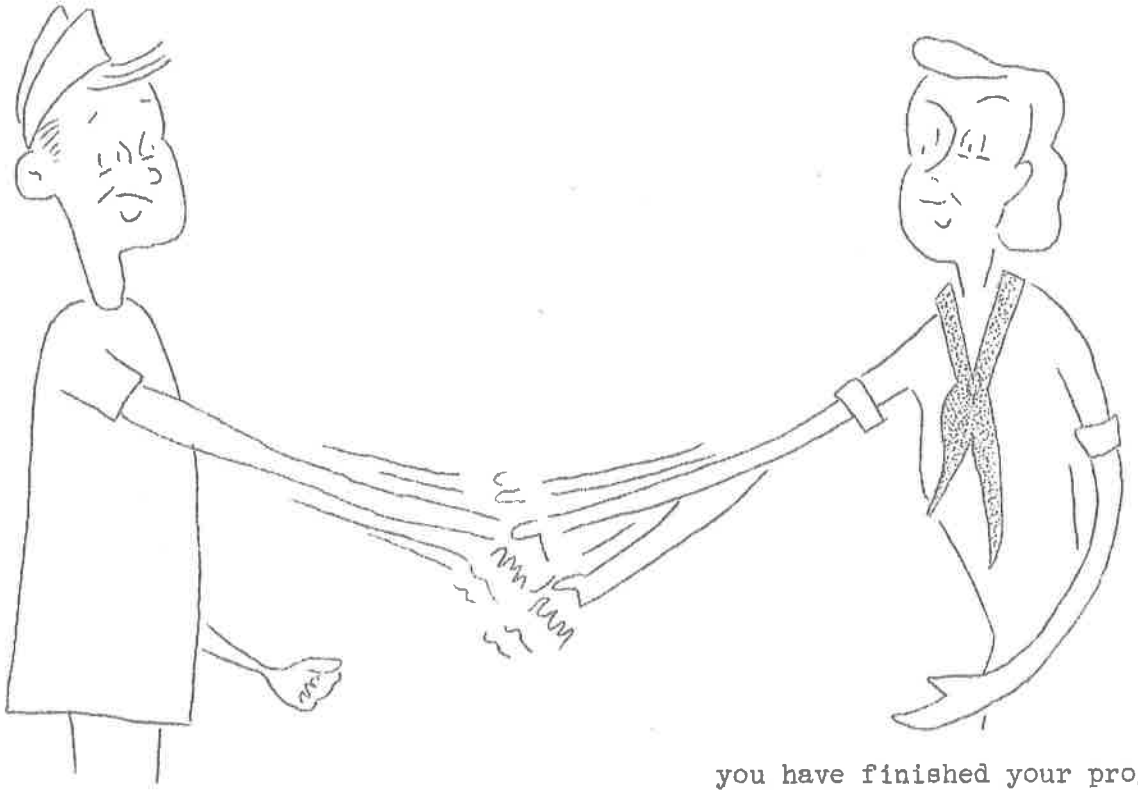
State statistics are even more important in pointing out our job. The Division of Labor Statistics and Research has information on industrial farm accidents. Insurance companies have data on employees and more information on employers. Much of this is broken down into county groups so you can see the type and frequency of accidents in your area.

News clippings are also a source of information on the local problem. Hospitals and family doctors can help you get the local facts. Reports at meetings are another source of information on local accidents. It is natural to want to tell about an accident you have seen.

So you can obtain accident facts. Your next job is to show how these accidents could be avoided because--accidents are made, they don't just happen. Organizations interested in farm safety will support your safety program also. Usually they have free information on accident prevention. The following can be of help:

National Safety Council, 425 N. Michigan, Chicago 11, Illinois
Department of Industrial Relations, 965 Mission Street, San Francisco, California
State Compensation Insurance Fund, 450 McAllister St., San Francisco 1, California
Industrial Indemnity Company, 155 Sansome Street, San Francisco, Calif.
California Farm Bureau Federation, 2223 Fulton Street, Berkeley, Calif.
California State Grange, 2101 Stockton Blvd., Sacramento, California

CONGRATULATIONS



you have finished your project.

If you care to comment on what you liked or disliked about it, here is your opportunity to sound off. Sign your name or not as you like and turn the comments over to your farm advisor.

It takes time and work to develop good safety habits. Farming is one of the more hazardous occupations. Even though we try to tabulate accidents and study safety by "agencies" there is always a large number of accidents under "miscellaneous causes."

This is what you'll learn next year ---

Traffic Safety
Machinery Safety
Fire Safety
Recreation Safety
Chemicals Safety

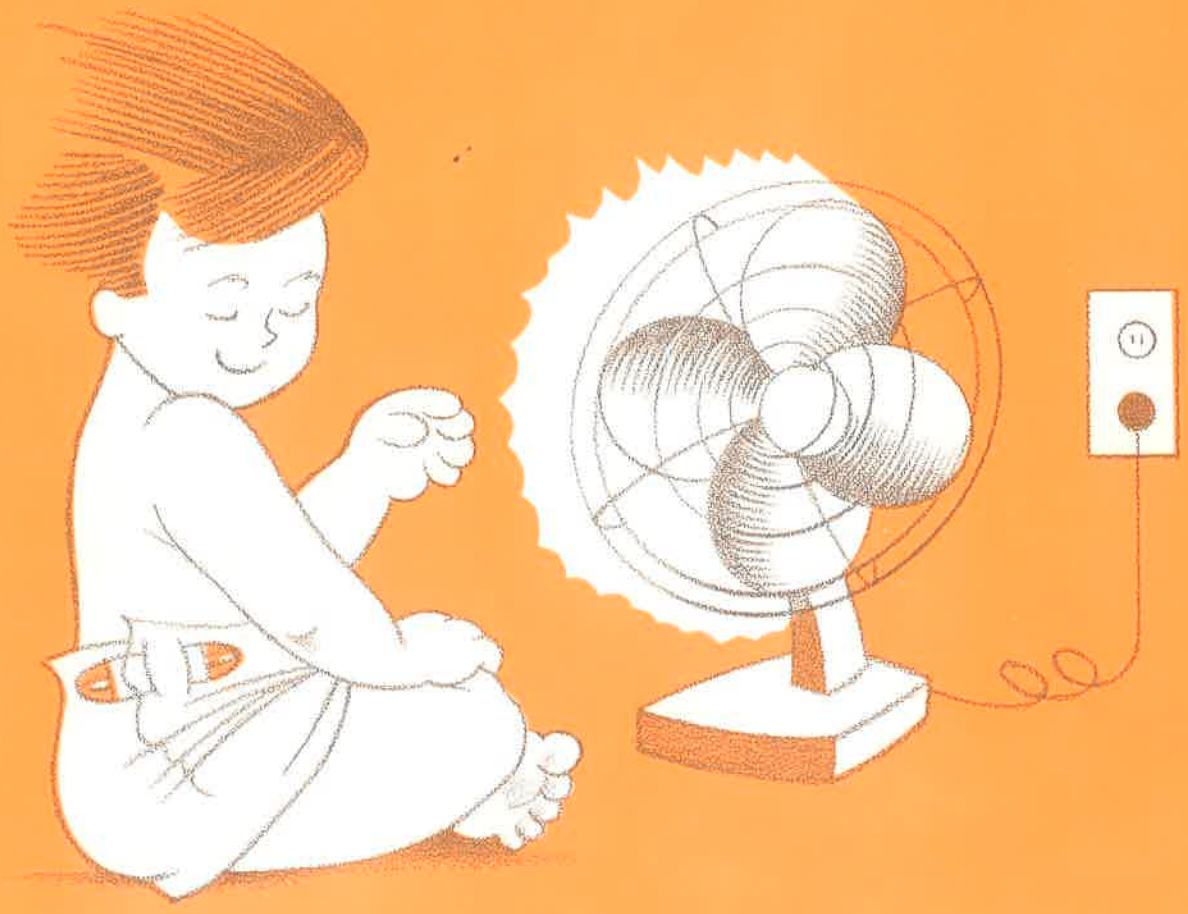
Hope you'll be with us.

3,000-9-5

Co-operative Extension Work in Agriculture and Home Economics, College of Agriculture, University of California and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. J. Earl Coke, Director, California Agricultural Extension Service.

Safety

is for YOU and ME



UNIVERSITY OF CALIFORNIA AGRICULTURAL EXTENSION SERVICE

4-H—Ag100 Rev.

The author is Ralph R. Parks, Agriculturist Emeritus with additions and revisions by Laura Cooley, 4-H Club Specialist, Berkeley.

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Co-operative Extension work in Agriculture and Home Economics, College of Agriculture, University of California, and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. George B. Alcorn, Director, California Agricultural Extension Service.

MARCH 1970--10 M Rev. DECEMBER 1968

Hi There!

OUR JOB IS SAFETY!
IT'S UP TO YOU AND ME!

HOW TO BEGIN THINKING ABOUT SAFETY

Each day accidents kill, injure, or cripple thousands of people. Besides this terrible toll, these accidents cost millions of dollars in destroyed property, medical care, and time lost from work and school. The money and time lost is paid for by each one of us.

Safety costs money too. We all share in the cost of our local, state, and community efforts to prevent accidents. Each 4-H member has the opportunity to work, either alone or in groups, to improve safety standards in his home and community.

Here are some things to do:

- ★ Learn how hazards develop.
- ★ Learn to see hazards.
- ★ Work with others to remove hazards.
- ★ Demonstrate safety to groups.
- ★ Appear on radio and TV safety programs.
- ★ Work on safety exhibits, hazard hunts, community cleanup, and other safety activities.
- ★ Contact fire departments, safety engineers, and insurance representatives to learn how they work.
- ★ Participate in highway safety programs, lawnmower safety work, etc.
- ★ Interest others in learning to live more safely.
- ★ Take pictures of unsafe things and situations. Photograph them again after they've been corrected.
- ★ Keep a record of what you do in this project to serve the community. There are trips and prizes, but the real goal is doing a good job to make the community safer for everyone.

HOW TO BE A SAFETY "HERO"

The person who dashes into a burning building to save a child, or who dives into the water to save someone from drowning is a hero. But there are thousands of "unsung heroes" who save the lives of many people by **preventing** accidents. You can be this kind of hero.

Since what people do causes more accidents than defective materials, your first job as a safety hero will be to learn how you can help people become more safety-minded.

Everyone is a mixture of human emotions, fears and desires, pride and ambition, loyalty, generosity, greed, and many others. Each of us has more of some of these traits than others. If we are going to appeal to people to act safely, we must first influence them to think safely.

Here are a few suggested appeals:

Pride—You can be proud of an accident-free record.

Greed—Accidents cost time and money.

Fear of Injury—No one wants to be injured or to injure another.

Thrift—Insurance premiums are lower for those with fewer accidents.

Fear of Publicity—No one wants the notoriety that follows an accident.

You will think of many more as you continue this project.

WHAT IS AN ACCIDENT STATISTIC?

The definition of an accident is this—any unexpected or unforeseen occurrence that stops or interferes with an operation in progress.

An accident may or may not injure someone or cause damage. If you fall off a ladder, you have an "accident." But unless you are injured seriously enough to see a doctor, you will not become an accident statistic. An accident does not become a statistic unless it is recorded.

When two cars collide, the event becomes a statistic, usually because a policeman makes a record of it, even if the only damage is a slightly crumpled fender.

Many organizations help to promote safety and prevent accidents in our country. The National Safety Council in Chicago is the leader and coordinator. This organization has operated for more than 50 years.

When we look at accident statistics we can see that the efforts of a great many people are needed to save lives. The chart shows the number of persons in each 100,000 who were accidentally killed in 1956, the number killed in 1966, and in the last column the areas where we have been most successful in saving lives. If you look at the total you will see that we have increased the number of fatal accidents by almost 1 death in each 100,000 persons over the last 10 years. These figures should help you see that when we make a real effort, as at home, or on the job, lives can be saved, but also how necessary an even greater effort really is.

	Number Killed		Number Saved
	1956	1966	
On the road	23.7	26.9	– 3.2
At play	9.5	9.9	– .4
At home	16.7	14.9	+ 1.8
On the job	8.4	7.4	+ 1.0
Total	58.3	59.1	– .8

WHAT CAUSES ACCIDENTS?

Most accidents are caused by unsafe actions that often happen so fast we aren't sure what caused them. For example:

An inexperienced driver on the freeway was following a car going much slower than other traffic. As the driver tried to pass the slower

car, his right front tire blew out, making him swerve into the path of the oncoming traffic.

If you were reporting this accident what would you say caused it? You might say a defect in the tire, but was this really the cause?

Let's look at the unsafe **actions** of the persons involved:

- ★ An inexperienced driver was driving on the freeway.
- ★ This driver had not checked his tires to be sure they were in perfect driving condition.
- ★ The slow driver was driving too slowly for the rest of the traffic, forcing other drivers to change lanes to pass him.

All of these things helped to "cause" the accident, which might have been avoided if the persons involved had **acted safely**.

Accident statistics show that 15 percent of all accidents are caused by defective materials and 85 percent are caused by carelessness on the part of some person.

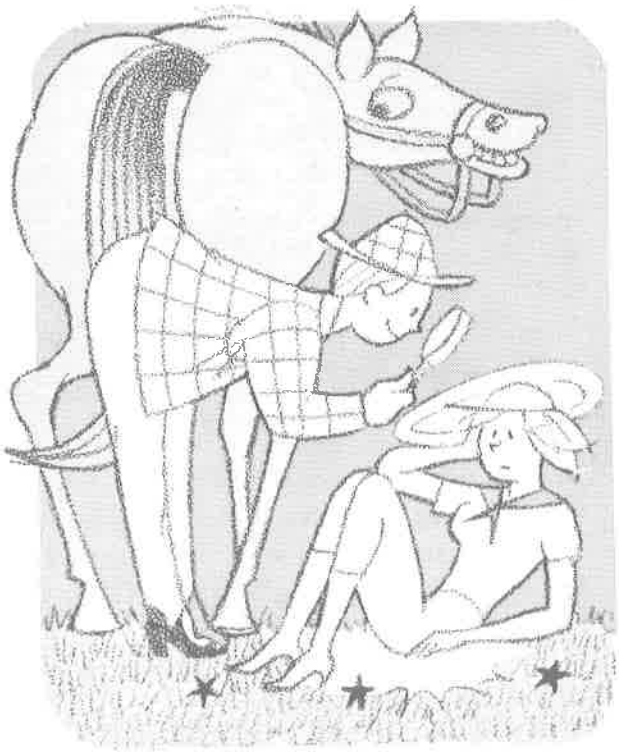
HUMAN BEHAVIOR CAUSES ACCIDENTS

Many human qualities that are valuable in some situations may become in the hazardous situations the very thing that produces an accident.

Competition is one human trait like this. You've probably seen the driver who isn't happy until he has "passed every car on the road." After he has done this, he often slows down until the other cars overtake him. This behavior may be because of a wish to prove that he is a better driver or has a faster car than other people. After he has proved this to himself, he slows down because there is no longer any competition.

Imitation when it is blind and unthinking is also another human trait that can sometimes cause accidents. A driver sees another one taking chances, and he follows like a sheep. There may be room for only one car to pass and an accident happens. Or a string of cars follow each other bumper to bumper at high speed. If one stops suddenly a pile-up occurs.

Curiosity when misused can become a boomerang in many dangerous situations. People who slow down to stare at the scene of an accident often cause another one because they forgot to watch what else was happening on the road. And many people foolishly rush to the scene of a fire, sometimes causing a collision or jamming the roads so that firefighting equipment cannot get to the fire.



Reflex actions that often save us (these are the actions we make automatically without thinking first) often cause accidents. For example, if you start to drop a knife, you may grab at it without thinking, and you might cut yourself. If someone startles the driver of a car or the operator of a machine, he may do something he would not otherwise do and hurt himself or others near him.

ARE YOU ACCIDENT PRONE?

Have you ever heard anyone say, "He's accident prone."? It is true that some people seem to have more accidents than others, but this may be because they are more excitable or less experienced than others. Experienced workers have fewer accidents than beginners. Experience is the best teacher. The experienced person has had time to learn the job and he knows what to do to avoid accidents. But there are other causes besides inexperience. Worry, anger, fear, or illness all tend to make us careless and it is carelessness that causes most accidents.

SAFETY ON THE JOB

It used to be that when a man was killed on the job, his fellow workers would "pass the hat" to take up a collection for his widow. Today, the employer is responsible for maintaining a safe place of employment and for instructing his employees in safety.

Most states have some form of workman's compensation laws that provide for the man who is injured on the job, or for his family if he is killed. Many employers also take out an insurance policy on their employees. State governments usually take the responsibility for enforcing safety in places of employment.

In a large industry, such as an automobile factory, it is fairly easy to check safety devices and practices. But agriculture is spread across our entire country, and it would be nearly impossible to give each farm a safety inspection.

More farm residents are killed in motor vehicle accidents than at home or at work, but they have more disabling injuries in their homes than on the farm or highway. About 1 in every 100 farm persons has a serious accident in his lifetime. This is not surprising, because the farm worker has to perform many different kinds of jobs and handle several kinds of equipment and he may not have the opportunity to become experienced with each one. Also, he often works by himself, so that he may not get immediate help if he is injured.

It is extremely important **that at least two persons** work together on such dangerous jobs as applying farm chemicals, and that **only trained workers** be allowed to operate complex farm machinery.

THE DANGEROUS AGE

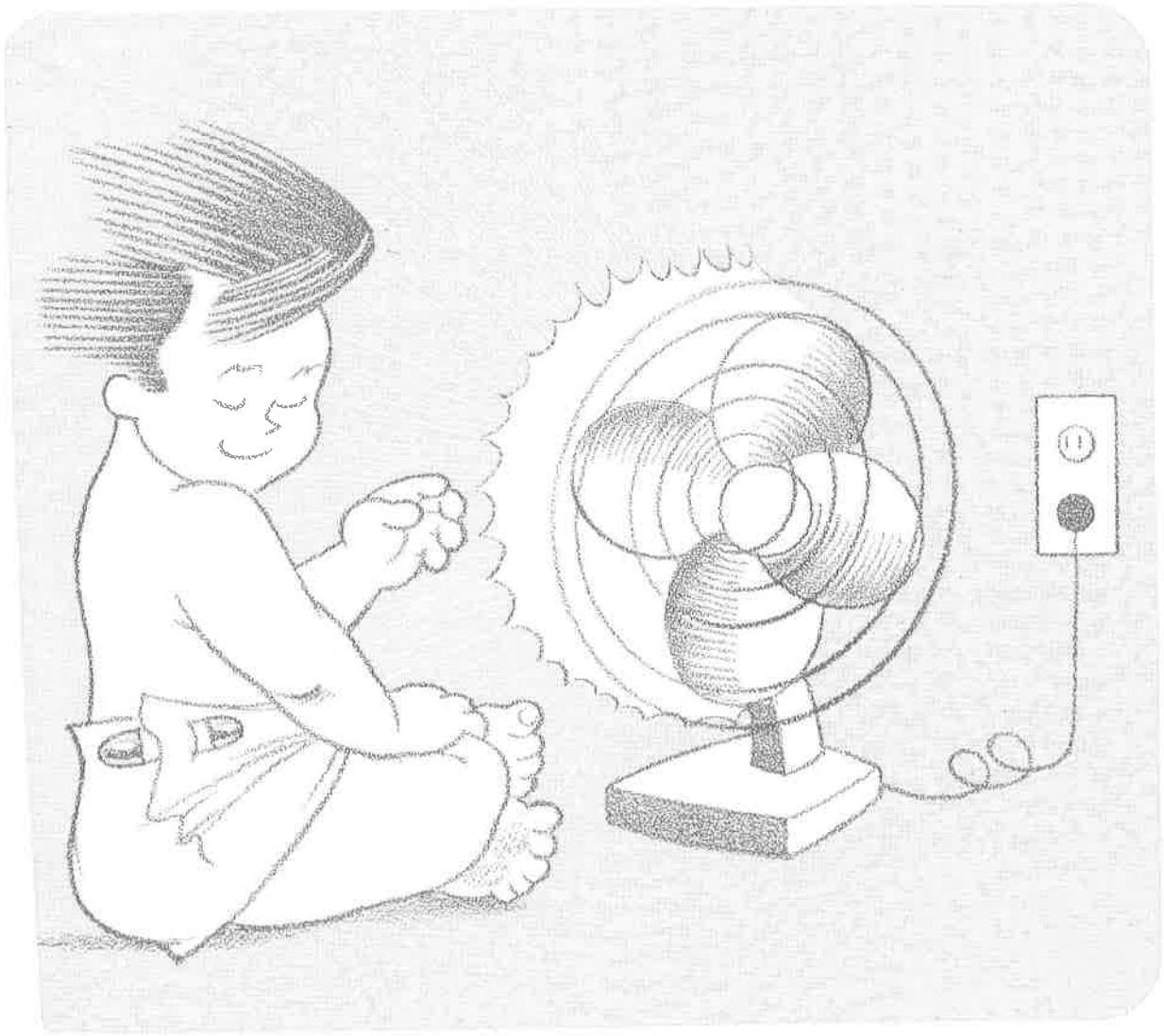
Children are dangerous—especially to themselves. Babies must be watched constantly.

At an early age they roll off beds, swallow small hard objects, fall out of highchairs, and suffocate themselves by pulling plastic bags over their heads. After they learn to walk, they fall out of open windows, pull hot pans off the stove, and eat and drink everything they can find—from aspirin to paint thinner. When children start to explore outside, they climb on tractors, get underfoot in the barn, and toddle into the paths of cars.

Fortunately, as children grow older they can be taught more about safety. But they still manage to fall into irrigation ditches, get kicked by horses, and burn themselves playing with matches. Childhood is the most dangerous age.

The next most dangerous age is during the later years of life. Older persons have more falls because they are less steady on their feet and do not see so well. They often fall in the bathtub or on stairs with no handrails. Slippery floors, icy steps, and throw rugs that slide also cause falls.

Accident prevention is important at all ages, but especially for the very young and the older person.



FIRST AID FORESIGHT

FIRST AID—WHAT TO DO UNTIL THE DOCTOR COMES

Sometimes—even though we keep all the safety rules—serious accidents occur. Then you must know what to do to help the injured person and keep him from more serious injury until the doctor comes. That's what first aid is—help until the doctor arrives.

Your prompt action may save a life. If you can give first aid properly, you will reduce the victim's suffering and leave him in a better condition to be treated by the doctor. Remember: the duty of a first aider ends where the doctor's begins.

Here's what first-aid training does:

- ★ It helps prevent accidents because it makes you aware of how serious injuries can be. It also shows the importance of caring for small injuries at once.
- ★ It teaches you how to recognize some kinds of injuries. This doesn't mean that you make a diagnosis—that's the doctor's job—but you can tell if the injured person needs immediate treatment or if he will be all right until the doctor comes.
- ★ It trains you to do the proper thing at the proper time. More important, it teaches you what **not** to do.

First of all—**keep an injured person lying down** until you can be sure how badly he is hurt. This keeps the victim from fainting and helps prevent **shock**, a serious condition that often follows injury. When shock occurs, the blood flow is disturbed and breathing and pulse are slowed down. Cover the victim with blankets or coats to keep him warm. Do not move him unless absolutely necessary. You can make his injuries far more serious by rushing him to the hospital. Send for the doctor at once.

Next, find out how badly the victim is hurt, and where. Look for serious bleeding. A person can bleed to death in minutes if something is not done to stop the bleeding. Check to see if the victim is breathing. He can die in a short time if he has stopped breathing. Artificial respiration is used to put air into the victim's lungs to start him breathing again.

Don't give the victim water or liquids if he is unconscious. You can tell if he is conscious by talking to him.

Keep onlookers away—they often interfere with what is being done. (If you should come

upon an accident and find that you can be of no help—don't be an onlooker yourself. Leave the scene so the victim will have plenty of air and so that others can work.)

Make the victim as comfortable as possible. Do everything you can to cheer him up. Don't let him see his injuries or become afraid. Keep him hopeful. Keep cool. Be sure that nothing is done that will cause further injury to the victim!

Be sure the person who goes to call the doctor can give him this information:

The exact location of the injured person.

The kind of injury, what caused it, and the probable extent of his injuries.

The supplies available at the scene of the accident and what first aid is being given.

BE PREPARED TO GIVE FIRST AID!

- **Assemble and pack an emergency first-aid kit.** You can do this as a group or make a kit of your own. The size and the amount of materials in it will depend on where you will use the kit. (Will it be used in the home, barn, farm shop, car, or will it be tucked in a knapsack for hikes?) It doesn't have to be large, but it should contain enough materials to care for injuries.

  You can use a cigarbox, a metal box, or a corrugated cardboard container. And you may want to paint it or put on a special design so that you can identify it quickly.

  Arrange the contents so that you can find the material you need quickly without unpacking the entire kit. Wrap the materials well so that they will not become dirty from handling. Pack them tightly so that they will stay in place.

  A good first-aid kit should contain at least the following items:

  Six 1-inch compressers on adhesive (Band-Aid* type)

  Two 3-inch bandage compresses

  One square yard of sterile gauze

  One triangular bandage

  One tube burn ointment

  One roll ½-inch adhesive tape

  Iodine. Individual glass containers—(ampules are best) but a bottle of mild tincture of iodine will do if it is rubber stoppered and the kit will not be handled roughly.

  Scissors

  Other articles you might have in your kit are wire or thin board splints, castor oil or mineral oil for eyes, paper cups, aromatic spirits of ammonia, etc. But remember, you want to keep your kit usable and convenient. Don't overload it with things. Calamine lotion, Epsom salts, aspirin, and the like belong in the medicine chest—not in an emergency first-aid kit.

- **Learn to stop bleeding or give artificial respiration.**[1] You may want to demonstrate these to others. Or you can make some sketches. Your leader will help you or will find someone—perhaps a local Red Cross first-aid instructor—to show you how to do them the right way.

- **Make a list of places around the home and farm where it would be good to have a first-aid kit handy.**

---

* Registered Trademark

[1] American Red Cross *First Aid Textbook*, Revised.

WHAT DO YOU KNOW THAT CAN SAVE A LIFE?

Insert right letter in box.

1. You are giving first aid when you: ☐

   A cure injuries.

   B give help until the doctor comes.

2. In case of serious accident: ☐

   A know what to do.

   B know what not to do.

   C know both, as they are equally important.

3. You prevent shock by: ☐

   A getting the victim to his feet and getting him to walk around to improve circulation.

   B keeping the victim lying down and covering him with coats and blankets to keep him warm.

4. When someone is badly hurt: ☐

   A rush him to a hospital at once.

   B keep him lying down and give first aid.

5. After a serious roadway accident when the victim is lying in the middle of the highway: ☐

   A move him at once to the side of the road.

   B let him lie there and have someone stop traffic or direct it around him until the doctor comes.

6. When a victim is unconscious: ☐

   A give him coffee or tea.

   B give him all the water he wants.

   C give him nothing.

THESE SAFE PRACTICES SPELL FIRST AIDS

F is for **fear.** Stop it before it starts. Tell the victim he will be all right. Turn his head so that he cannot see his injury.

I is for **information.** Find out what the injury is before you act. Tell the doctor everything you know.

R is for **reclining position.** Keep a victim lying down. If his bones are broken, movement may cause them to cut nerves and blood vessels, tear through the skin. Moving a victim with a broken back may cause his death. Even after someone has been saved from drowning and given artificial respiration, he should be kept lying down to prevent strain on his heart.

S is for **shock.** This is a state of physical and mental depression which follows injury. The victim may turn white and gasp for breath. Cover him immediately, and keep him warm. If he is conscious, give him a sniff of spirits of ammonia or a cup of tea or coffee.

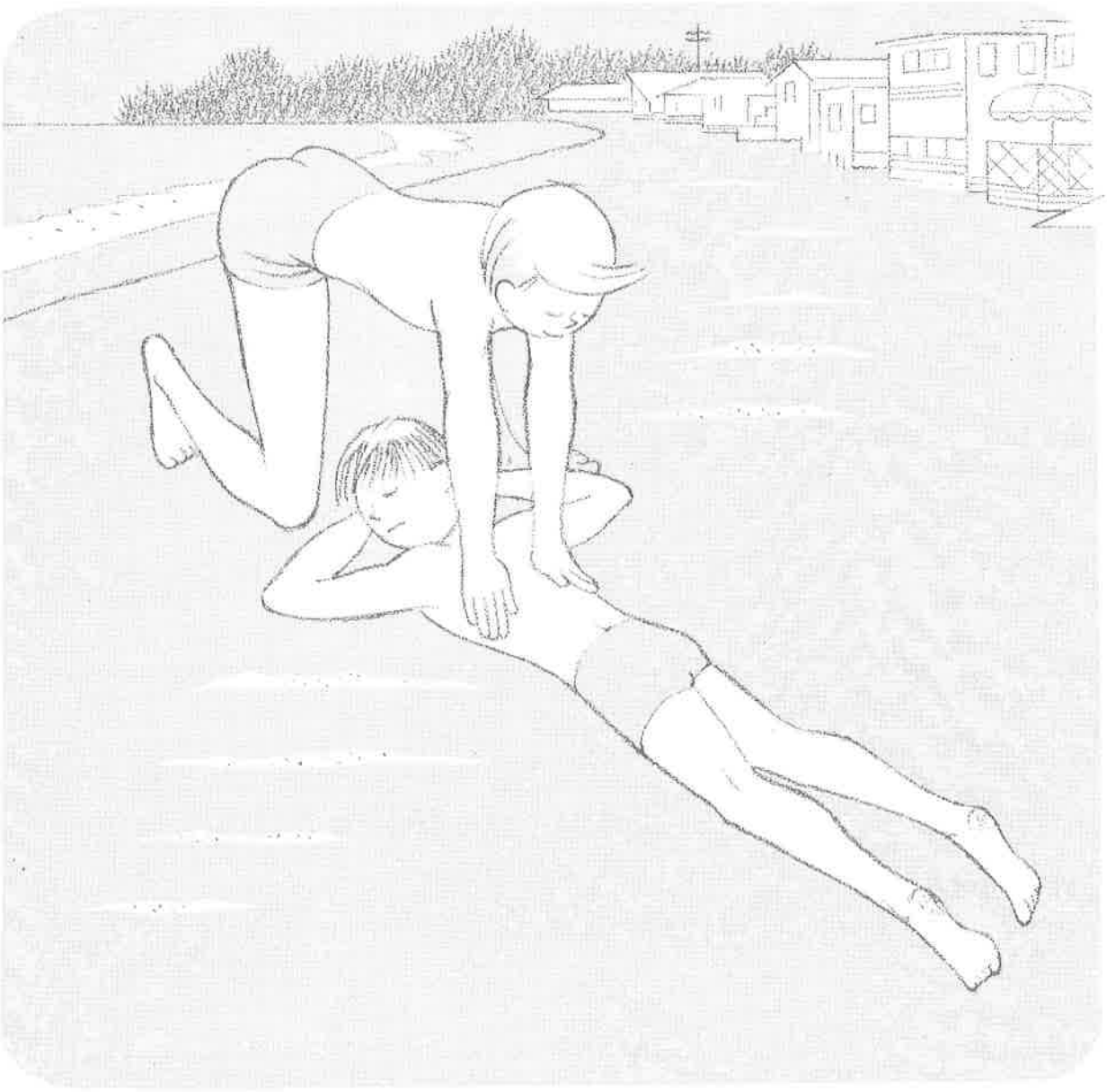
T is for **transportation.** Don't move a victim unless he is in a burning building or car, or a capsized boat. If you pick up victims of auto accidents and rush them to a hospital in a jouncing car, you may make their injuries worse.

A is for air. Be sure the victim gets plenty! If a crowd gathers, ask two big men to hold them back.

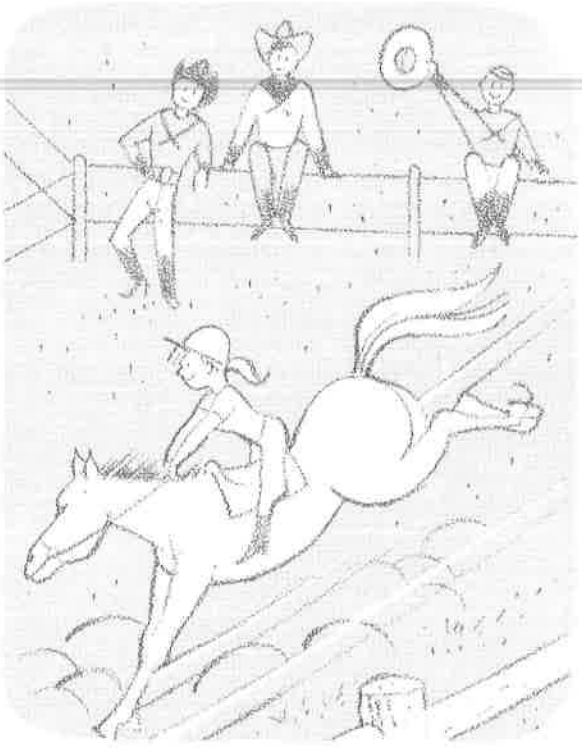
I is for immediate treatment of bleeding, suffocating, poisoning. Serious bleeding may cause death in 5 or 6 minutes. You should know the pressure points where serious bleeding can be stopped and how to make tourniquets to stop bleeding. For suffocation and drowning, you should know something about artificial respiration. For poisoning, dilute the contents of the stomach at once by filling the victim with water. Then stick your finger down his throat to make him vomit.

D is for drink. Water, tea, or coffee may be given to persons who are conscious. If the victim is unconscious, give nothing —a drink may choke him.

S is SEND for the doctor at once!



ANIMAL SENSE



KNOW ANIMAL NEEDS

Animals respond to good care. Learn to enjoy animals, but respect their habits and feelings. Most animals can be trusted except when startled or threatened. Their instinct is to protect themselves and their young.

A dog is man's best friend—but he may attack strangers, or even children, when you least expect it. Keep your dog under close control when strangers are present. Have a pen where he can be shut in when necessary. Even a chained dog can be dangerous to people not used to animals. If your dog chases cars, break him of the habit or keep him confined when he is not being worked. A dog is very eager to learn from you, but you must use patience in teaching him.

A horse also can be a friend. He usually is willing to do what you want, and he likes kind words and encouragement. A friendly horse wants your company, and will follow you around if petted. But don't startle him by yelling or making sharp noises. If you whip a horse, you can expect him to pull back and try to get away. As you go near a horse, let him know you are around by talking to him gently. Go to his head first, when possible.

Do not permit horses to stand alone when harnessed or hitched to a load. They are startled easily and one runaway can ruin a good horse or team and possibly hurt someone. Do not wrap tie ropes or reins around your hand or your body. You might be injured seriously because you could not turn loose when necessary.

When leading any animal, walk beside it, not in front of it.

SOME ANIMALS AREN'T PETS

Don't make pets out of calves and sheep. They can be dangerous, particularly to youngsters. Bulls must be kept in safety bullpens where gate operation and feeding can be done from the outside. Boars and rams may attack without warning. Don't trust them. Even cows may be dangerous, particularly at calving time. They can kick "in all directions at once."

Some diseases can be passed on to humans by animals. If you suspect an animal is sick, keep your distance, and tell your parents.

Safety with animals starts with you. Animals can be wonderful to those who understand them and take good care of them. Don't rush friendship with an animal. Be firm in controlling them. An animal learns good habits from you. Animals are fun as you learn to manage them.

GOOD HORSEMANSHIP

Experienced horsemen usually follow these rules for safety around animals.

- Let the horse know you are around by speaking to him, whistling, or singing a song so that the horse knows where you are. He may kick if he is startled by your sudden appearance.
- If you are planning to work with a horse, don't let him feel you are afraid of him by standing back. If you stand close to him, he may push you, but he will not be able to kick you hard.
- You usually approach a horse from his head. If you plan to work with him, reach out your hand and touch him on the neck or shoulder to give him confidence in you.
- Teasing, tickling, or otherwise abusing a horse is bad business. He might remember it and develop bad habits that are hard to break later.
- If you have had no experience in handling a horse's feet, watch an oldtimer before you pick up a horse's feet.
- Use a long lead rope or strap when handling a horse, but keep your hands on the strap as close to him as you can and still walk safely. You can keep both hands on the strap and be ready to slack off to the end of the strap if it becomes necessary.
- A quick tug on the strap or rein will remind the horse that you are supposed to be in control.
- Walk beside the horse's head when you are trying to lead him, not too far ahead, not too far back. Keep the slack out of the lead lines so that they do not get under the horse's feet.
- When taking a horse into a boxstall, try to turn him around before you release him so that you do not have to walk past his rear.
- Horses need regular attention. If you are absent from a horse for long periods of time and he is "feeling his oats," you might have a little trouble getting him back to his old gentle habits.
- Horses can be frightened by unusual objects and noises. Try to anticipate such occurrences and pat or talk to the horse so he has confidence.
- Keep your gear in good condition and adjusted properly. If you have safety catches for stirrup leathers, be sure they work.
- See that his bridle and saddle fit properly and are not adjusted too tightly. When you are adjusting the saddle pad and tightening the girth, a horse often will work against it. You may have to tighten the girth again to be sure the saddle will not slip as you mount.
- Mount in the open and away from hard surfaces and objects. Approach and mount from the horse's left side. Hold the reins in your left hand and take up any slack so that the horse cannot step away from you as you mount. Some riders stand close to and ahead of the left stirrup when they mount. In this position, you can swing into the saddle if the horse starts forward quickly.
- Learn to ride erect and with your toes, not your instep, in the stirrup. This is safer and easier on you and your horse. Learn to relax your body and ride with the motion of the horse, not against it.
- Keep your horse under control at all times. You can do this by holding a snug rein and allowing slack only when the horse has settled down to your mode of travel. Hold

the reins with your left hand, and use the right hand to pull out the slack.

- Walk him up and down hill. If you are in a group, be sure to keep your distance and watch for objects which the horse ahead might clear and you may not.
- If your horse becomes frightened at an object and you have time and distance to dismount, it may be safer to get off and lead him rather than to try to force him to carry you by it.
- A horse may change directions when you least expect. Stay alert. More people fall off horses than are bucked off. If you fall off, get up and remount immediately.

LEARN ANIMAL MANNERS

Dogs

- Meet the owners of three or more dogs in your neighborhood. Make a list for each dog, including name, breed, age, use, where kept, and habits (good and bad). How about the safety of strangers or children around the dog?
- If you don't own a dog, borrow one or make arrangements to feed a dog for someone for 1 week. How much food and what kind did it eat?

Horses

- Find the owner of a horse you can ride or drive, or inquire about. Tell what you learned about safety with horses from this experience.
- If you don't own a horse, find one you can care for and feed for 1 week. Describe your experience.
- What illnesses do horses have? What would you do if the horse you fed became ill?

Other Farm Animals

- Where have you observed other farm animals being kept? What safety precautions were taken in housing or working these animals? What simple diseases can these animals have? What treatment should they receive when sick?

ANIMAL QUIZ

Insert right letter in box.

1. A dog: ☐
   - A can be trained not to attack strangers.
   - B cannot be trusted when strangers are present.
2. A dog should: ☐
   - A be fenced in or tied for safety.
   - B run loose or he will become mean.
3. A horse: ☐
   - A may kick if you approach him from the rear.
   - B will not kick if you have his confidence.
   - C will not kick if you speak his name.
4. A horse should be: ☐
   - A handled from his left side.
   - B held by you standing in front of him.
5. A bull is safe: ☐
   - A to be around if a ring is in his nose.
   - B when kept in a safety bullpen when you are on the outside.
6. Animals: ☐
   - A treated kindly can be trusted at all times.
   - B with newborn young cannot be trusted.

BIKES, BRAKES, OR BREAKNECK ?

BEFORE YOU RIDE

Bike riding is great sport. Every boy and girl should learn to ride safely. You can run over someone if you are not careful. Or you can be run over by a car or truck if you get in the way. A fall from a bike can bruise and skin you painfully. For safe bike riding, you need to know more about a bike than just how to balance yourself or pedal fast.

Your bike must fit you. Don't ride on one that is too large or too small. The height of the seat and the handlebars can be adjusted somewhat.

Be sure the handlebars and seat are securely tightened after adjustment. Socket wrenches are better than crescents or end wrenches for loosening and tightening these hexagonal nuts on a bicycle. Some of these nuts are quite small, which means their shoulders can be damaged easily with poor-fitting wrenches or pliers.

Don't turn your handlebars upside down like a racing bike or reverse the seat post to give you an odd riding position. If you do, you won't be able to see ahead well or to balance yourself well when riding in traffic. Wheels and chains, too, must be serviced and adjusted from time to time to keep them safe. When you make adjustments, have an older person help you check them before riding.

Take good care of your bicycle so it will give you the greatest pleasure. A bike that rattles, squeaks, or runs hard due to neglect is no fun to ride.

There are four main sets of ball bearings in your bike, besides the pedal bearings. They are in the front and rear wheels, the crank part, and the steering assembly.

The balls run in a lightweight grease. Between the times you repack the bearings with fresh grease, you can add oil to wheel bearings to keep the grease from drying and becoming hard.

Usually the shafts and bolts of your bicycle have right-hand threads. That is, they turn clockwise to tighten, and counterclockwise to loosen. One of the exceptions to this is the left pedal shaft, where it screws into the crank arm. This is a left-hand thread. Also, the left-hand cone of the pedal crank has left-hand threads to prevent the cone from tightening as you ride.

Your coaster brake needs very little attention. If it starts slipping or fails to stop you as it should, better take it to a service shop. Its working parts are rugged and will last a long time with reasonable care. An experi-

enced mechanic can take apart a coaster brake, clean it, and put it back with proper lubricant in a few minutes. Repair parts seldom are needed.

Check the air pressure in your tires to make them last longer, operate safely, and ride smoothly. On a rough road, lower pressures (about 22 pounds on a balloon tire) will make the going smoother. On a hard road, high pressures will make the going easier. Remember, though, that with the hard tire on a wet road your danger of slipping is greater. This is also true on loose gravel.

If you are having trouble with a tire not holding air, check the valve core first. All valves should have dust caps. Keep them down firmly to take the pressure off the valve core. Don't ride a leaky tire. Have it patched, or patch it yourself without delay.

BETTER BIKE RIDING

Riding a bike at night is dangerous. Don't do it except when necessary. Red reflector tape on the rear, and white tape on the front, will help others see you on the road. Light clothing also will help. Lights on your bicycle are even better. A flashlight makes a good spare light. But remember, a car driver may not see your small light because of his strong automobile lights and his higher speed.

A bicycle rider must obey all the rules of the road. Give pedestrians the right of way, stop at stop signs, and go slowly in heavy traffic. Stay on the right side of the road. Use arm signals. And remember that courtesy always pays.

Cross the street only at intersections. Look carefully to the left before you cross the first half of the street. Then look to the right before you cross the second half. Wait until traffic has cleared or stopped before you cross. Keep to the right as you cross—don't cut corners. If you are not sure of yourself, get off and walk across. Push your bicycle from the side.

Watch carefully where you are going—but know what is happening at each side and behind you. Before passing a parked vehicle on the road, be sure nothing is coming from behind. Don't change directions or stop quickly without letting others know what you plan to do.

When you go on trips, take a canteen of water with you. Wear a hat or cap and take protective clothing against the sun of the day and the chill of the evening. Look for shade, and rest frequently. When you are with others, ride single file on the right side of the road as cars approach. Don't carry riders. Enjoy your ride. Do it safely.

SAFETY-CHECK YOUR BIKE FOR ADJUSTMENT

Adjustment

_____
(Date)

	Poor	OK
1. Stand beside your bike and hold the handlebars as you do when riding. If you can turn the handlebars up and down, put a check in the "poor" square. If you can't, check "OK."	☐	☐
2. Lift the weight from the front end to see if the cones in the front end of the frame are in proper adjustment. Put a check in the poor or OK square.	☐	☐

Poor OK

3. Hold the front wheel with one hand and the handlebar with the other. See if you can twist the handlebar post out of position. Give it an OK if you can't, poor if you can. ☐ ☐

4. Steady the bike with one hand. With the other, grasp the tire or rim near the front fork. Do the wheel-hub bearings feel quite loose, or is the front wheel held securely? (Be sure the wheel nuts on each side of the fork are firm when you make this test.) ☐ ☐

5. Test the rear wheel the same way. ☐ ☐

6. The chain should have about ½-inch movement up and down. If it is too tight, the bike will run hard and tire you. If it is too loose, it will wear rapidly on the sprockets. How is your adjustment, poor or OK? ☐ ☐

7. How about the seat? Is it held firmly in place? You will tire less if you keep the ball of your foot on the pedal, rather than your instep. Try the seat for height. Your leg should be about straight when the pedal is in its lowest position. ☐ ☐

8. Now turn your bike over and let it rest on the seat and handlebars. Hold the frame with one hand and the pedal crank near the end with the other. Is there much looseness in your crank assembly? ☐ ☐

9. While you have the bike in this position, read the serial number which is usually on the crank housing. Mark it down so you can identify your bike later if necessary. ☐ ☐

_____

10. While your bike is in this position, turn the wheels to check them for wobble. Also, try the coaster brake to see how it works. (Caution: If you apply the brake too suddenly, you can slip a tire and cut a valve stem or do other damage.) ☐ ☐

11. Are your wheels in good alignment? Are the rims straight and do they run in the center between the forks? (If any spokes are broken, replace them to help straighten the rims. The wheels can be centered in the fork by a simple adjustment.) ☐ ☐

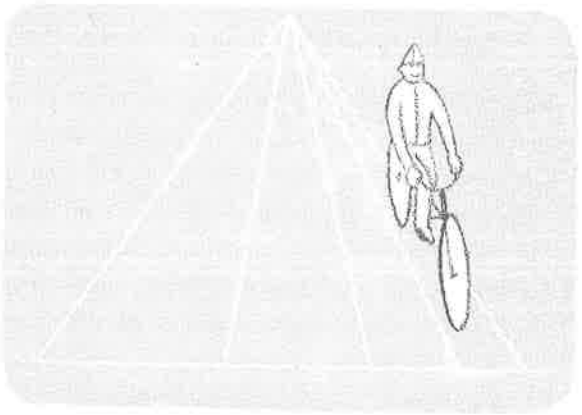
12. Are the pedals in good condition? (If they are bent and weathered badly, it usually is easier to replace them than to repair them.) ☐ ☐

SAFETY CHECK FOR A BIKE RIDER

Balance is all-important to the rider of a bicycle. Any obstacle course on which you can practice and be tested will help you gain balancing skill. In addition, you need practice in giving arm signals before turning or stopping on a highway. Learning to stay on the right edge of the road is also important to safety and requires balance and good riding skill.

Here is something that will give you practice in balancing. Get a 20-foot piece of string and a piece of chalk. Select a center mark on which a helper can hold one end of the string. Make bull's-eye circles, 8, 12, 16, and 20 feet in diameter. For the rider who can stay in the 8-foot circle, give a score of 5; for staying in the 12-foot circle, 4; for the 16-foot circle, 3; and for the 20-foot circle, 2. You may set up your own scoring system and circle size. Then, using the same circle, give arm signals and have the rider turn in the shortest right-angle turn possible at the circle. To do this, you might want to make straight lines at right angles for a corner.

A straightaway course can be set up in the same way. A carpenter's chalkline works best here. Have two persons hold the ends of the line while you chalk it. Then snap the line against the pavement to make the line you want. Make two lines, about 4 feet apart and 50 feet long, with a crossline at the end. Add to this pair, two more lines, 3 feet apart and 50 feet long. Add a third pair 2 feet apart, 50 feet long. Have the rider stay inside the lines, give a stop signal, and stop within 1 foot of the crossline. Then start from there and stay in the second pair, stopping again at the 50-foot crossline, etc. You can select any width to fit the experience and skills of the riders. It is good practice. If the riders can stay on such a course, they have good control.



BIKE QUIZ

Insert right letter in box.

1. A safe rider: ☐
   - A can ride any old bike and be safe.
   - B will not ride a poorly adjusted bicycle.

2. A night rider: ☐
   - A is safe if he has a light.
   - B is taking chances.

3. A good rider: ☐
   - A will not carry passengers.
   - B will carry passengers.

4. A careful rider: ☐
   - A crosses streets in the middle of the block.
   - B crosses streets at intersections only.

5. A courteous rider: ☐
   - A waits for traffic to clear out of his way.
   - B signals and lets traffic wait.

6. A smart rider: ☐
   - A lets others take care of his equipment.
   - B takes care of his own equipment.

7. A cross-country rider: ☐
   - A needs nothing for the trip.
   - B takes water and extra clothing on a trip.

BE CAREFUL WITH CHEMICALS

It's important that you know why and how chemicals are used to kill insect pests and weeds. But it is equally important that you know the hazards of using them. Pesticides are poisonous and must always be used with caution! Keep them out of reach of children, pets, and irresponsible persons.

IN THE FIELDS AND ORCHARDS

Chemicals that are powerful enough to kill insects can also make YOU very ill—perhaps kill you. If you spill or spray a chemical on your clothing, your skin may absorb it. If it blows in your face, you may breathe it into your lungs, or take it into your stomach by licking your lips. Or it could irritate your eyes seriously. Chemical materials must be applied only in amounts and at times specified, and only when following all precautions.

CHEMICAL CAUTIONERY

Some sprays may stay on fruit trees for a month or longer. You could be poisoned by handling the fruit, tasting it, or climbing the trees.

You may not feel sick after one or more exposures to a poisonous chemical but repeated doses may accumulate in your body so that only a small amount will seriously harm you.

If you feel sick after being around or using chemicals, call your doctor at once! Be able to tell him what material you have contacted.

Follow these general rules:

- Do not handle chemicals without permission and unless you are under experienced adult supervision.
- Read the label on the container before you handle any chemical and every time you handle one, no matter how many times you may have done so before.
- Follow the instructions exactly. Dispose of empty bags or containers so they won't be dangerous to humans, animals, or pets, or to plants and waterways. Burn or bury the empty bags or containers. (Don't burn or puncture aerosol cans. They will explode.) Be sure the smoke from the burning will not drift onto any person or animal, or onto nearby crops, foods, or water.
- Avoid inhaling sprays or dusts. Never allow anyone to smoke, eat, drink, or chew anything when handling chemicals. Cover all foods and water containers before spraying.
- Every person who does spraying or dusting should wear proper safety equipment as recommended on the label. Change clothes and wash them before wearing again.
- Take a shower immediately after using chemical sprays or dusts. After a truck has been

used to haul pesticide chemicals, thoroughly clean the truck bed before riding in it or hauling other materials.

- When chemicals are not in use, keep them in their original containers in a locked cabinet or room, out of reach of children and animals.

Never sit or sleep in a room where poisonous materials are stored.

Only trained, experienced persons should apply chemicals. But even these people must constantly remind themselves of the many dangers involved in chemical use. You can help in this reminder by being familiar with the rules we have been discussing.

When chemicals are being applied these rules should be exactly followed:

- Never use the mouth to siphon liquids from containers or to blow out clogged lines, nozzles, etc.
- Never spray with leaking hoses or connections.
- Never work in the drift of a spray or dust.
- Keep chemicals on the property to which they are being applied and prevent drift by stopping treatment when weather conditions become unfavorable.
- Don't apply pesticides over fishponds, canals, streams, or lakes, and don't apply them to fields being irrigated if the drain water runs off the field.
- Follow label directions and recommendations in order to keep the chemical residues on edible portions of plants within the limits permitted by law.

AROUND THE HOME

A number of other chemicals and medicines used around the home and farm can cause trouble in inexperienced hands. It is important that you know how to protect others from poisons.

Some children will eat or drink anything they find—lye, bleach, rat poison, paint thinner. Don't leave cleaning materials, fuels, or insecticides around where children can reach them. Never store solvents or oils in soft-drink bottles.

Always leave the label on all chemicals and medicines. Leave them in the original containers, if possible. If a label tears or becomes worn, replace it at once with a neatly printed label that can be read easily. Be sure all the important information is on the new label.

Some household chemicals and medicines are poisonous when used the wrong way. Aspirin, for example, can be helpful to relieve pain, but large doses can be very harmful—particularly to children. Some medicines are safe when used on the skin, but are poison if swallowed. Iodine is an example of this kind of poison.

Keep medicines and cleaning materials under lock and key. It isn't enough to put them up high—children learn to climb very fast.

A good thing to know: If someone has swallowed poison, call the doctor at once! The directions on poison labels tell you to give the patient something to wash the poison out of his stomach. Always read the label on the container before starting any treatment!

ON THE HIGHWAY

Everyone knows the danger of breathing engine exhaust fumes in a closed garage. On the highway, you breathe the same fumes if you follow too closely in heavy traffic. Exhausts that release gases beneath cars spill

fumes into your fresh air intakes at the front of your car. The next time you follow a truck that has an exhaust above the cab, notice how much less of its fumes enter your car.

California law has made it necessary for motor vehicles to install a device that will prevent some exhaust fumes from escaping to contaminate the air.

Unburned gases from an exhaust can be detected, but the worst troublemaker—carbon monoxide—is odorless. Even in your own car, poor ventilation can cause this poison gas to accumulate. If you feel drowsy when you are in a car—stop and turn off the motor. Get some fresh air before starting again. Carbon monoxide poisoning can cause you to lose consciousness or even kill you.

BE CRITICAL WITH CHEMICALS

- **Visit a home. Look for chemicals kept around the house.** You might want to list where you find them and decide if they are kept in safe places.

- **Visit a local agricultural chemicals store.** Look for the more hazardous chemicals. Read the instructions for use, with particular attention to safety. List all the dangerous chemicals you find and tell how to avoid troubles with them. If you can clip safety instructions, fasten them in your book.

- **Visit a ranch where dangerous chemicals are used.** A fruit ranch where parathion is used would be a good one. Tell how the chemical is used. How do they dispose of the empty bags? Is the orchard or place where the chemicals are used posted? Tell what you find out about chemical safety practices on this ranch.

WHAT HAVE YOU LEARNED IN YOUR CHEMICAL CAUTIONERY?

Insert correct letter in the box.

1. Homes can be safe with chemicals if: ☐
   - A everything is kept in the bathroom medicine cabinet.
   - B bottles and other containers are labeled and kept away from careless persons and children.

2. Poisons sometimes: ☐
   - A can be helpful.
   - B should never be used on the skin.

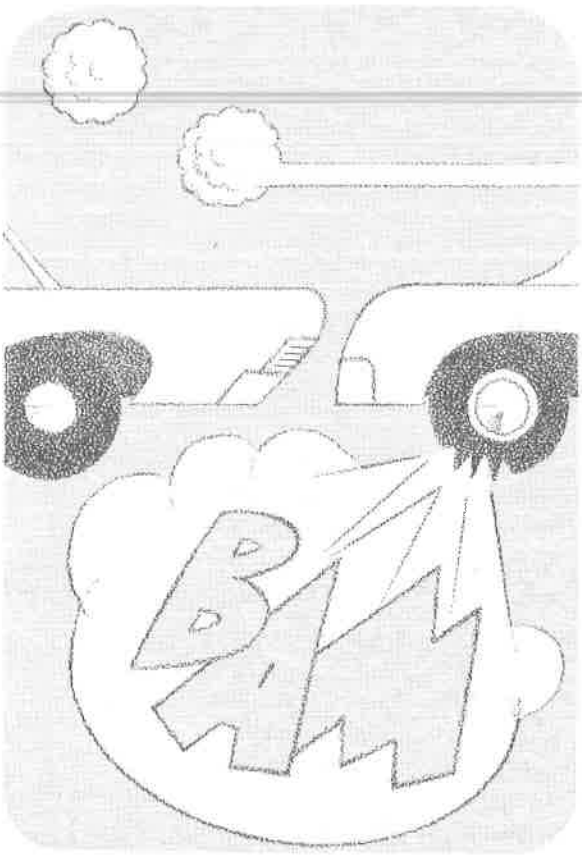
3. Labels left on containers: ☐
   - A make them safe to be left anywhere.
   - B will help to warn others to keep the materials in a safe place.

4. If you come into contact with a dangerous chemical, you should: ☐
   - A wash your face and hands quickly.
   - B remember what it was and see a doctor.

5. If you can take small doses of a poisonous gas without feeling sick: ☐
   - A the next one might send you to the hospital.
   - B you have nothing to worry about.

6. When you cannot smell engine exhaust gases: ☐
   - A you are safe.
   - B you might yet be in danger.

DRIVING LUCK IS NO ACCIDENT



HOW TO BE A LUCKY DRIVER

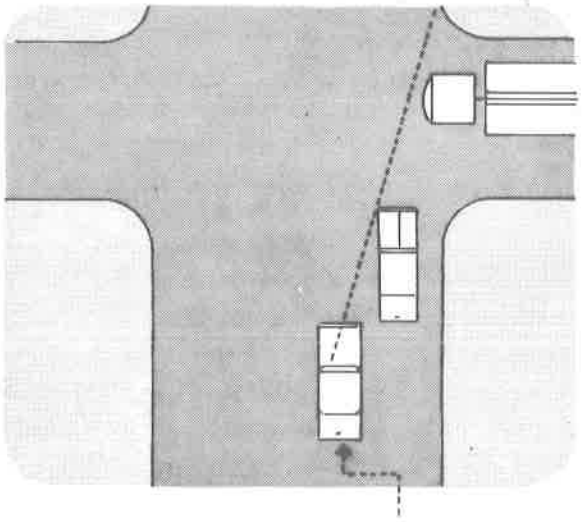
The best way to be a "lucky" driver is to drive with caution and follow the rules for safe driving. But even the very best driver is never on the road by himself. He must be on the alert constantly for other drivers and pedestrians.

Drive at a safe distance behind the car ahead. You are too close if you cannot stop in time if the car in front of you stops suddenly. The faster you and the car in front of you are traveling, the more space you will need to stop in time. Some authorities suggest that you stay at least 10 feet behind the other car for each 10 miles an hour you are driving. But 50 feet at 50 miles an hour is not much room in which to stop in an emergency. Close driving never saves time—instead it causes accidents. Crowding may cost a life—perhaps your own!

When you are riding a bike or driving a car, it's your turn to watch out for pedestrians. Be prepared to stop if someone steps off the curb just as you reach the corner. Be especially watchful for children. They sometimes dart into the street without looking first. A ball that rolls into the street usually is followed by a child or a dog. When you are close to the curb or driving in traffic, have your foot ready for the brake so you can stop easily and quickly.

WATCH YOUR PASSING MANNERS

- **Stay out of the left lane** unless you are passing or need to turn left.
- **Before you change lanes,** glance in your rearview mirror to be sure the lane is clear. Make a signal in plenty of time so cars following you will know which way you are going to turn.
- **Don't pass another car near an intersection.** A stopped or slow-moving car may be waiting for pedestrians to cross, or for another car that has the right-of-way.

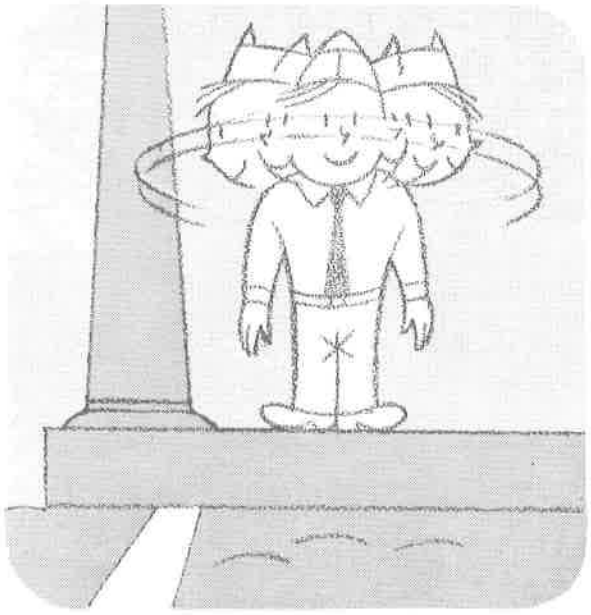


- **Never pass on a hill or curve** or any place where you cannot see a clear stretch ahead that will give you time to pass and get back in your lane in time. When you have passed a car, wait until you can see it in your rearview mirror before you swing back into the right lane. Cutting in too soon is extremely dangerous.
- **Drive with the traffic.** If many cars are passing you, you may be driving too slow. If you are passing many cars, you probably are going too fast for safe and courteous driving.
- **Don't drive when you are tired or sleepy or angry.**
- **Be especially watchful for children and aged walkers.** They often do not use crosswalks.
- **Practice "defensive driving."** Stay clear of the other fellow.
- **Don't be impatient in heavy traffic.** You can make up lost time in places where there are fewer hazards on the road.

ARE YOU A GOOD PEDESTRIAN?

It's just as important to be a good pedestrian as it is to be a good driver. What is the first thing you do when you want to walk across the street? **Before** you step off the curb, do you stop and look to the left? That is the direction from which traffic comes—unless it is a one-way street in the other direction. At the center of the street, a good pedestrian looks for traffic coming from the right.

Never cross a busy street except in a crosswalk. You're safest in a marked crosswalk. Traffic should stop for you, but you can't depend on it. Be alert. Walk quickly but carefully to the other side. Never run across the street.



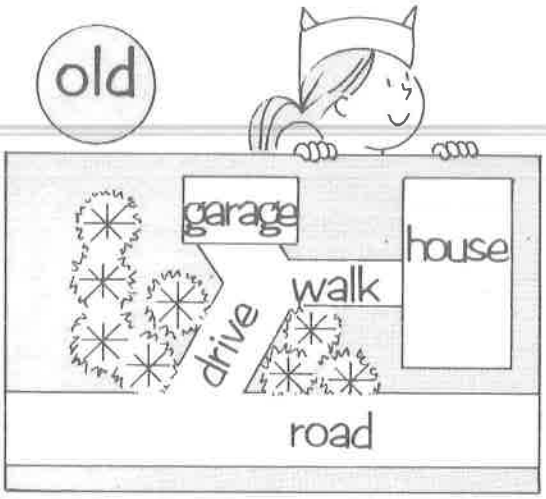
When you are teaching younger children to cross the street, here is a little jingle that may help them to remember how to do it safely.

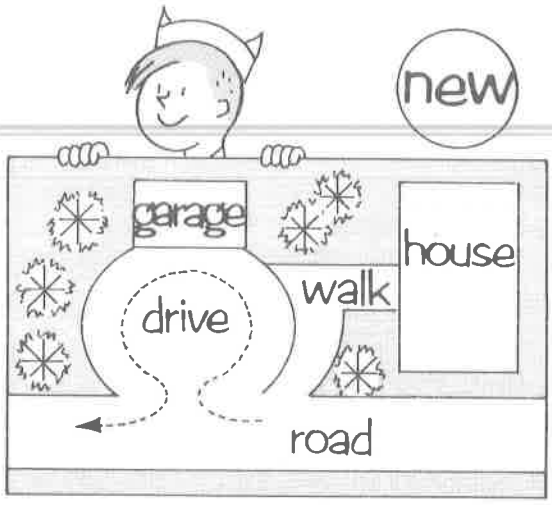
"Look to the left and then to the right
before you cross the street,
Use your eyes and use your ears—
before you use your feet."

TAKE A LOOK AROUND YOUR HOME

Many car accidents happen on home grounds. When a car stops in your driveway, must it back up to get out of the packing space? Can children play behind parked cars, or must people walk behind them? It's safer to arrange your parking area so that vehicles always start forward on a circle drive.

The driveway should enter the street or road at right angles to the traffic so that the driver can see easily in both directions. To eliminate blind corners where the driveway enters the road, cut back flowers and bushes so drivers can see road signs and traffic in both directions. See that blind corners around buildings are posted with warning signs.





TRANSPORTATION ON THE FARM

It is dangerous for a second person to ride a tractor when there is no place for anyone to sit safely but the driver.

In many pickup trucks, the driver is dangerously crowded when three persons ride in the front seat. Usually, only the driver and one passenger should ride there. If more persons are to ride in the pickup, they must sit inside the bed, not on the sides or standing. Seats with backs should be built in the bed when the truck is used to transport workers. There should be a safety chain or guard across the back, and steps or a ladder for getting in or out of the truck. When driving such a vehicle, stop at all railroad crossings and observe the same rules of safety that other personnel carriers follow.

THE THREE E's OF TRAFFIC SAFETY—ENGINEERING, EDUCATION, AND ENFORCEMENT

Engineering makes your roads and equipment safer today. Specially trained people remove the danger spots on roads and vehicles. As a result, "safe driving speeds" are faster each year as machines and roadways improve.

Engineers also designed the safety belt. Pilots and airline passengers have used these for a long time. On a tractor or automobile, they keep the person from being thrown out in case of a wreck or sudden stop. Often a driver will reach for a child to keep him from falling, when he should be giving all his attention to driving. Seat belts for children give them some freedom of movement and yet keep them from being thrown against the sides or front of the car.

Education is the answer to many of the problems of traffic safety. People are the most dangerous and unpredictable part of traffic safety. Every driver and pedestrian must know the rules and follow them. These rules usually are based on "courtesy of the road."

Enforcement is a great help to traffic safety. The patrolman acts as a referee to enforce certain rules and regulations that tell us how we can use our equipment and roadways for the good of everyone.

YOU BE THE JUDGE

If you were a traffic judge, what penalty would you give to the following offenders. Try to think of something that would help these people to improve their driving, not just punish them.

- Legal Beagle thinks that just because there is a posted speed limit, it is always safe to drive that fast. It doesn't matter if the traffic is heavy or the road is wet or icy or under repair. It doesn't matter if rain or fog or oncoming headlights make it difficult to see—Beagle drives the "legal" rate of speed.

- Weaving Willie switches constantly from one lane to another. Wherever there is a "hole" in traffic, he darts into it. Better watch for him when he passes you, and be ready to use your brake to keep him from grazing your front fender as he cuts in front of you.

- Slow Joe is proud of the fact that he has never been in an accident—but he'd be surprised at how many he has caused. Be prepared to stop or slow down when he pulls out of a sideroad into a stream of faster moving vehicles—there's liable to be a pileup.

- Never-Look Nellie and Seldom-Signal Sally drive as if they were the only ones on the road. They change lanes, stop, and make turns without bothering to look or signal. You aren't safe driving near them unless you have a crystal ball.

- Go-Boy-Go likes to pass everything on the road. In town, his favorite sport is jumping the signal at stop signs. He also loves the sound of brakes screeching around him as he makes left turns from right-hand lanes. Fortunately there aren't very many of his kind—maybe because they don't live very long.

YOU CAN DO SOMETHING ABOUT TRAFFIC HAZARDS

Safety studies are of no value unless something is done or learned. Let's try to locate driving hazards which can be corrected and do some work that will result in safer operation of vehicles.

- **Sketch the routing of traffic on your farm** or that of a neighbor where you think there might be a problem. For example, show where vehicles turn off the main road to come to the ranch headquarters. Is there shoulder space for vehicles to get out of traffic before they turn in? Where do trucks and automobiles park? Must they back out of the parking or can they go ahead in leaving? What about the entry into the road again? Is the vision obstructed? Is there a stop sign or other caution to help the driver?

- **Observe a group of workers being taken to and from fieldwork.** Are they loaded into a truck? Is a stepladder provided? Is there a safety gate or chain to keep them from falling out the back? Are seats provided? Does the driver read English? Has he a license to drive? Is the vehicle properly equipped with lights, horn, brakes, well-running engine, a clean windshield, sun visor, wipers, etc.?

  Many of these things you will not be able to check. But you can observe and draw your own conclusions from what you see and the questions you ask the driver and others.

- **Take a backseat ride with some driver.** Observe how he handles the vehicle, where he slows down, where he moves in and out of traffic, what hand and light signals he uses, where and how he makes left turns, what use is made of the rear-vision mirror, and how he feels about the other drivers. Watch how other drivers react to the car in which you are riding. Do they give you right-of-way? Do they "hog" the left lane? Do they crowd or fight traffic to get ahead? Note the good points as well as the bad.

CAN YOU TURN THESE TRAFFIC QUESTIONS INTO RIGHT ANSWERS?

TRUE or FALSE

1. You must stop whatever you are riding or driving to make it safer for anyone walking across the street. ☐

2. If you are walking, you must obey traffic signals, too. ☐

3. Cross to the left side of the highway in passing on a blind curve or near the top of a hill. ☐

4. You should drive at a safe speed even if it is less than the posted speed limit. ☐

5. If you are turning left, you may cross over the center line just before you reach the intersection. ☐

6. When starting from a parked position, you can pull out into traffic or back up if you blow the horn first. ☐

7. It is safer to crowd the car in front of you than to drop back and let everyone go around you. ☐

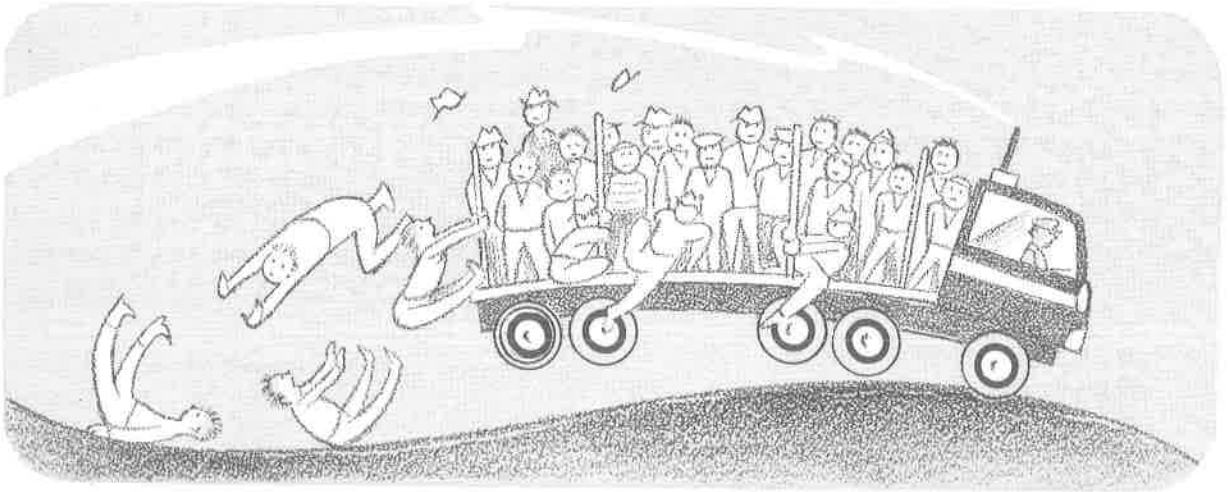
8. The time to post traffic warning signs is when someone gets hurt. ☐

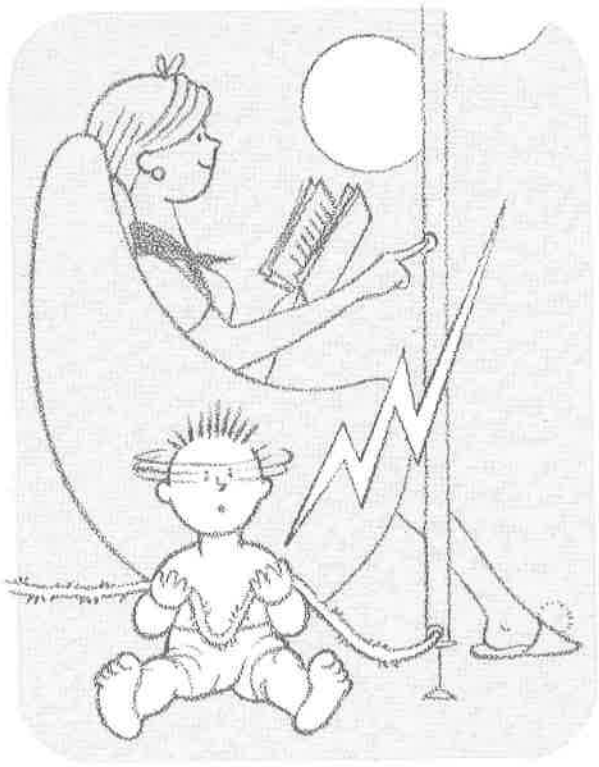
9. Watching in the rear-vision mirror makes it safe to back out of a parking space. ☐

10. Children should be kept off farm lanes and parking areas. ☐

11. It is just as easy to stop a car going 30 mph as it is to stop one going 15 mph. ☐

12. Courtesy is the best traffic rule to observe. ☐





ELECTRICITY SAFETY OR SORROW

ELECTRICAL SAFETY

Electricity, like fire, is a wonderful servant—but it is extremely dangerous if not kept under control. To learn how to use it safely, you must know how it works. You should have an electrician or other experienced person help you work on electrical safety.

Electricity flows best through metals—electrical wire usually is copper.

Electricity does not flow easily through rubber, wood, plastic, and glass, and these materials often are used as insulation for your protection. Electricity flows easily over wet surfaces. That is why you can get an electrical shock more easily when standing on a wet floor or damp ground. **NEVER touch an animal or person who has been electrocuted until you have turned off the electricity.**

Electricity cannot be stored. It flows in a circuit from the source (battery or transformer) to the lightglobe or other electrical device, and back to the source. You will notice that electric cords have two wires—one (the "hot" wire) carries the electric current away from the source; the other (ground wire) carries it back. You seldom can be sure which is the "hot" wire and which is the ground. When the switch is on, we have a connected circuit; when the switch is off, we have an open circuit.

One side of most electrical circuits is grounded for our protection. High voltage lines are grounded through the transformer at the powerhouse. If the insulation breaks down, the electric current runs harmlessly into the ground. Wire service entrances for all buildings usually are grounded by a pipe or rod driven into damp soil.

In addition, the newest electrical codes require a separate ground on every piece of electrical equipment. This is provided by the U-shaped blade on the 3-pronged plugs, providing the third hole in the receptacle is grounded.

In your electrical safety inspection you will look for proper grounds, good insulation, proper fuses, protection devices for equipment, and proper use of wiring materials.

- Overhead wiring should be held securely in place on good insulators, and be high enough over traffic to be out of reach. Check overhead lines to see that no towers or poles are used near them.

- See that wire service entrances for all buildings are grounded. Look for proper grounds on motor frames, switchboxes, milking machines, etc. Portable shop mo-

tors need ground wires, too. In the house, check to see that all electrical appliances and portable electrical equipment are grounded.

- Check all cords to see that the insulation is good. Electrical wires should not be run under rugs or hung over nails. Wiring intended for inside use should not be used outdoors.

- Fuses also are safety valves of an electrical wiring system. For every size and use of wire, there is a safe working load. When there is an overload, the fuse burns out. **NEVER** use pennies behind fuses. Have some trained person examine the fuses and wiring system with you to be sure that the proper type and size are used.

- Breakers on motors protect the equipment by breaking the current when there is an overload. Motors require a high current flow to start, but they operate on less current. The wire and fuse size must be large enough to start the motor. The breaker or other protective device must hold when the motor starts, but it also must protect the motor from overload when it is running on less current. You should find both fuse protection on the motor circuit and overload protection at the motor switch (sometimes built into the motor).

WIRING INSPECTION

List the buildings you inspected for wiring and proper use of electricity.

_____

_____

_____

_____

How many grounds did you find and where?

_____

_____

_____

_____

List the fuse or breaker-protected circuits you found in the house.

_____

_____

_____

List the repairs and replacements you made or caused to be made in the wiring system found in your home and on your farm.

_____

_____

_____

_____

Tell of any interesting experience you had in making your farm electrical inspection. What expert help did you have?

_____

_____

_____

_____

ELECTRICAL QUIZ

Insert correct letter in box.

1. Grounds are used to: ☐

   A take electricity out of the ground.

   B take electricity into the ground in case of mishap.

2. Large motors have both fuse and overload protection to: ☐

   A give double safety.

   B protect the wiring and motor separately.

3. You should avoid standing on damp ground or touching a water pipe when operating electrical equipment because: ☐

   A You might find yourself part of a 115-volt circuit.

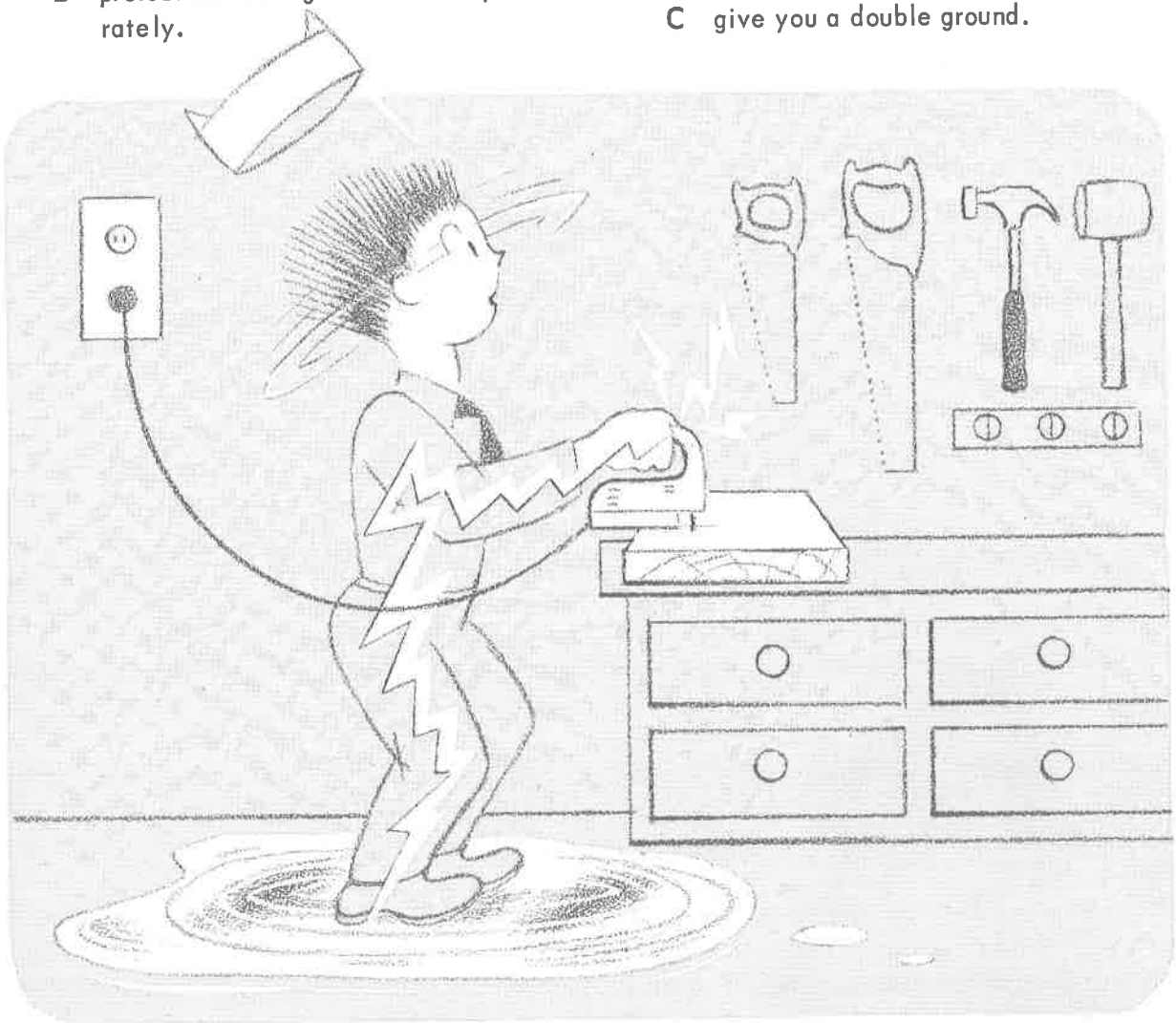
   B the ground might shock you.

4. Many new appliances are supplied with 3-wire connector cords to: ☐

   A give more capacity to the circuit.

   B insure a separate ground for the equipment.

   C give you a double ground.



FALLS ARE ONLY A MISSED STEP AWAY

FORETHOUGHT FOILS FALLS

Falls cause nearly half of all farm home accidents and one-sixth of all farm industrial accidents. Falls head the list of all accidental causes recorded. The very young and those in the older age group have more trouble keeping their balance, and have more falls. But, we can prevent most falls by a little forethought.

Poor housekeeping causes many falls. Pick up toys and unused equipment lying around where people walk. Have a box or other place for such things, and keep them in their place when not in use, so people won't trip over them. Remember to park your bicycle in a rack, or hang it up by its front wheel. And never put things on the stairway to be taken up the next time you go.

Watch your steps around the home. All steps and stairways should have handrails in good repair. If someone misses a step, a handrail may prevent him from falling all the way to the bottom. Handholds over bathtubs also may prevent a slip from being a serious fall. It's a good idea to use nonskid wax on floors, and to be sure that scatter rugs are the kind that won't slip out from under you when you step on them.

Never carry a load that is so high you can't see over it to watch where you put your feet . . . .two trips are better than tripping!

Good lighting helps prevent accidents—especially at night. Lights should be shaded so that they do not shine in the eyes. A stairway light should be placed at the bottom of the stairs not at the top. Dark hallways, stairs, and entranceways should be well lighted. Where there are no electric lights or light switches, have a flashlight handy for use at night or when walking in dark areas.

Ladders cause many falls when they are not kept in repair or when they are not used properly. Each type of ladder is designed for a certain job. Ladders should be kept in good repair and users should be taught how to use them properly. If you place the foot of the ladder too close to a tree or building, the ladder may fall backward with the climber. If you lean out too far, the ladder may topple with you.

Stepladders usually are safe if the climber stays off the top step—use it for a brace instead of a platform.

Fruit ladders are more apt to tip because they have three legs instead of four. The picker may feel more secure because the tree

foliage hides the ground and the danger. If he leans out too far, the weight of a full bucket or picking bag may be enough to overbalance the ladder. To prevent the bag from swinging away from his body, the picker can tie it to his waist as well as his shoulders. Of course, the picker should start picking into the empty bag from the top of his reach —not the bottom.

REDUCE FALLS

What can you do to make your farm and home safe from falls?

- Remove obstacles from walks or walkways. This means repairing walkways, steps, or ramps where necessary.
- Look for places where handrails are needed and put them on. Do any other construction that will prevent falls.
- Watch to see who is climbing and where—to reach things on high shelves, make repairs, wash windows that can't be reached from the floor or ground. Help provide ladders or stepstools for such reaching. Discourage the use of tables, benches, or chairs in place of ladders.
- Inspect the ladders on the farm and see if the persons using the ladders know how to place and use them. Notice how they walk down ladders with loads. Could loads be carried and balanced so that both hands are free to hold on to the ladder? When you see mistakes, write them down and discuss them with those in charge of the work.
- No two accidents happen in exactly the same manner. Study your situations—they are a little different from those on a neighboring place. Make your own plans to prevent falls. Make a record of what you observe and what you do, particularly the demonstrations that you give on correct ways to use a ladder and correct ways to lift and carry a load.

FALLS QUIZ

Insert correct letter in box.

1. Falls happen oftener to: ☐

   A children and older persons.

   B middle-aged persons.

2. Ladder accidents occur because climbers: ☐

   A try to carry too heavy loads on the ladder.

   B become overbalanced.

3. The best thing to stand on when washing windows is: ☐

   A a bench.

   B a stepladder.

   C a chair.

4. A stairway light should be placed at: ☐

   A the top of the stairs.

   B the bottom of the stairs.

5. If you have a load you can't see over: ☐

   A carry it in front of you so you can fall on it if you stumble.

   B don't carry it; take part of it at one time.

FIREFIGHTING FIRSTS

BE A FIREFIGHTER

What is a firefighter? A firefighter does more than put out fires. He knows how to keep fires from starting. And he knows how to stop a little fire from becoming a big one.

The best time to fight a fire is before it starts. A fire needs something to start it, something to burn, and air to keep it burning.

HOW NOT TO START A FIRE

Most fires start because someone is careless. Here are a few fire starters a good firefighter watches for to prevent fires.

- **Matches** are dangerous when left lying around where youngsters can play with them. A burning match can start a fire when it is thrown away carelessly in a barn, or fuel storage area, or dropped into a wastepaper basket. Always break a match to be sure it is out before throwing it away.

- **Heating systems** that are not kept in repair can start fires. Accumulations of soot in flues may catch fire and burn. Pilot lights that do not have automatic devices that shut off the gas if the pilot light fails are a hazard. The gas may accumulate and explode when a match is lighted to start the pilot light. Laundry that is hung too close to heaters, or curtains that blow against heating equipment may start fires. Portable heaters can set fire to clothing, if the wearer stands too close to them.

- **Electrical equipment** can cause fires if not kept in proper repair. Wornout electrical cords are a threat to safety. Overloaded circuits, improper fusing, and shorts in equipment can cause fires.

- **Spontaneous combustion** is the outbreak of a fire without a spark or match to start it. Such fires usually start in oily rags or damp hay.

LET'S LOOK INTO FIRE CAUSES

- Make a survey of heating equipment. Can it become overheated?_____ Are the users aware of this hazard?_____ If the pilot light goes out on the gas heaters, will the gas automatically shut off?_____

  Inspect and clean the smoke vents. Check the venting of the heating and cooling equipment.

  Which ones are ventilated to the outside and which are not?

- Let's take a look at smoking and match supplies.

  Where do you find ashtrays?

  _____

  Can they be kept out of bedrooms?_____
  Do you find that ashtrays are emptied into wastebaskets with papers?_____ Are matches guarded and stored in order to be kept away from children?_____

- Where is fuel stored?_____ Have you seen any warning signs and locks to protect fuel from fire?_____

  How well cleaned and orderly is the fuel storage and area around it?_____

  Can the firefighting equipment around the storage be safely used in case of fire?___
  _____Explain what it is_____

  _____

  _____

  _____

- Make a report on the electrical equipment and wiring around the farm and home. Follow the suggestions in the electrical portion of your material.

HOW TO KEEP LITTLE FIRES FROM BECOMING BIG ONES

"Fire season" is all the year round, but fires start most easily during the dry part of the year. In California, everything is dry from late April until after the first rains.

A good firefighter knows that fires sometimes start in spite of everything we do to prevent them. He also knows that fires often will not spread if there is no trash or other flammable materials around to furnish fuel for the flame. So he fights fire by clearing away rubbish that can be a fire hazard around his home.

Have you noticed the firebreaks along the highway, around the edges of fields, or in wooded areas? These bare or burned over strips often will stop fires from spreading because they run out of fuel to burn.

You can do the same by clearing away dead grass, rubbish, and other burnable material from around your buildings to prevent the spread of fire. Get rid of piles of old papers, rags, and scrap lumber.

Gasoline, diesel oil, and solvents are explosive when heated. Paints and paint thinner also make very hot fires. Never store gasoline in glass bottles. If the bottle breaks, the gasoline fumes will blow up if they reach a pilot light, heater, or other flame.

HAVE A SAFE CHRISTMAS

Have you ever seen a dry Christmas tree burn? It goes up in a flash. If it catches fire in the home, it may burn down the home and injure people. The best way to prevent such a Christmas tragedy is to keep your tree fresh and damp as long as you have it in the house. As soon as you get your tree, make a fresh cut at the base and keep the tree in a can of water to help keep it moist and prevent the needles from falling.

You can spray your tree with a borax solution and a fire retardant, but the tree still will burn, although more slowly. Such sprays may discolor the needles.

Keep your tree out of passageways and away from heating units that will dry it. Keep a bucket of water or sand handy in case of fire, and as a reminder that there is a fire hazard.

If you plant the tree for a public place, notify the fire department. They can advise you on precautions to take. Keep electrical wiring and Christmas tree lights in good repair. Don't allow wrappings from presents to accumulate.

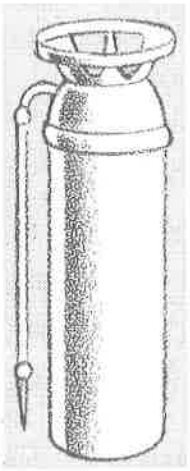
A good reminder for Christmas tree safety is a tag on the tree asking that the user keep it in water, keep it away from heaters, keep wiring safe, and have a fire-safe Christmas.

FIRE EXTINGUISHERS FOR FIGHTING FIRE

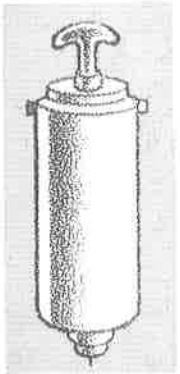
Once a fire starts, the firefighter tries to smother the flames as soon as possible. A small fire sometimes can be smothered with a blanket or by throwing dirt on it to keep away the air the fire needs to burn.

But the good firefighter should be prepared for fires of all kinds and sizes. Water is the best fire extinguisher for most fires—but not for burning oil or electrical fires! Water under pressure is best, but it also is important to have water to replenish a firetruck where there are no fire hydrants. This means you should have a farm pond or well that pumps at least 100 gallons a minute.

Remember—there is no miracle fire extinguisher that you can hang on the wall and use to scare away fires. Usually, you have to be there to cover the fire with water, dry chemical, or liquid to smother the flames.



Soda-acid extinguishers are effective on small fires. They have about the same effect as the 2½ gallons of water they contain plus the pressure supplied by the soda and acid being mixed. After they are used, they no longer are effective until they are recharged with soda and acid. An equal amount of water under air pressure would do about the same amount of good on a fire. An orchard sprayer or a pressure water system with an attached hose ready for use would be ideal to use on a small fire. It would be a help, too, on a large one. When not in use, orchard spray systems make excellent farm "fire wagons."

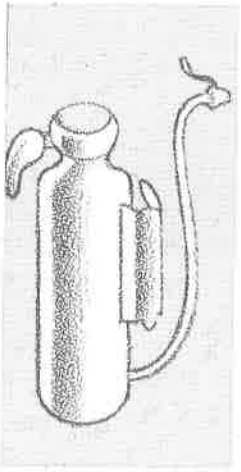


Carbon tetrachloride extinguishers are good for electrical fires because the carbon tetrachloride is a nonconductor of electricity. (Water should never be used on electrical fires because it conducts electricity very readily and could electrocute someone.) Be very careful with carbon tetrachloride. Use this extinguisher (the kind carried on a tractor) in the open air. The

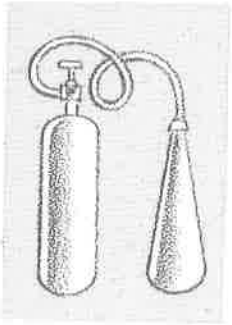
vapors from this extinguisher are very poisonous if you inhale them. Never wash your hands in this chemical—particularly if you have an open cut. The chemical can be absorbed in the body and is harmful.

Foam extinguishers are good for fighting gasoline fires. The common size is 2½ gallons. Turning the extinguisher upside down causes the two chemicals to mix. Carbon dioxide supplies the pressure for forcing the foam out to smother the fire and to cling to the burning material.

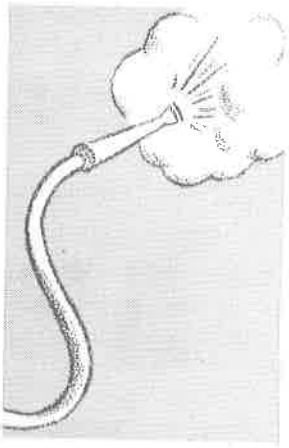
Dry chemical extinguishers also are good for smothering a fire. Usually, carbon-dioxide cartridges supply the pressure for blowing a finely ground powder, such as bicarbonate of soda, over the burning material. Dry chemical does a good job of smothering if the extinguisher is big enough to handle the fire you are fighting.



Carbon-dioxide extinguishers carry a large quantity of the gas under high pressure. When released to the outside air, the gas expands so fast that "snow" is formed. It cools and smothers at the same time. A horn is used on the extinguisher to direct the gas toward the fire. It is good for small fires, particularly electrical fires, because carbon dioxide is a non-conductor.



Fog made from a fine spray is particularly effective on all fires to cool and hold them under control. It also allows the firefighters to get closer to the fire and work. Fog nozzles are available for farm sprayers. Any hose nozzle that breaks the water into a spray helps absorb the heat from a fire and to reduce its danger. There are only two types of fire where water might get you into trouble—electrical and gasoline fires. Almost all water carries enough impurities to make it a conductor of electricity. Water is heavier than gasoline so it will tend to float the fire to someplace you might not want it before you could cool or smother the fire with the spray.



Back-pump extinguishers are used by foresters because water is so valuable for putting out wood fires. If the pumps are kept in repair, they will throw the water quite a distance. Manpower is all that is needed to work the system if a supply of water is handy. Unfortunately, the pump leathers dry up and become useless if they are not used occasionally and serviced when they need it. On the farm it would be easier to have a larger supply of water than the foresters can carry. Buckets and pumps for getting water on the fire are easier to use.

Bicarbonate of soda is an excellent smothering agent for fires. As an experiment you might mix 1 pound of this to 9 pounds of sawdust or rice hulls, and see how effective it is on a small fire. Sand and dirt shoveled onto a fire will help smother it also. Common household borax will make materials more

fireproof. Use all the borax that will dissolve in the water, and rinse the material in it. Clothes treated with borax may cause irritation to the wearer. To prevent this, add a little boric acid to the solution.

> You can see most of the extinguishers listed in this section at your local fire station.

Remember: Access to buildings and places where fires might start is as important as the firefighting equipment itself. If you cannot get to the fire, you cannot fight it. Keep ladders handy for roof fires. Know where hose connections and water can be reached. Keep your firefighting equipment in readiness.

FIRE SAFETY CHECKS FOR YOU

Inspection List

- ☐ All things that burn fast are removed: old magazines, papers, furniture, clothing, etc.
- ☐ Oily rags, bottles of gasoline, and paint remover are properly handled and stored.
- ☐ Stove vents and chimneys are clean and in good repair.
- ☐ Heating systems are in good repair.
- ☐ Kerosene or other fuel oils are not used to start fires.
- ☐ Chopped hay is mechanically ventilated to prevent fire.
- ☐ No defective and overloaded wiring is used.
- ☐ Dry grass and trash are removed from around buildings.
- ☐ Trash is not burned on a windy day or in an unsafe place.
- ☐ Ladders and water supplies are kept ready in case of fire.
- ☐ The fire department number is posted near the telephone.

Don'ts for Fire Protection

- **Don't** throw away burned matches until they have cooled.
- **Don't** leave "no smoking" to chance. Post signs and enforce them.
- **Don't** allow oils or other fire boosters to be used in stoves or fireplaces.
- **Don't** store gasoline within 50 feet of large buildings.
- **Don't** be a firebug. Burn trash carefully when it is necessary.
- **Don't** wait until a fire starts to fight it. Have a plan for quick action and your equipment ready.

HAVE YOU LEARNED TO BE A FIREFIGHTER?

Check correct box.

To be a good firefighter, you must:

- have your firefighting equipment ready at all times. ☐
- prevent fires by cleanups, and plan the use of equipment before the fire starts. ☐

It is safe to store gasoline in glass bottles:

- if you label it properly. ☐
- never. ☐

More fires start:

- in the fall when it gets cool outside. ☐
- in the summer when it gets dry outside. ☐

Electrical wiring gets the blame for many fires. You'll find that:

- ordinary wiring is safe if you watch it carefully. ☐
- special wiring is needed in hazardous places. ☐

A soda-acid extinguisher:

- is good for smothering a fire. ☐
- is good for cooling and extinguishing a fire. ☐

A back-pump fire extinguisher is:

- good for farm fires. ☐
- good for forest fires. ☐

A firefighter's job is:

- to be ready when a fire starts. ☐
- to prevent fires by cleanup and being ready if a fire starts. ☐

HERE IS HOW YOU CAN BECOME A FIREFIGHTER!

- **Make a plan for firefighting in your home or on your farm.** You might include in your plan: the location of all firefighting equipment, including the telephone for calling the fire department. Show the plan to your leader for his comments.

- **Make a collection of firefighting equipment pictures or sketches.** You should be able to explain how each piece of equipment works and what fires they will work on best. This would make excellent material for a demonstration or illustrated talk before some of your local groups.

- **Carry out a cleanup operation at your home or some other place that needs your help.** It might be a camp, a group of outbuildings on a ranch, or even a home. Clean out the old papers, rags, dry grass, paint, or other fuel that could start or support a fire. Provide a storage space for flammables that need to be kept at a safe distance. Prepare signs for "no smoking" around the storage space for flammables and around hay storages, for example. Invite the local fire warden to make suggestions or even an inspection if he has the time.

PLAN YOUR ESCAPE FROM FIRE

Everyone should know how to escape from a building in case of fire.

First, see that the phone number of the fire department is on or near the phone. Seconds can be very important to safety.

Next, think where a fire might start and how the persons in the house or room might escape. Can the windows be unfastened and opened readily? If windows are difficult to open or climb through, someone might run toward the fire rather than take extra time needed to open them.

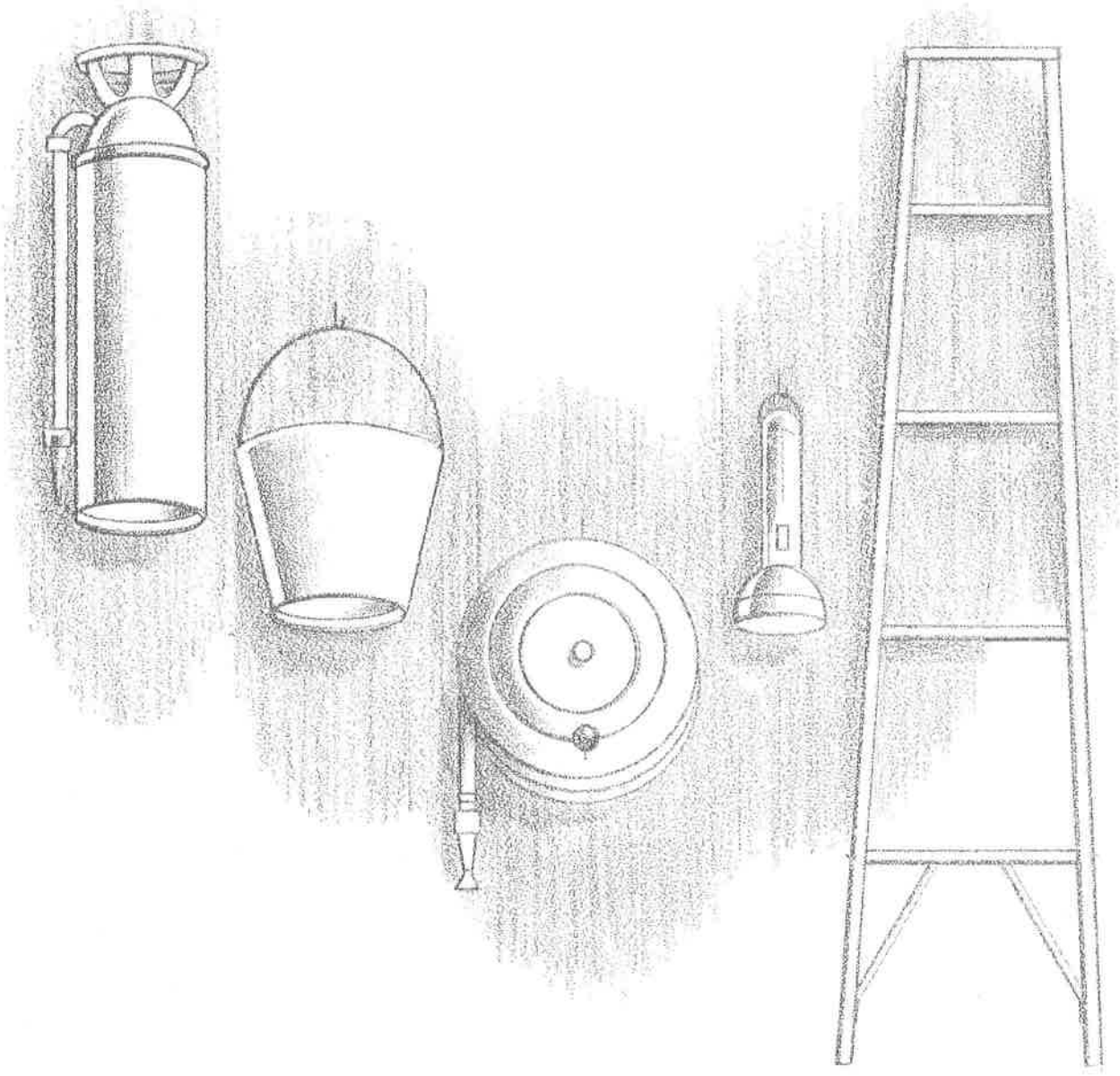
Take a careful look through the house for several ways of escape. You might even draw a sketch of the house showing the loca-

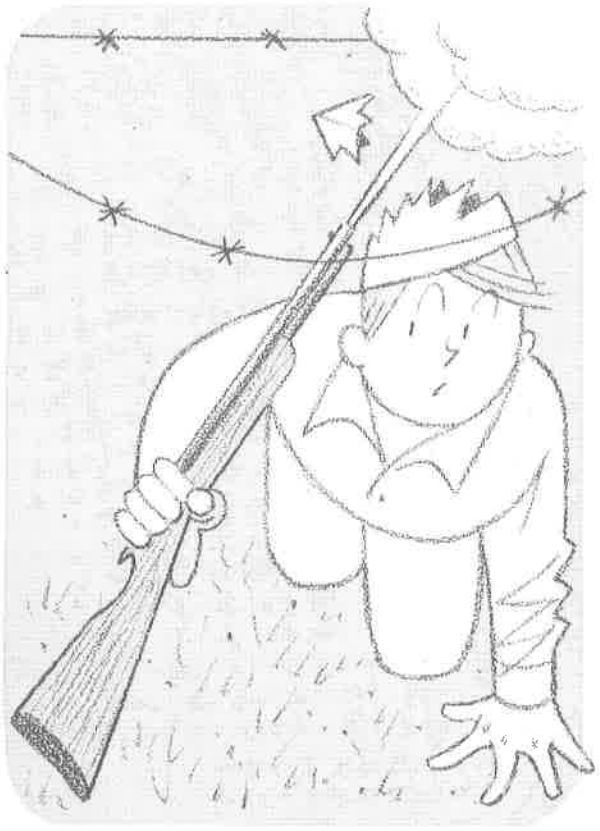
tion of the phone, escape routes for each room, locations for fire extinguishers, buckets, hoses, lights for emergency work in the dark, and ladders if they will be needed.

A plan well made is a start towards escape. People are more important than things, so be sure your plan for people comes ahead of your plan for putting out the fire. However, it may take only a little effort to put out a small fire if the right materials are available. If a fire is burning behind a closed hot door, leave it closed and go for help. Smoke and gas can be deadly, and the open door may spread the fire.

Have an assembly point outside the house where you can count heads and see that everyone is out. Don't go back for things you left. It might mean your life. Have flashlights in case the fire cuts off the electric power.

Planning for an emergency may save lives and property.





GUN SAFETY

Our forefathers needed guns to provide game for food and to protect their homes. The Pilgrim father usually carried his rifle in the crook of one arm and his wife's hand tucked under the other—even on his way to church.

Today, we use guns mainly for the sport of hunting. Too often, however, a happy hunting trip turns out to be a trip to the "happy hunting ground" for someone. A gun in the hands of an inexperienced or careless person is indeed a "deadly weapon." No one should handle a gun until he has received complete instructions on using it safely.

DO'S AND DON'TS FOR YOUR SAFETY

★ Treat every gun as you would a loaded gun.

★ Watch that muzzle! Don't let it point at anyone, even you.

GOOD GUN SHYNESS

★ Unload guns when not in use. Carry guns in cases to the shooting area.

★ Be sure barrel is clear of obstructions.

★ Be sure of your target before you pull trigger. No guessing.

★ Never point a gun at anything you do not intend to shoot.

★ Never climb a fence or jump a ditch with a loaded gun. Watch that muzzle.

★ Store guns and ammunition separately, out of reach of children.

GUN HANDLING KNOW-HOW

1. What is the most important thing for a hunter to remember when carrying his gun?

_____

2. List two correct ways to carry a gun.

_____

_____

3. How should a gun be carried in an automobile?

_____

_____

4. Why is it dangerous to have a loaded gun in an automobile?

_____

_____

5. How should a gun be handled when crossing a fence?

6. Should the gun and ammunition be stored together?

7. When returning tired from a day's hunting, is it a good idea to stand your gun in a corner and put your unfired ammunition in a nearby chest with the idea of storing them away in some better place later?

8. When should the safety on a gun be in the "off" position?

THE RIFLE AND SHOTGUN

Both rifles and shotguns are used in hunting. They operate much the same, but there is a difference in their bores. (The holes in their barrels.) The shotgun barrel is relatively thin and its bore is smooth. It often is called a "smoothbore." A rifle barrel has a thicker wall and spiral grooves in the bore. These grooves (rifling) spin the bullet—keeping it point-first in flight and increasing accuracy and range.

Shotgun pellets travel about 1,100 feet per second and have a maximum range of only a few hundred yards. A rifle bullet may travel as fast as 3,000 feet per second and has a range of from one to several miles.

GUNMANSHIP QUIZ

See if you can find the answers to these questions!

1. Why are sights less important on a shotgun than on a rifle?

2. What is the correct way to squeeze the trigger of a rifle?

3. What is the purpose of sighting in a rifle?

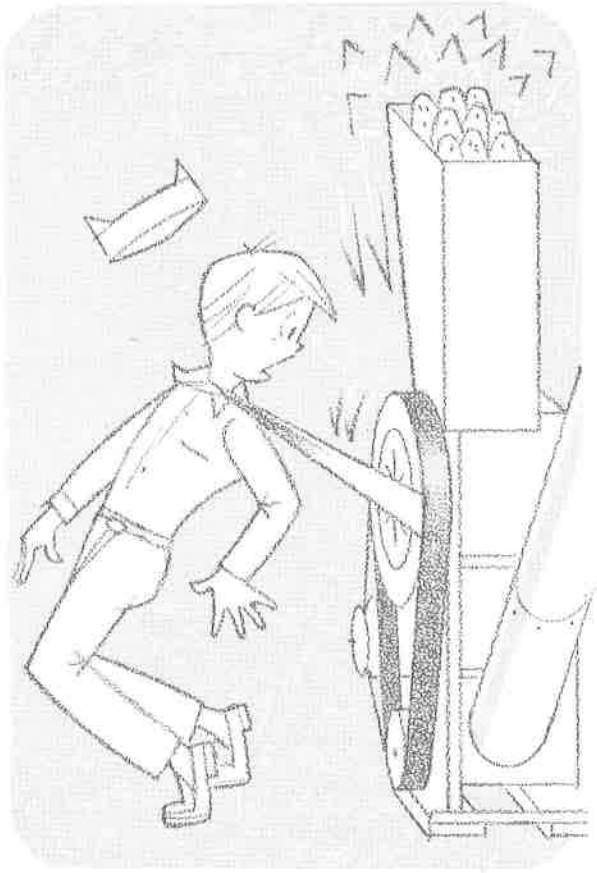
4. If you are sighting in a rifle and the shots are going high and to the right, how do you move the rear sight to make the shots hit the center of the target?

5. Where should you start sighting in the rifle if the setting is unknown?

6. Name the positions for firing a rifle.

7. From what position is the shotgun usually fired?

8. Why do you lead the target in firing the shotgun?



MACHINERY MANNERS or MUCH TO DO ABOUT MACHINERY

MACHINERY MANNERS

Machinery makes it possible for a few men to do the work of many on the farm and in the home. Machines do big jobs at little cost. For example, ¼ horsepower (about 2 man-power) can pump 1,000 gallons of water into a pressure storage tank where it will be ready for use at a cost of 2 cents (1 kilowatt hour).

The average farm in California uses enough electricity in 1 year to equal the work of 200 men for 1 year—42,000 kilowatt hours' use or the equivalent of about 220,000 man-hours of work. Tractor-power use about equals that of electricity in agriculture.

So it really pays to know machinery and how to make the best use of it. You can profit by knowing the job of every machine on your farm and in your home. Be sure you know the safety features and how to operate each piece of equipment properly before you attempt to use it. Some machines are laboratory tested and have carefully built in safety features. Others may not have even simple guards, slip clutches, and other safeguards.

Unguarded and improperly operated machines can crush, main, or kill you in seconds if you are caught off guard. A good safety rule around machines is to be on guard at all times. Be sure you know what you are doing. Watch others to keep them from unsafe acts. See that equipment is kept in good repair at all times. Replace guards that are removed and add others when needed. Power shafts, belts, and chains left running in the open are "surefire" for an accident.

Machines, including tractors, cause about one out of every seven reported industrial accidents on the farm. This usually does not include accidents to owners or members of the family not included in the accident insurance required for hired help. Your local accident insurance representative can give you general information on accidents occurring in your community. Newspaper clippings cover the more serious accidents. Hospitals can help you with information on machinery accidents, too.

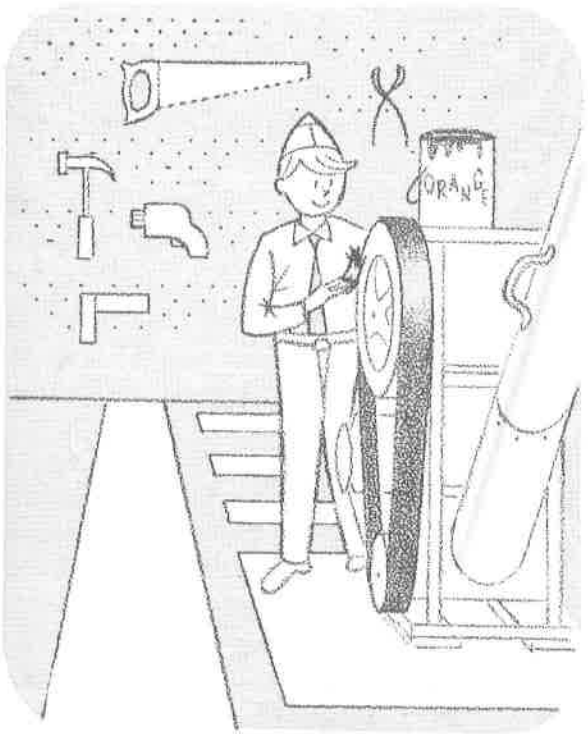
Some people do not want others to know about their accidents. Possibly this is because many accidents don't just happen—they are caused by carelessness.

Stationary machinery such as feed grinders, nut hullers, compressors, and pumps are eas-

ier to "guard" than mobile machines, combines, cornpickers, disks, or tractors. One of the best ways to guard against accidents with stationary machinery is to have a clear space around each machine. This gives the operator enough room to make adjustments and to lubricate it properly. All grease fittings should be easy to reach with a gun—the operator shouldn't have to reach between moving parts. See that all chain and belt drives are covered so they won't catch clothing, tools, or fingers. These covers should be hinged to allow inspection and servicing of the drives. Rotating shafts—even smooth ones—also are dangerous and will grab clothing when you least expect it.

Dust from machines can be a fire hazard as well as a health hazard. Ventilation is important. Good lighting helps the operator keep the machine in better repair and to be more alert when working around a machine.

Color is important, too. **White** is for traffic direction. You might paint white stripes on shed floors for traffic lanes and to mark off areas around machines where boxes and materials should not be stored. White often is used on steps and handholds on machines. **Orange** is used to mark the most dangerous parts of machines, gears, and chain drives. The orange can be used inside covers, to remind us to replace them properly. Accidents often are caused by inexperienced drivers trying to make field adjustments on machines.



Farm shop floors or other paving can be striped with colored paint to indicate row spacings and furrow centers when adjusting these settings in the shop. This will save time in the field and the adjustments can be made more safely and easily when the tools are handy.

You can use color to show the proper places of tools in the shop so that you won't stumble over them or lose them. Paint the silhouette of the tool in green or blue on the wall where the tools hang. If there isn't a tool in front of each silhouette, you know at once that one is missing or has not been put away.

OTHER SAFETY TIPS

To prevent accidents, make it safer to get on and off machines. Steps and handholds added to field machines may make them easier to service and adjust. It isn't safe to stand on a muddy tire while filling a spray rig, for instance. Some clutch and brake pedals are too small. The operator's muddy foot may slip off them and cause an accident. Famous last words are "my foot slipped."

Tractor driving can be safe if the operator uses good judgment. At least one-fourth of all tractor accidents happen when the driver is inexperienced. Most trouble is caused by operating too close to ditch banks, driving up steep hills, speeding, and improper hitching.

Fires often are caused by filling the fuel tanks when the tractor engine is hot or running.

Safety with machinery means staying alert to what could happen **IF**—someone slipped, the machinery started, a sleeve was caught, the adjustment didn't hold, the cable broke, the safety hitch failed, the brake locked, the highway wasn't clear, the tire slipped, or the child ran out. Safety makes the difference between a successful operation and a costly one with casualties.

Equipment in the farm shop[2] needs to be checked regularly to keep it safe. Tablesaw guards often are left off because the user says he can't see where he is sawing. Either leave the guards on or use a safer type of blade. One blade has only a few hardened teeth cut into the edge of a solid disk. This type of blade is somewhat safer than the regular powersaw blade.

Tool-grinding wheels should be operated at proper speeds. They should be guarded and equipped with tool rests so that the work can be held safely at the proper distance during grinding. Wear goggles or a shield, and hang them near the grinder when you are through. (A green paint patch around the hook where the goggles hang will remind you that they are there for the safety of the user.) Always wear goggles or a face shield if the machine you are working on is not guarded so that you work behind a window.

[2]Farm Shop Equipment—Its Usefulness on California Farms, Circular 443, University of California.

Also, have a first-aid kit hanging where it can be seen easily. If you back it with green, it will remind shopworkers that a good safety practice is to clean cuts and protect them aginst dirt.

Many accidents occur when machines are being started or stopped. Make sure everyone is clear of machines before you start them. Before you start any machine it is good practice to check for tools that may have been left in a danger spot. Tools that fall into the machine or tools that are thrown into the machinery when it starts cause damage and delay in farming—and may cost a life.

MIND YOUR MACHINERY

You can learn safety engineering much easier and quicker by doing the job for yourself. Let's do this in three parts.

- **Inspect a ranch-operated shed** for receiving almonds, walnuts, or fruit where cleaning, drying, or other machinery is used. Look it over carefully for safety features and other features that are not so safe. Make a sketch or take pictures of what you find so that you can tell others.

- **Look at a combine, hay baler, or other piece of field machinery** to find the safety shields, the safety instructions, moving

parts, drives, or shafts that are not properly guarded, and tell how the guarding could be done to make the machinery more safe to operate.

- **Do at least one constructive job to help with machinery safety.** For example, you might help clean up and straighten a shed used for dehydrating prunes, or a shop used for making machinery repairs. See that all power drives are properly guarded, and that the place is lighted properly. You might want to do some color painting to improve efficiency and safety. Or you might prefer to work on some field machine. Clean it. Check the safety features. Add some others if you can. Paint the steps white, the unguarded drives or insides of the guards orange, the fire extinguisher and bracket red, control levers blue.

Even if you do not live on a farm, you can get permission through your leader, to inspect and clean some farm machinery. Even a lawnmower needs some safety checks and care.

WHAT HAVE YOU LEARNED ABOUT MACHINERY MUSTS?

Check the correct box.

1. Machinery should be guarded:

   to keep out the dust. ☐

   to keep out fingers and floppy clothing. ☐

2. Riders on a tractor:

   are safe if they sit on the driver's lap. ☐

   shouldn't be sitting on the driver's lap. ☐

3. A machine operator should stop the machine before making adjustments because:

   there is danger of getting caught in the moving parts. ☐

   there is danger of making the wrong adjustment. ☐

4. Colors help in safety and machinery. Orange is:

   used for marking steps and handholds. ☐

   used to mark gear or sprocket drives that can catch fingers or clothing if not guarded. ☐

5. The safest thing about a machine is:

   an automatic stopping switch. ☐

   a safe operator. ☐

6. Driving a heavily loaded tractor up a steep bank is:

   a safe practice. ☐

   a dangerous thing to do. ☐

7. Farm machinery should be checked:

   regularly. ☐

   when something goes wrong. ☐

8. Safety work is interesting because:

   guards and operating practices can be improved on nearly every machine you see. ☐

   all machines can be completely guarded to make their operations safe. ☐

MOWERS MEAN BUSINESS

One of the most worrisome pieces of equipment for the safety engineer is the power mower used around the home. It is very difficult to guard. It also is difficult to convince users of the hazards of these machines.

It would help if every machine had a "dead man" switch or clutch so it would stop when the operator leaves his position behind the mower. Many operators cut off their fingers reaching under these mowers or picking them up when they are still running.

Guards never seem to prevent these rotary mowers from throwing rocks and other foreign objects picked out of the grass. Of course, if the guards are too low they tend to clog the machine and reduce its effectiveness.

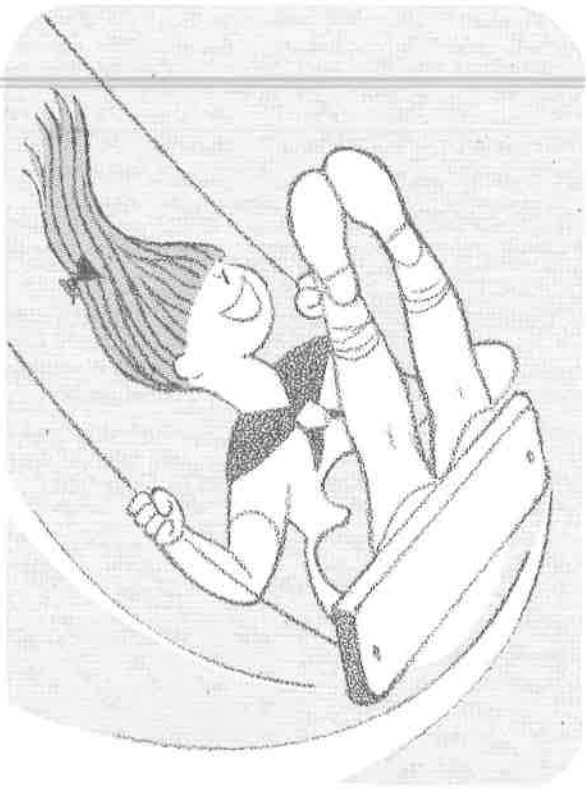
Use the same precautions around gasoline-operated mowers that you use for tractors. Stop the engine before working on the machine. Don't refuel while the engine is running or hot. Store the fuel in a red can in a safe place away from fire. Oil leaks and gas leaks should be taken care of promptly. Dust and trash collecting in the cooling fins and shrouds of the engine can cause heating problems leading to accidents. Loose and worn belts reduce the efficiency of the machine.

The same precautions used around electric equipment in the shop should be used around the electric-drive mower. The mower should be fitted with a 3-wire cord. We do not leave safety grounding to chance any more. While one of the two wires supplying the power circuit is called the "ground," a third wire is used in shops and outdoors to ground the frame of the equipment and reduce the hazard.

Start cutting nearest the power outlet and work back and forth across the lawn to avoid crossing under the power cord.

When operating any power mower, work safely and keep others at a safe distance.

PLAY SAFE



CHILDREN LIVE DANGEROUSLY

It seems to be part of growing up that boys and girls have accidents—many of them while at play. Most of these accidents happen because children are playing in the wrong places.

Machinery seems to attract children like a magnet—but it is very dangerous for children to play around it. Many children play in the street—but it is dangerous there, too. It is no place to have a ball game or to race wagons or skateboards. Many children are injured seriously when they play around livestock, or with matches, or in iceboxes, or on stairs or ladders.

When older persons supervise play, they often have "rules" that seem to take the fun out of playing—but the rules may save your life. Play and recreation should be planned to avoid accidents. This is not always easy. Running, jumping, falling, throwing, swimming, hammering, sawing and nailing all have their excitement and their hazards. But if they are well supervised, much of the accident risk can be removed—making them more fun for everyone.

PLAN AN OUTDOOR PLAY YARD

An outdoor play yard is a good place to have fun and to keep your little brother or sister out of mischief. The equipment you will want to build or supply will depend on the ages of the boys and girls who will play in the outdoor yard.

Pounding boards, basketball hoops against one end of the garage, slides, swings, sandboxes, croquet sets, and Ping-Pong tables are just a few of the many items of play equipment that would keep a child entertained and help him grow and develop.

Enclose the yard with a fence if you can. It is best if it is within sight of the kitchen or living room window, so that mother can keep an eye on it—especially if the children are small. They might have swings, a sandbox, a teeter-totter, or a "jungle gym." If everyone in your home is older—10 to 14 years or more—you may want to have a basketball hoop, croquet court, or handball court.

You can certainly make yourself popular by becoming an expert on organizing safe play for youngsters.

PLAN INDOOR PLAY FOR WINTER MONTHS

It's just as important to play safely indoors as outdoors. A basement, a playroom, or even a large bedroom could be turned into a "place for fun" when it is raining outside.

There are lots of things you can build to keep young people busy.

How about a puppet theater? You could have fun making hand or string puppets and putting on plays. A good light and a white wall can be made to work as a shadow puppet theater. You'll be surprised what you can do with your hands alone or with paper cutouts to make shadow plays. You could fix up an easel so that younger children can paint.

Simple card games keep youngsters busy for hours. You could teach them games such as "stagecoach upset" or "lion hunt[3]." For you and some of your older brothers and sisters or friends, you might want to have a Ping-Pong table. There are lots of things you can do to make indoors a delightful place to play—and play safely.

WATER CAN BE SAFE

Swimming is fun and good exercise—if it is done right. The most important rule is never go swimming alone. **ALWAYS SWIM WITH SOMEONE ELSE**—then you can keep an eye on each other. If there is trouble, there'll be someone there to help.

Stay in shallow water until you learn to swim. Nonswimmers have a bad habit of riding innertubes or air mattresses into deep water. When a swimmer gets over his depth in water, he may panic and drown. A rope separating the shallow part of a pool from the deep helps to warn people to stay where it is safe. Fenced-off pools, ponds, and irrigation canals also prevent drownings.

With a little practice, you can learn to float. If you can stay afloat in deep water, you will have time to rest and decide what to do next —or wait until you are rescued.

It isn't safe for an average swimmer to go after a drowning person—a swimmer in trouble may pull you under and drown you both. The best thing to do is supply a float of some kind to the person in trouble. A rope tied to an innertube or life buoy, or even a piece of wood that floats can be used to tow in a person.

There are certain rules of conduct around water, too. Do not run on the edge of a pool. Water makes it slick, and you may fall and injure yourself. Horseplay around water or in a boat always brings trouble. Do not swim into areas where boats are being operated.

You should know how to swim before you get in a boat. And know the rules of boat safety before you operate a boat. In a boat, you are responsible for the safety of other persons in the boat.

Overloading a boat can cause it to capsize. If your boat upsets, it will help keep you afloat until you are rescued. Never take your boat into swim areas—any more than you would drive your car on the sidewalk.

Lifebelts are a must if you water ski. Children should never be allowed on docks or boats without lifejackets.

There should be a life preserver for everyone in a boat.

Sometimes a drowning person is rescued but dies because no one knows how to give him artificial respiration. Mouth-to-mouth resuscitation is the type most commonly used. Tilt the victim's head back with his chin up.

Remove any foreign material from his nose and mouth. Pinch his nostrils together and

[3] These games and others are in the Agricultural Extension Service publication, "A Bushel of Fun," 4-H-G50.

place your mouth over his. Blow into his mouth until his chest rises. Remove your mouth and allow the air to come out. Repeat this 12 to 15 times a minute, once in 4 seconds or less (once in 3 seconds for small children) until the victim starts breathing for himself.

NOW YOU CAN MAKE PLAY MORE SAFE!

- How good are you at building things? Make a list of toys and games that might interest you or your younger brother or sister. You can get ideas from visiting a toyshop and taking notes on play equipment you find at other homes and in schoolyards.

_____

_____

_____

_____

_____

- Can a play area be made in your yard at home where mother can keep an eye on the happenings? Lay out such an area; have it fenced if possible, and see how much play equipment you can improve or make available for the job. List the items that you can obtain now.

_____

_____

_____

- Inspect the homes in your community to see what is being done for play—in a safe place—with safe equipment—and under the control of an older person. List what you find and make sketches or take pictures if you can.

_____

_____

_____

_____

_____

Ask your county home advisor for reference material on play equipment.

WHAT DO YOU KNOW ABOUT SAFETY IN PLAY?

True or False

1. To be safe, children should never run, jump, or climb. ☐
2. A fenced play yard is necessary for safe play for children. ☐
3. For safety, youngsters should play outside only. ☐
4. Plans should be made for play areas inside as well as outside. ☐
5. Playthings and equipment need not be expensive or difficult to obtain. ☐
6. The "buddy system" for safe swimming is a "must." ☐
7. Permission should be obtained from adults before you go in swimming. ☐
8. It is never safe to play in the street. ☐

TOOL TRAINING

TREASURE YOUR TOOLS

Why should you learn the right way to care for tools and how to use them properly?

Every good workman takes pride in the tools he owns and the way he uses them.

Faulty tools and careless users cannot do a job well, and they cause accidents.

One-tenth of the disabling injuries on the farm are caused by accidents from handtools.

Have a place to keep your tools when you are not using them. Tools that are left lying around become dirty, broken, or lost, and they get in the way of other workers.

The ideal place to keep your tools is hanging on a wall near your workbench. If you need to take a few tools with you to your work, carry them in a toolbox. You can pad the box with a piece of old blanket to keep them from banging against each other.

Hammers, at least two, are needed in a set of tools—one for driving nails and carpentry work, the other for metalwork. A carpenter's hammer will break easily if used to pound metal. Metalworking hammers are not made for nail driving.

When pulling large nails, remember to use a block to get the best leverage on the nail-head.

Keep your hammers clean. Wooden handles may need occasional tightening. Replace the handles when they are cracked or broken.

Screwdrivers are useful farm tools. See that the blade is ground straight so it will fit the milled slot in the screwhead. If the blade is too thick or too thin, it may slip out of the slot. A well-equipped toolkit has screw-drivers of different sizes and with different blades to fit a variety of screwheads.

When using screwdrivers, keep your free hand away from the blade—it might slip and injure you. Keep your work in a vise or on a workbench when possible. Don't use a screw-driver for a pry bar or a cold chisel—you'll ruin the blade.

CAUTION: Wear goggles when you are fitting tools on a grinding wheel. Hang the goggles near the grinder when you are through using them. Be careful when you work around any shop equipment that does not have safety guards.

Pliers are handy and necessary tools. If you have a pair of electrician's pliers, don't use them for hammering. Keep them oiled and rust free. Wrap the handles with tape so they will stay cool in the sun and not slip in your hands. Careless mechanics may use slip-joint pliers as wrenches. This spoils the shoulders of nuts so that wrenches cannot be used on them safely.

Wrenches are made in many styles and sizes for heavy or light work. Don't be a wrecker of wrench sets. Select the wrench for the job, but don't test your strength with it. Pulling on a wrench is always safer than pushing. Keep in mind where your knuckles might strike if the wrench slips. If a nut is "frozen" in place, try hammering to jar it loose. It is even better to cut it off with a cold chisel than to spoil a wrench trying to remove it.

A quick way to learn safety with tools is to demonstrate their safe use to your club.

There are many things to be learned about safe use of tools. This is just a starter for you.

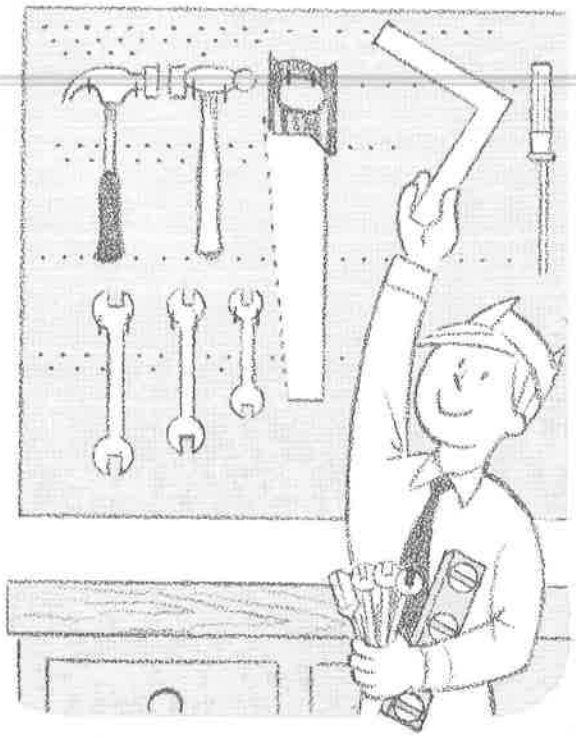
Good references on handtools:

ABC's of Handtools, by General Motors Corp., Detroit, Michigan 48202.

Safety on the Farm, California Farm Bureau Federation, 2855 Telegraph Avenue, Berkeley California 94705.

HANDTOOL HUNT

See how many unused tools you can find around your home, in the family car, in the tractor toolbox, or other storage places. When you help straighten up a shop or toolbox, you may find many good tools that have been neglected or discarded. If the owners give you permission, clean the tools, and arrange them on a board rack or in an orderly toolbox.



Here are some things you might do—

- Find a couple of old hammers, one for carpentry, one for metalwork. Clean them and replace the handles, if necessary. There are liquids available to clean rust. You also can use grit papers and other abrasives to clean your tools. Mark your tools with paint so you can identify them.

- Assemble a set of screwdrivers you can find. Dress the blades. (Don't sharpen them.) Clean and finish the handles.

- Pliers are another item that can be salvaged and made workable. Add a few to your kit of tools. See that they are clean and usable.

- Wrenches are always in demand in any shop or toolbox, yet many good ones are discarded because of broken sets. See how many you can recover and how much of a set you can put together. Probably you will find and clean an adjustable wrench.

This could fill in the set so that you have a wrench to fit any nut size.

- Add other tools you can find, and learn to demonstrate the safe way to handle and use them. You might have to visit a number of scrap piles over a period of time to gather the tools you need for a good set. But this will be fun and cost you little. You will have demonstrated to others the thrift and advantage of keeping tools and taking good care of them.

- You might want to tell about certain new safety practices you have learned with tools.

HANDTOOL QUIZ

Check correct answer box.

1. A box or rack is needed for handtools:

   to keep the tools sharp. ☐

   for safety and convenience. ☐

2. Safe use of tools means:

   working slower. ☐

   greater efficiency. ☐

3. A hammer with a loose handle is a hazard:

   only when other workers are present. ☐

   any time it is used. ☐

4. When using a screwdriver, you should:

   hold your work. ☐

   put your work on a bench or in a vise. ☐

5. When using a wrench, it is safer to:

   push away from you. ☐

   pull toward you. ☐

6. A carpenter's hammer is unsafe for pounding on metalwork because:

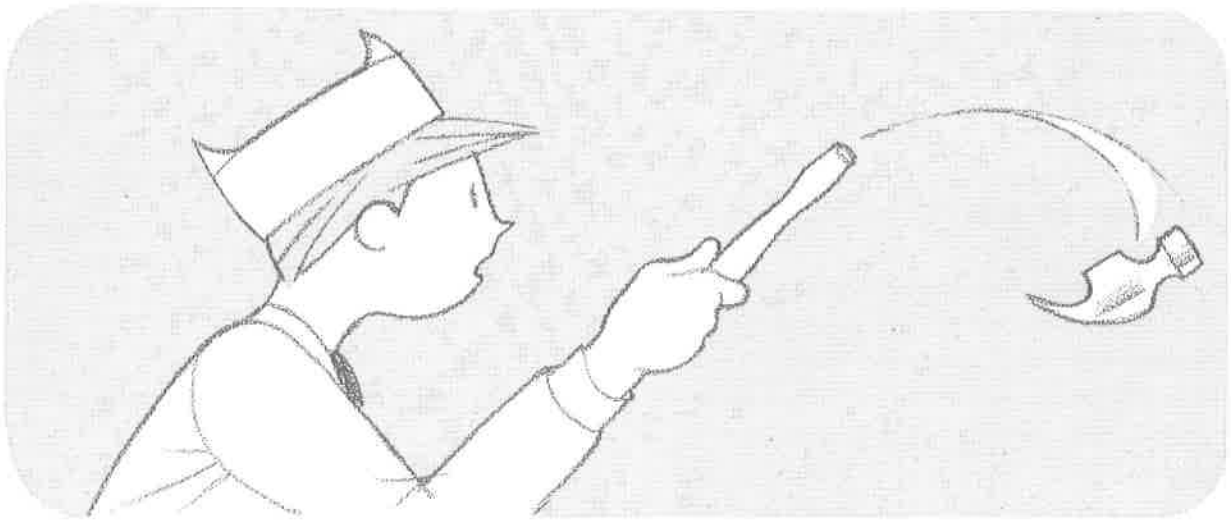
   the hammer may break. ☐

   the claws may catch in your clothing. ☐

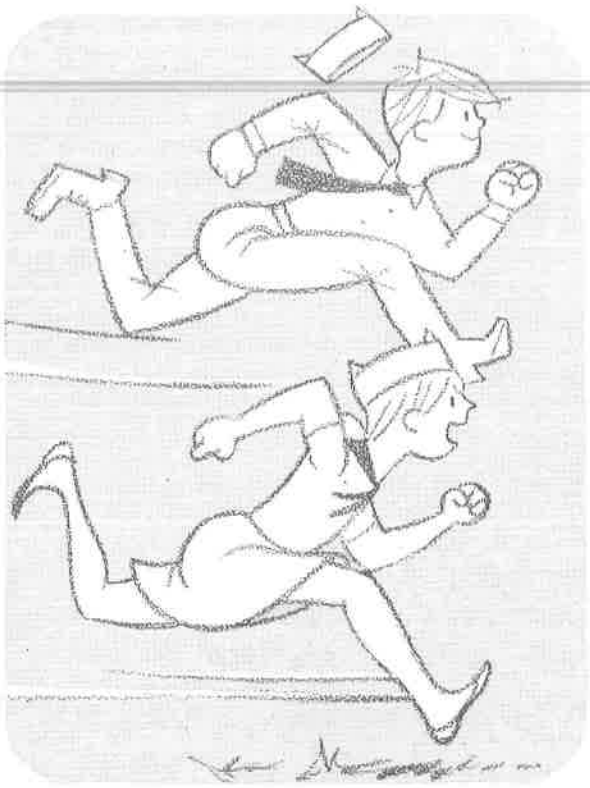
7. Pliers should not be substituted for a wrench because:

   the pliers may break. ☐

   rounding the shoulders on a nut may make it unsafe for the next fellow with a wrench. ☐



EXTRA SAFETY EVENTS



SAFETY ACTIVITIES

Safety is no accident. It takes work and thought and planning. Many industries and large farm organizations hire safety engineers.

A safety specialist can save his employer many times his salary by preventing accidents. Insurance seldom covers the entire cost of an injury or death. . .money cannot pay for the grief and inconvenience and the loss of time and production. And each accident may increase the cost of insurance.

WHY NOT BE A SAFETY ENGINEER?

Individual homes and farms cannot afford to hire a safety engineer. But you could be a self-appointed safety engineer and plan your own safety campaign. You can follow safety practices and look for hazards that can be eliminated. You can encourage others to help you carry out your plan. You can show them that careless persons have more accidents. Here are some suggestions for your campaign as Safety Engineer.

CLEANUP FOR SAFETY

You can do a lot to improve safety around your own home and farm, but why not plan a safety cleanup campaign for your entire community? This can be a lot of fun because it takes team effort to get all the citizens interested.

You might start with traffic. Is there a particular place where accidents often occur? If it's a blind corner, perhaps you can get permission to cut back brush and trees that obstruct the view of drivers. Or maybe there's a bad turn that needs a warning sign. Perhaps it's a place where pedestrians often cross, and a crosswalk sign is needed. Many small communities do not have enough street and road signs—some lumber company might furnish the posts and you could make the signs and install them.

A hazard hunt will turn up many more places that need to be cleaned up for safety. Perhaps it's an old unsafe building that you can get permission to tear down. It may be a vacant lot that is unsightly and a fire hazard as well. You might get the fire department to burn it, and give a demonstration of fire-fighting at the same time.

SAFETY DISPLAYS AND EXHIBITS

Safety displays are eye-catchers—at meetings of any kind.

Some things to display are: Safety goggles alongside a broken pair of eyeglasses. By the goggles, put a card labeled **THIS**, and one by the broken glasses labeled **NOT THIS**. Grease pencils make good letters for such signs. Perhaps you can find green for **THIS** and red for **NOT THIS**.

To show proper storage of kitchen knives, put a **THIS** card behind some knives in a scabbard or fitted tray for knives. Put **NOT THIS** behind a jumbled pile of cutting and table knives.

For children, put a **THIS** card behind some round-nosed scissors, and **NOT THIS** behind a sharp-pointed pair.

Behind a good ladder or stepstool, put a **THIS** card. Behind a loose broken ladder or box put a **NOT THIS** card. You can think of many comparisons. Any display of safety equipment or clothing will attract attention.

For a larger, more formal display at a fair or other show, get your group together to develop ideas. For example, the danger in chemicals is not generally understood. "Read the Label" could be emphasized, showing the warnings on labels. A fire safety display might show the types of fire extinguishers and firefighting equipment available for use on different types of fires. A tractor safety theme might show a tractor partially tipped to show how accidents occur. This should attract attention. Other points could include power-take-off guards. Hazards in fueling can be shown. Also you can emphasize that extra riders are out of place on a tractor.

WHY NOT A POSTER CONTEST?

Posters help to remind us of things we perhaps know but tend to forget. Good spots for safety posters are bulletin boards, walls and doors of shops, and on machines themselves. Some are very effective with just a printed message. Cartoons or drawings often are used, too. They don't need to be professional.

You can create a lot of good ideas with a poster contest. Each club member could make one during a program activity some evening. The better ones could be displayed in store windows or at meetings of Farm Bureau to let the community know you are interested in their safety as well as your own. Prizes for posters need not be expensive. Most people would prefer recognition at a meeting, a letter, or news story, saying they had done a commendable job.

ILLUSTRATED TALKS

It is easier to stand in front of a group and talk if you have something to show or explain (a prop). Be sure your prop works. Place it so it will be handy for you to reach or look at now and then. Usually, it should be even with you or a little ahead of you toward your audience.

For example, if you are explaining how to use a ladder, you won't stand behind it so your audience can't see you, and you don't stand in front of it either—you don't want to turn your back to the audience when you show how to climb the ladder and use it safely.

RADIO INTERVIEW

Local radio is a good means of telling the community what you are doing or have done. All radio stations have "public interest" time for programs such as yours. Your job is to find out from the radio farm director what kind of program he wants and when he can use it.

People, places, and things make good topics for a radio interview. You can talk about people who helped with the hazard hunt. You can tell about the places you have been. You can tell about the things you found—but, remember, no one likes to be pointed out as the horrible example. You can give statistics to prove that something should be done to improve safety.

Before your interview, write down some questions you would like to have asked, because you have the answers. Also, this helps you to plan what you will say. Don't memorize, don't repeat. Make your time on the air as friendly and spontaneous as you can make it. Talk as if you really believe in what you say.

Most announcers read their scripts—but don't you try it. Think of what you want to say and say it. Your listeners will like you for it.

TV SPOTS

Putting your club activities on television should not be difficult if you have something good to show. Television stations have "public interest" time the same as radio stations. Your viewers won't expect you to be professionals. But you must have something important to say. Tell it naturally and use good props.

If you want to spoil your show, have a memorized speech. Better tell your story with a few different words each time. If you always say it the same—it will sound memorized. Television demands personalities. You have one if you tell enthusiastically what you have learned and what you believe.

Have your props ready. Place them where they are easy for you to reach. Be sure they work every time. Tell what you are going to demonstrate and why it is important. Put on a natural show. Then repeat, in a different way, what the demonstration showed and why what you are talking about is important.

Here is an example: Many farm accidents occur from unguarded machinery. Open belts, gears, chain drives, and power-take-off shafts are hazardous when left unguarded. You can use pictures of the unguarded areas if you can't bring in the real thing.

For the demonstration you could chuck a filed smooth shaft in a small drill. Mount it for your demonstration so you can keep both hands free. Use a soft handkerchief or piece of cheesecloth. Show how the supposedly smooth shaft will grab the handkerchief out of your fingers. Don't get too close yourself. Remember this is the way a cottonpicker works. Any moving part on a machine needs to be covered or shielded in such a way that persons cannot become caught in it.

Your ladder safety demonstration also would go over well on TV. Be prepared to include other accident facts to fill the program time.

LET'S HAZARD HUNT

A very necessary part of any safety program is inspection and correction of hazards in your home, on the farm, in industry, and in the community.

Your mother is correcting hazards when she picks up items someone might stumble over, replaces furniture someone left out of place, or puts things out of reach of little hands. Your father does the same around the farm. You can help by watching for hazardous situations and equipment. The only way you can recognize hazards is from observations, learning, and experience. The only way you can get that experience is to practice mak-

ing inspections with others interested in learning, too.

For example, if you should find a battery installed under a gasoline tank on a machine, you should recognize it as a dangerous arrangement. Fumes from the gasoline tank or line leaks will furnish the fuel. A spark from connecting a battery charger or a wrench falling across the terminals will supply the ignition and you will have a fire.

A ladder left in an upright position is always a challenge to a child. Store the ladder on its side, or better yet hang it on a pair of brackets on the side of a building under the eaves. It is in sight and ready in case of an emergency.

To get the most out of a hazard hunt, your club could divide into teams of two or three members. Each team goes through the area, making careful notes on every item. When you finish, compare notes. You'll be surprised at the many things you did not think of as hazardous that are pointed out by someone more experienced. Accidents have a habit of occurring in places that have been "safe" for years.

Usually the owner will correct the hazard after you leave. It takes time and special effort to correct hazardous situations that have existed for a long time. Don't expect miracles. Each inspection, each discussion, each report makes people more conscious of their responsibilities.

After a morning or afternoon of hazard hunting, it might be appropriate to have a few safety demonstrations. They don't have to be elaborate or complicated. Everyone knows something about safety, and probably could give a short talk on some safety practice he has found to be important.

SAFETY COURT

Safety courts can be fun as they teach. They can be as simple or complicated as you want. At camp, for example, you can give a "judge" a hammer for a gavel and dress him up in a black "robe" with a pair of glasses to hang near the end of his nose.

Anyone in the audience can be accused of unsafe practices. (If you know something about his home life, camp life, or his equipment, the charges can be made even more real and funnier.)

Without giving "the accused" much opportunity to plead "guilty or not guilty" he or she can be declared "guilty" and sentenced to "hard labor" or whatever you have in mind as a punishment for the breach of a safety practice you have seen or imagined. For example, if the accused is guilty of carelessness with tools, make him drive spikes into a board or log with a tack hammer.

If he is guilty of starting a fire with kerosene, give him a folder of matches and have him burn each match down to a ¼-inch length to remind him that fire is dangerous. If he is accused of operating a tractor without a power-take-off shield, have him roll his pants legs up and down 50 times to remind him that unguarded shafts and drives can catch clothing and injure people.

You might want to add a "bailiff" to your court to keep order and look after the prisoners. You also can have "attorneys" for the "state" and the "defense" to argue the cases.

With all the fun there will be a note of seriousness to each "case." The teaching can be made very effective. Especially at camps, a safety court can be used to stress such

HAZARD HUNT LIST

Where found	Hazard	How would you correct it?

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

Hazard Tag

What is it? _____ Date: _____

Why is it? _____ Initials: _____

rules as "have a swim buddy," "do not run on the dock," "pick up all broken glass," etc.

HOW TO JUDGE SAFETY

To judge safety you must know the established safety standards.

Housekeeping is the term used to indicate orderliness of the area or machine being inspected. If you find a shop with tools left out, scraps on the floor, and poor lighting fixtures and ventilation, give the area a poor safety rating. If a machine looks as if it had never been cleaned or adjusted, it may have hidden defects or dry bearings that will contribute to accidents.

Safeguarding of machinery, wiring, steps, and working surfaces also is important to the prevention of accidents. To judge what has been done you need to know what can be done to protect those working in the area or on the machine.

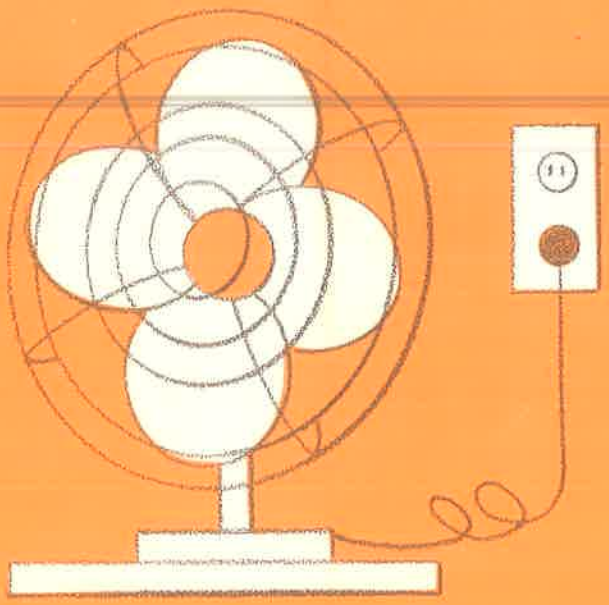
Maintenance, proper repair of broken equipment, and periodic servicing and checking of the equipment also are essential. If the owner brags that he has "never put a wrench or grease gun on that tractor since it was new," he shows a complete disregard for safety and for the value of the equipment. All equipment wears out in time. It wears faster if poorly maintained. Poorly maintained equipment causes accidents.

Safety equipment is essential to prevent accidents. A safety judge expects to see goggles for eye protection near grinding wheels, proper headgear and gloves for welding, fire extinguishers around fuel supplies, blocks for wheels of equipment being repaired, and wiping cloths for greasy hands. In the field where head injuries are common, you look for hard hats. Where eye injuries are common, you look for goggles. Where dangerous pesticides are being used, you look for protective clothing and cleanup facilities when the job is done.

Worker comfort also is important. A worker should be able to work faster and safer when he is protected from the hot sun. Some tractors and self-propelled machines are being equipped with cabs and heaters or coolers like truck cabs. This enables the operator to work longer hours with less fatigue and greater safety. In a building, the worker should be able to work faster and safer where glare is controlled, and good lighting and ventilation are supplied.

Safety training is important to accident prevention. It pays to instruct workers in such a simple thing as how to climb and use ladders safely. Many workers don't realize they should start at the top of the ladder and work down in picking a heavy bag of fruit. Where and how should the pruning shears be carried when both hands are needed to move the ladder? A truckdriver may need instruction on a tractor.

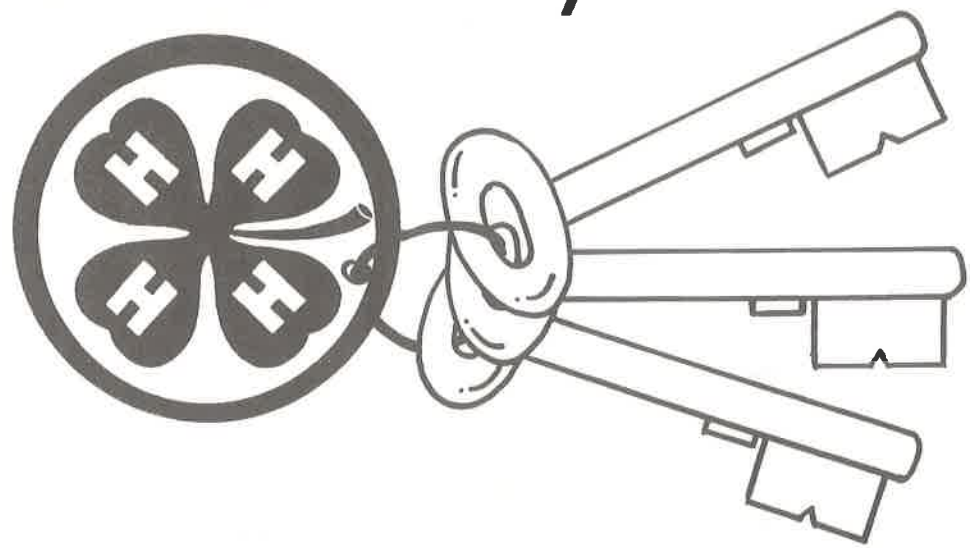
If a worker has done his job safely over a period of time he deserves some acknowledgment in front of the other workers. Such recognition helps the workforce to realize that safety is important to them as well as the owner.



The End

The Keys to 4-H

Canal Safety



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ACKNOWLEDGMENTS:

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FACTS

Urban water use is about 5,000,000 acre-feet annually.

There are 1800 miles of major canals in California.

Canals cost approximately $63,000 per mile to fence.

There are 102 irrigation districts in California.

The average person uses 172 gallons of water per day.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, James B. Kendrick, Jr., Director, Cooperative Extension, University of California.

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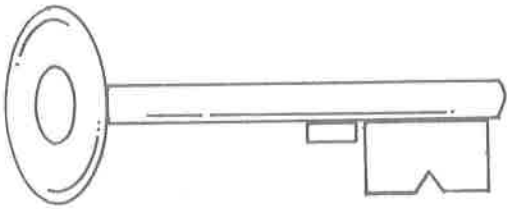
Teen Leader

The Teen Leader in the canal safety program works along with the Leader to help reduce irrigation canal hazards in the community. This includes going along with 4-H'ers to insure member safety, planning project meetings with the adult and looking for canal safety needs in the community. The Teen Leader responds to community calls for help in the area of safety from public agencies, and plans enjoyable activities for the members' recreation.



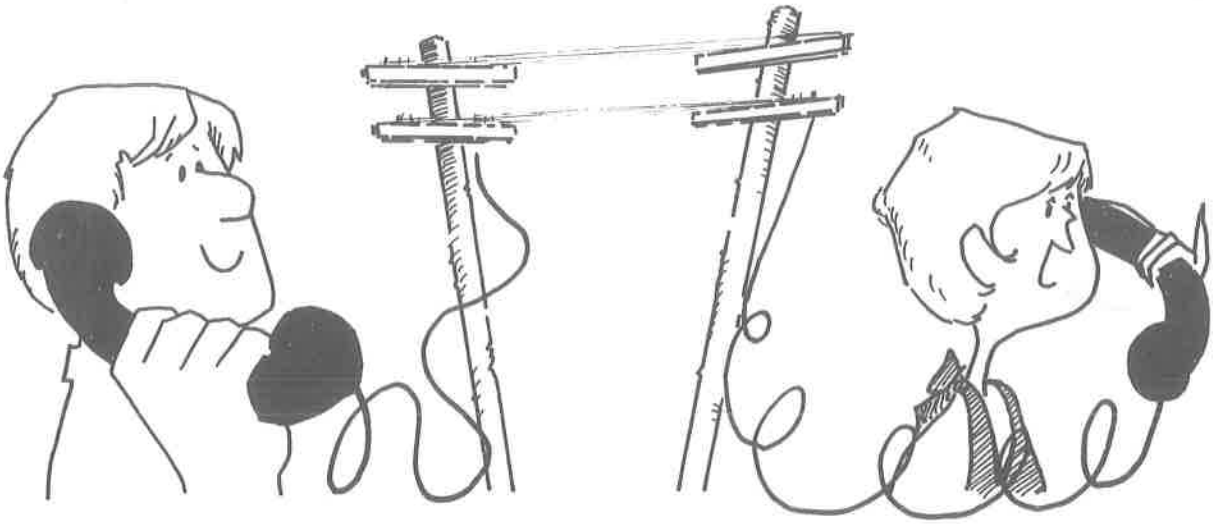
The Teen Safety Leader:

1. Helps members plan, organize, and evaluate their canal safety project work.
2. Puts together the program content for the year.
3. Plans activities for the group.
4. Plans recreation for each meeting.
5. Plans meeting content, contacts 4-H'ers, and conducts project meetings.
6. Obtains and gives canal safety literature to the members.
7. Sets standards for the project work.
8. Keeps members informed of canal safety-related activities in which they can participate. Helps them prepare for such activities.
9. Develops parent involvement in the program.
10. Finds safety-related agencies and develops programs with them that will involve 4-H'ers in canal safety.
11. Sets up the budget for the year.

The Adult

The adult:

1. Is there to answer the Teen Leader's questions about canal safety.
2. Informs the Teen Leader of Adult Leader meetings and of what is discussed.
3. Is interested in the safety activities promoted by the Teen Leader.
4. Suggests people in various agencies who might be available for meetings or who are sources of information.
5. Along with the Teen Leader, helps members measure their progress in their canal safety work.
6. Attends all project meetings and activities of the group.
7. Helps work with parents to keep them involved in canal safety.



HOW MANY

Working with a small group you can learn along with them during the year and learn how to be a productive leader. If you are working with an experienced leader, perhaps you could start with a large group.

Five to twelve members is a small group for canal safety work because many activities, such as distributing posters, require a good deal of time. Fifteen to twenty members is a large group. If you feel you have too many members, recruit another Teen Leader to work with you.

To accomplish a lot during the year:

1. Divide the group by age and experience level and have the older, more experienced members work on their own projects, like puppet shows.
2. Always do activities together. The older participants can perhaps hold chairmanships.
3. Hold meetings that include all the members.
4. Hold special meetings for special projects, including only those 4-H'ers involved in these projects.

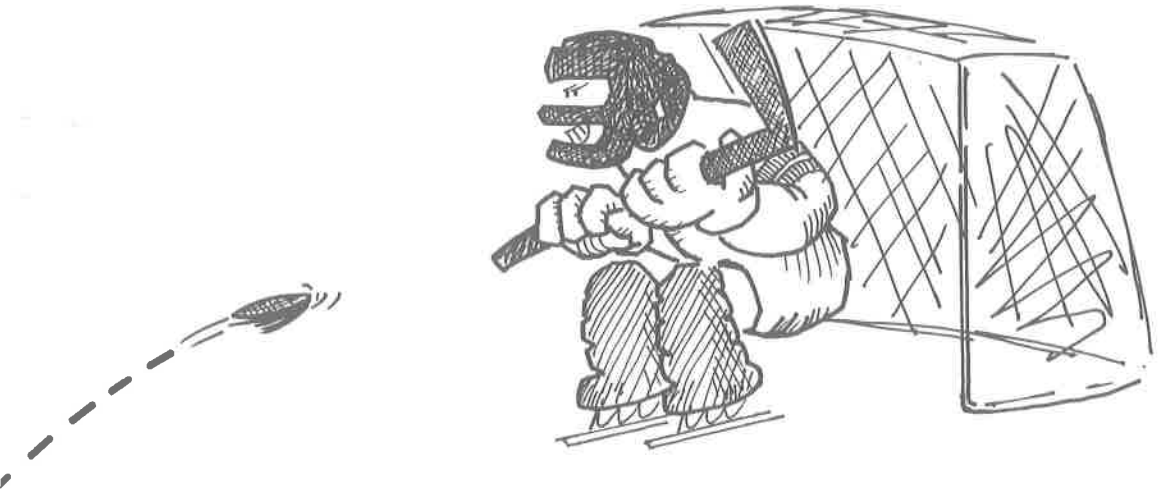
Specific goals define tasks

Specific goals let the members know what has to be done. The specific goals of the canal safety program were to:

1. Distribute 500 posters to businesses and schools in the county.
2. Obtain funding to help defray the cost of the project.
3. Have different age groups work together for a common goal.
4. Work with television and radio to develop on-the-air safety announcements.
5. Work with other volunteer groups to provide transportation and other services as needed.

To achieve your goals in setting up a canal safety program it is important to set up a schedule and work from a time table. The Teen Leader should check frequently on the group's work and keep the leader informed of the progress. This Teen Leader follow-up is the key to a successful program.

GOALS ARE VITAL



General teaching goals of a canal safety program might include:

1. Reducing drownings in canals.
2. Making the community aware of the dangers of irrigation canals.
3. Teaching children that canals are not safe for swimming, boating, or fishing.
4. Teaching children that canals have strong currents and icy cold water, which can cause cramps quickly.
5. Teaching children that canal edges are not safe playgrounds.
6. Teaching people that the slanted sides of the canals are slippery and it is difficult to climb out of the water.
7. Creating cooperation between the 4-H and other agencies, such as the National Safety Council and local irrigation districts.
8. Training 4-H members for public speaking.
9. Making members safety conscious.

Meetings =

MOVEMENT TOWARD YOUR GOALS

Each group meeting should contribute to the general group goal.

Possible activities for meetings:

1. Contact farm organizations and the Irrigation District and volunteer the services of your 4-H group. Visit the public relations person for the Irrigation District and ask what this agency would like your group to do.
2. Write the United States Bureau of Reclamation and the American Red Cross who have a joint water safety campaign. Ask for literature and any suggestions to get a canal safety program underway.
3. Sit down with your group and work out ideas that the group could do for canal safety *in the community*—it takes the entire community working together to accomplish canal safety.
4. Volunteer to post canal safety warning posters throughout the area if the Irrigation District or some other agency will have them printed.

Not all activities are suitable for all ages. The Teen Leader should work to determine the proper activities for each group.

Possible activities for meetings (cont'd)

5. Volunteer to hold a county-wide poster contest for 4-H members. Offer prizes for the winning posters. Plan to give out the awards at the 4-H fair or other county 4-H events in the spring when canal safety is so important. Ask some local agency to donate the prizes; they like to get into the life-saving act.
6. Plan TV announcements of the award-winning posters.
7. Display all the posters on canal safety at various locations for the public to view.
8. Work up a puppet show on canal safety to be given on TV and at businesses and schools.
9. Hand out canal safety material at large shopping centers. Also give repeated puppet shows at the centers.
10. Work with the Sheriff's Department's Canal Rescue Squad. They can offer suggestions for your group's activities.
11. Sponsor a "canal safety" essay contest. Have the local newspaper co-sponsor it and provide the prizes. Your group could also arrange a field trip to the newspaper's plant to see its operation.

GROUP AWARENESS

Canals have slick, slanted sides and it is almost impossible to get out of a canal once you fall in. The water is usually icy cold which causes cramping, and the undercurrents are swift. Even men specially trained in canal rescue are unable to get out of canals without assistance.

Canals are dangerous for a lot of reasons; that is why canal safety programs are necessary. To conduct safety activities and programs in any area, it is necessary to know your subject and be aware of the dangers yourself. Here are some general rules for canal safety.

Don't:

1. Play on canal banks.
2. Swim in canals.
3. Ski in canals.
4. Ride bicycles on canal banks.
5. Picnic near canals.
6. Climb fences to reach canals.
7. Fish in canals.
8. Raft down canals.

Water Watchers Song

Be a water watcher now,
Canals are not safe anyhow.
Don't play on their banks at all,
You might slip or slide or fall.
If you're like my friends and me
Water watchers we'll all be.

(Sung to the tune of "Twinkle, Twinkle, Little Star.")

Note: This song could be used as a radio spot announcement.

Resources Available

The single largest failure in obtaining resources, be it financial or otherwise, is that all too often we do not expect to receive anything when we ask. Show enthusiasm when talking with people who might be able to give your group something. People are more willing to help somebody who is eager.

Films

Speakers

Community service projects

Pamphlets

State agencies to contact:

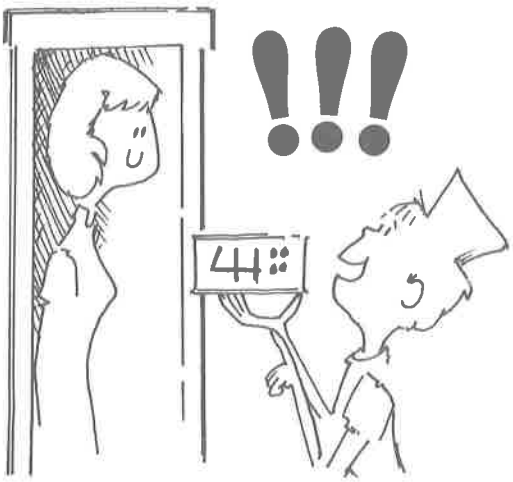
1. Farm Bureau
2. Irrigation districts
3. Public utilities
4. Department of Fish & Game
5. Cooperative Extension specialists

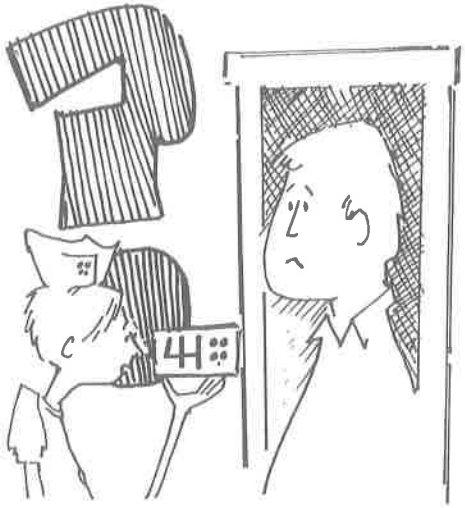
National agencies to contact:

1. Red Cross
2. National Safety Council
3. Bureau of Reclamation

Local agencies to contact:

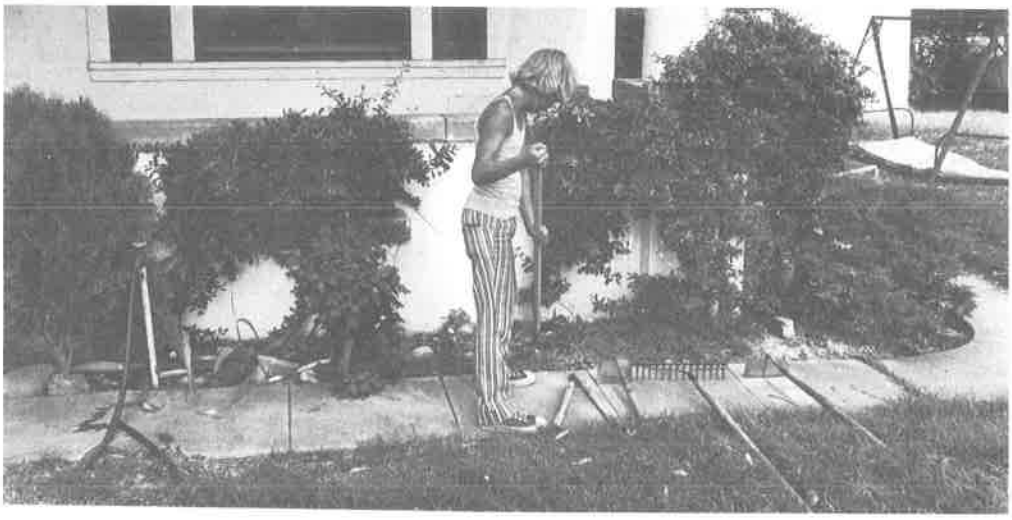
1. Sheriff's Department
2. Swim clubs
3. Service clubs
4. Theatre-drama groups, puppet shows
5. Chamber of Commerce
6. TV and radio stations
7. Hospitals
8. Nurses' Association
9. American Medical Association
10. Cooperative Extension
11. Farm organizations





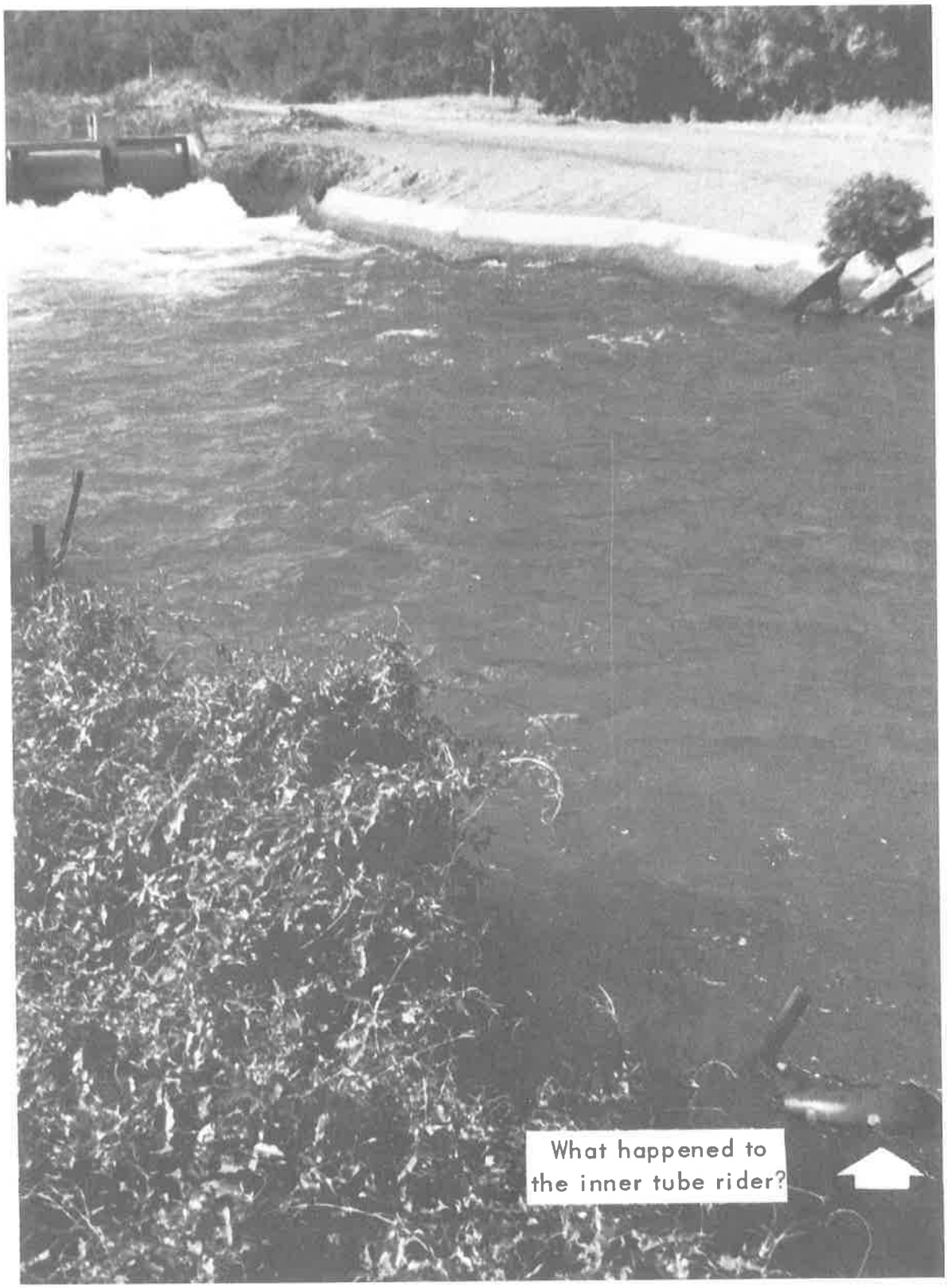
A Club is A Club is A Club...

A 4-H club should serve its community. One of the best ways a club can do this is through safety programs. Clubs shouldn't wait for accidents: they should have preventive programs. Safety is a prerequisite for all projects.



The ideas suggested in this guide can be adapted to any project, 4-H or otherwise. County-wide programs can be started by small groups who coordinate their efforts to serve the needs of their community. Contact your advisor or other leaders who might be interested. Remember the example of the canal safety program can work for either a club or county-wide event.

This pamphlet is just a guide to a canal safety program; HOWEVER, THESE FEW OUTLINED STEPS TO A SUCCESSFUL PROGRAM CAN BE USED IN ANY SAFETY AREA THAT NEEDS IMPROVEMENT IN ANY COMMUNITY.



THINK TWICE—YOU ONLY LIVE ONCE.

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COOPERATIVE EXTENSION UNIVERSITY OF CALIFORNIA

This information is provided by Cooperative Extension, an educational agency of the University of California and the United States Department of Agriculture.

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Cooperative Extension representatives, serving 56 counties in California, are known as farm, home or youth advisors. Their offices usually are located in the county seat. They will be happy to provide you with information in their fields of work.

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ACKNOWLEDGEMENT: Ruth Baker, Director, Consumer Protection Bureau, Sacramento County

The National Safety Council

Toys are fun, but some toys may be hazardous. . .

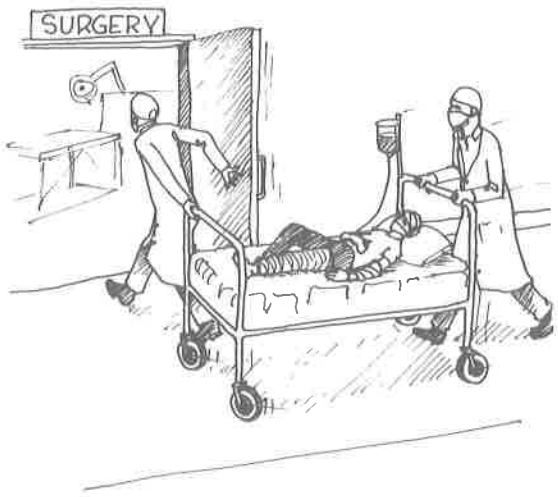
Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. James B. Kendrick, Jr., Director, Cooperative Extension, University of California.

About this manual

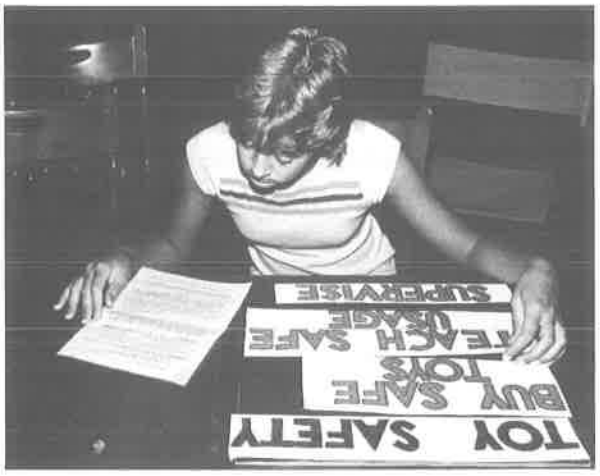
This manual is designed to help leaders develop a productive program on toy safety. You will become acquainted with the types of materials available for your use, what agencies will help you and who you can talk to for information. From the activities suggested in this safety manual both you and your group should have a better understanding of some of the hazards connected with certain toys. Also the suggested activities should be fun for everyone involved.

Some words about toy safety

No one should argue the fact toys are fun and educational, but each year an estimated 150,000 people receive hospital treatment for injuries associated with toys. Since 1970 the U.S. Consumer Product Safety Commission has banned more than 1,500 items, mostly toys. Any electric toy, such as a train or oven can be deadly if there is a faulty part or if it is misused. A child's cuddly stuffed toy can be injurious if it has exposed wires that can puncture, or if it has small parts (eyes, nose, etc.) that can come loose and easily be swallowed. Concerned individuals, whether they are parents or 4-H'ers in a toy safety program, can help lower the number of injuries by looking for and selecting safe toys. We can teach children safe play habits. We can supervise children during playtime. Remember the slogan of the U.S. Consumer Product Safety Commission: "For Kids' Sake. . .Think Toy Safety."



The Teen Leader in Toy Safety



Teen Leaders work with other leaders in the 4-H group. The Teen Leader plans activities with the adult and goes along with the members on these activities. As a Leader in the Toy Safety program your main objective is to educate the public toward toy safety and to teach 4-H'ers toy safety. Making the public aware of the importance of buying the safe toy for each age group is a big job. Be ready to provide people with the facts about toys and games for children. This may include leading the community-awareness activities with the help of your Adult Leader.

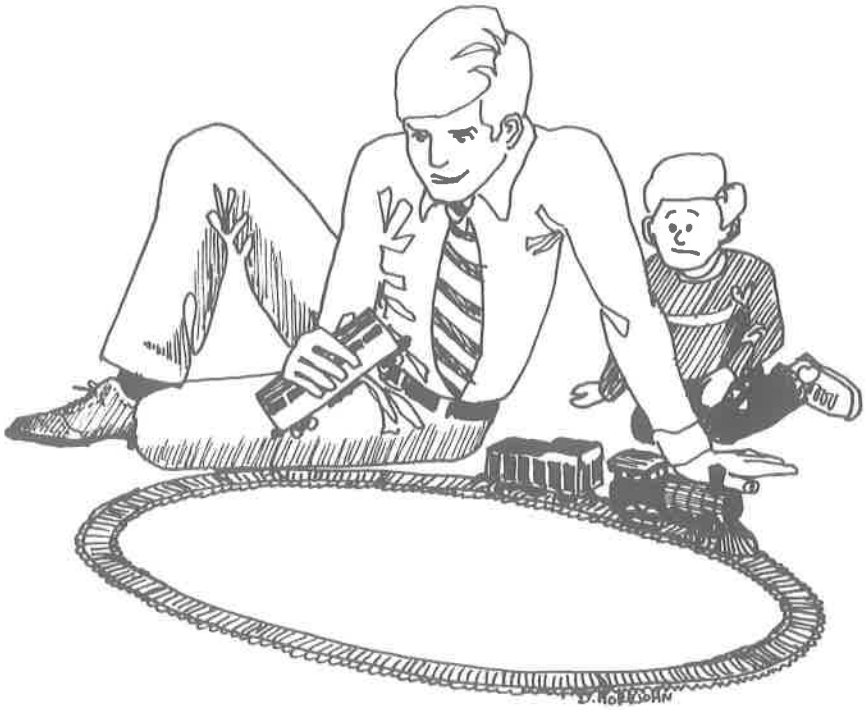
The Teen Leader's tasks are many and varied. They plan activities for the group and help members organize their project work. This includes gathering materials to be used at the project meetings. This means writing the U.S. Consumer Product Safety Commission and other agencies (see the list at the back of this manual).

The Teen Leader conducts the meetings. A meeting should be planned in advance so things run smoothly as possible. The meetings should be fun as well as productive.

Leaders seek to maintain parental enthusiasm and develop their involvement in the Toy Safety program. Remember parents may be an untried source of toy safety experience. Leaders cooperate in working out the budget for the year. Teen Leaders should know approximately the costs involved and have some ideas as to how these costs will be covered.

The Adult Leader

The more experienced leaders can answer the Teen Leader's questions about toy safety. They should know what agencies to contact for assistance. The Adult suggests people who might be able to speak at the group's meetings. The Adult acts as a public-relations person for the toy safety program. Above all, the Adult is interested in the activities of the group and shows sufficient enthusiasm to get other adults to support the program and understand the child's viewpoint.



People working together

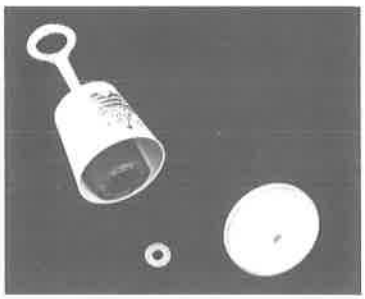
In any organization the name of the game is cooperation. Leaders of various ages and experience make up a leadership team that provides the initiative for the members' activities. The Adult Leader works with either a Teen or Junior Leader to plan the group's projects. They look for projects that maximize the group's abilities and interests. Remember that a group will only be enthusiastic if its leaders are enthusiastic as well. Have a positive feeling towards your program and your group members.

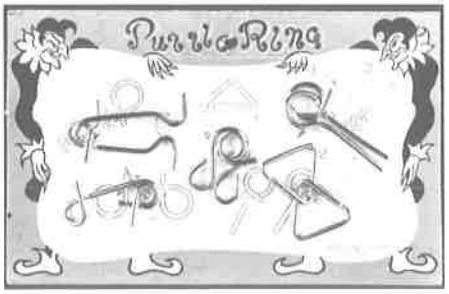
Getting the job done

Well-defined project goals let everyone know the tasks in hand. The following are some project goals that could be used by toy safety groups.

1. Establish and maintain good feelings between all the members of your group. For a program to be successful the members must feel good about working together.
2. Money to pay the expenses of the toy safety program can be a problem. Before you start making elaborate plans, make sure your budget can handle them.
3. Develop a toy safety handout to be distributed to the general public.
4. Public relations is important. Try always to present a good 4-H image in your attitudes and action.
5. Help members to speak in public. Sometimes it takes a while for people to be relaxed talking in front of a group. With your help members can develop their own toy safety demonstrations, using dangerous toys such as shown below, which enables them to become accustomed to public speaking.

Things to Swallow.





Sharp Cutting Edges.

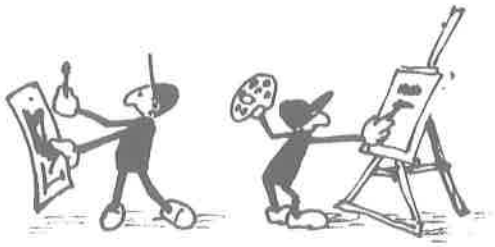
Dangerous Projectiles.

A job for everybody

A toy safety project offers opportunities for everybody to participate. The youngest members can collect examples of safe and dangerous toys. Devices in squeak toys that come loose like the one in the boy's foot (shown) can be swallowed.

Then with the help of the older members they can develop a poster idea.

The 12 and 13 year olds can make posters showing how to select toys for various ages. These members can also build a booth to be used for displays at fairs and shopping centers. The 14 and 15 year-olds can operate the display booth. They could also supervise the younger members in making the posters. They could work with the older members (16-19) to develop handouts explaining the types of unsafe toys on the market.



The older members are the ones who would be in charge of setting up the booth at the district fair. They would contact the fair office about the details. These members could also find ways to help finance the handouts on hazardous toys.

Things to do

1. Teen Leaders can order pamphlets and films from the various agencies listed at the back of this manual. These groups also have speakers that might be able to speak to the group about toy safety.
2. Contact the buyer of a local department store and ask him or her to talk to your group about buying safe toys. Ask if your group can take a trip through the store so they can learn to recognize safe and unsafe toys. Someone from the Better Business Bureau or the Consumer Product Safety Commission may like to go on tour with you.

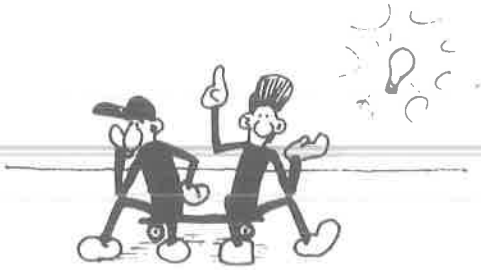
3. Plan a meeting when members can bring examples of safe and unsafe toys from home.
4. Repair a few old toys, showing how they can be made safe. You might want to start a collection of safe and unsafe toys that could be used later in displays and demonstrations. The safe toys could be donated to a children's home or the pediatric ward of a hospital later. Below a Teen Leader repairs a teddy bear, which though it looks safe, can be dangerous if its parts become loose.

More things to do

5. Develop demonstrations from your collections of safe and unsafe toys.
6. Toy displays could be set up at shopping centers, fairs, and meetings of various groups as the PTA, the Farm Bureau and various women's organizations.

7. Make a list of "safe toys for different ages." Take this list to the head buyers of various department stores for approval. The stores may be able to print this list and distribute it to shoppers.
8. Contact the local radio and TV stations about appearances of 4-H members. The stations may wish to do their own spot announcements if your group provides the literature to write the script.
9. Visit nursery and elementary schools and give demonstrations of safe and unsafe toys.
10. Create a song or poem that could be used on radio or TV.
11. Find out what other organizations are interested in child safety and offer to co-operate with them on any project.

Ideas



Age and Interests	Hazards to Avoid	Suggested Toys
Under 1 Age of Awareness	Toxic, heavy breakable toys. . . sharp edges which might cut or scratch. . .small attachments that might come loose and be put in ears, nose or mouth.	Brightly colored toys hung in view. . .sturdy, well-built rattles . . .stuffed dolls with embroidered eyes. . .colored balls.
1-2 Investigative Age	Small toys which may be swallowed. . .flammable objects. . . toys with small removable parts. . .poisonous paint on any object. . .stuffed animals with glass or button eyes.	Rubber or washable safe squeak toys. . .soft stuffed dolls or animals. . .blocks with rounded corners. . .push and pull toys with string or rounded handles.
2-3 Explorative Age	Anything with sharp or rough edges which will cut or scratch . . .objects with removable parts. . .poisonous paint or decorations. . .marbles. . . beads. . .coins. . .flammable toys.	Sand box with bucket, shovel and spoon. . .large peg boards . . .wooden animals, cars and wagons to push around. . .tip-proof cars and tricycle. . .large crayons. . .a low rocking horse . . .small chair and table. . .simple musical instruments.
3-4 Imitative Age	Toys which are too heavy for child's strength. . .poorly made objects which may come apart, break or splinter. . .sharp or cutting toys. . .highly flammable costumes, electrical toys.	Small broom and carpet sweeper. . .toy telephone. . . doll buggies and furniture. . . dishes. . .miniature garden tools. . .trucks and tractor. . . non-electrical trains. . .building blocks.
4-6 Beginning of Creative Age	Shooting toys or target toys. . . ill-balanced mobile toys. . . poisonous painting sets. . . pinching or cutting objects.	Blackboard and dustless chalk . . .simple construction sets. . . paint and paint book. . .doll houses and furniture. . .small sports equipment. . .jump rope . . .paper doll set with blunt-end scissors.
6-8 Beginning of Dexterity Age	Non-approval electrical toys. . . sharp edged tools. . .poorly made skates. . .shooting toys.	Lightweight tools. . .roller skates. . .kites. . .puzzles and games. . .playground equipment.
8-12 Specialization of Tastes and Skills	Air rifles. . .chemistry sets. . . darts. . .bows and arrows. . . dangerous tools and electrical toys unless under parental supervision.	Arts and crafts. . .hobby materials. . .coin and stamp collections. . .puppet shows. . . musical instruments. ..gym and sports equipment. . .model and construction building sets. . . electric trains with Underwriter Laboratories (UL) approval. . .bicycle.

List compiled from National Safety Council Material.

Agencies willing to help 4-H'ers in Toy Safety

The following groups are happy to cooperate with young people working on safety projects. Some are national organizations that have local offices in most communities. A letter, phone call or visit will usually result in some very useful information.

American Red Cross

Underwriters' Laboratories

Local sheriff's department

TV and radio stations

Toy stores and toy manufacturers

Chamber of Commerce

U.S. Consumer Product Safety Commission

National Safety Council

American Medical Association

Local fire department

Pediatrics ward of hospital

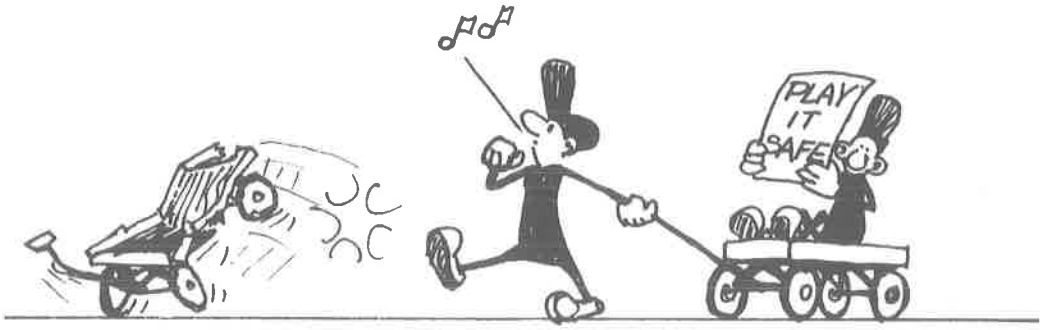
Child care centers

U.S. Marines (Toys for Tots program)

Local theater groups who do puppet shows

When it is all over

As the toy safety program progesses, it is wise to review the final objectives of the program. The purpose of the toy safety program is to educate everybody of the potential hazards of some toys and of the importance of parental supervision of children at play. The result of the education would be an eventual reduction of toy accidents in the community, which in turn would mean a reduction of the needless pain and suffering, and accompanying medical costs. The toy safety program has other results. The members learn more about how 4-H cooperates with other agencies. The 4-H'ers also gain experience in public speaking. Finally, participation in the toy safety program leads to a greater understanding that carries over to all aspects of safety.



No matter how careful a person is in the selection of safe toys, nothing will be accomplished if these toys are carelessly left on the floor where someone could fall over them. Parents and teenagers should teach young children the safe playtime habits. This includes teaching them to pick up toys when playtime is over and sharing toys with other children. With the proper supervision, children's playtime can be both fun and safe.

The End

References and Notes

WHAT'S YOUR SAFETY I. Q.?

Here are some pertinent questions to check your safety knowledge. Read each question carefully, then choose the answer that you feel is best. Compare your responses with the correct answers on page 4.

1. Slow Moving Vehicle Ahead

You are cruising along on a 2-lane road. Ahead you see a vehicle with an SMV emblem on it. What is the safest thing to do?

a. Slam on the brakes so you can avoid hitting the vehicle.

b. Proceed at your same travel speed until you get close enough to see what sort of vehicle it is and how fast it is going. If it is going slowly, quickly put on your brakes unless you can pass.

c. Slow down and be prepared to stop if necessary. When near the vehicle, check oncoming and following traffic — when safe, pass.

d. When you get right behind the vehicle, blow your horn to let the driver know you wish to pass.

2. What's the Right Angle?

When propping a straight ladder against a wall, what should be the distance from the foot of the ladder to the bottom of the wall?

a. One-tenth

b. One-fourth

c. One-half

the distance from the foot of the ladder to the point of support against the wall.

3. How Fast Can You Jump?

You are trying to pull a very heavy load with a tractor. To get maximum traction, you've hitched high (a dangerous practice). You open the throttle and release the clutch. The tires spin, then bite in, but the load won't move. The front end of the tractor starts to rise. About how long will it take for the tractor to reach the "point of no return" (where disengagement of the clutch cannot prevent total upset)?

a. Less than one second.

b. One and a half seconds.

c. Between two and three seconds.

4. Double Trouble

Assume that you are driving an average car under normal driving conditions. After you step on the brakes, how much more distance will you travel to completely stop a car going 60 mph than one traveling 30 mph?

a. Twice as far.

b. Three times as far.

c. Four times as far.

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5. Which End Up?

When carrying a long piece of pipe, lumber, etc., you should:

a. hold the front end close to the ground?

b. hold the object level with the ends about an equal distance from the ground?

c. hold the front end high?

6. Carbon Tet Tip

Carbon tetrachloride is sometimes used as both a spot remover and a grease solvent, but it should never be used around the home. Why? Which two of the following statements are true?

a. It is harmful to some synthetic fabrics.

b. The fumes are toxic and can poison you.

c. It is more toxic if you have consumed an alcoholic beverage.

d. It is highly flammable.

7. Can't Stop on a Dime

You are driving 20 mph on glare ice. The temperature is 25 F and your car has regular tires. You must stop and have applied the brakes. About how much farther will your car travel before stopping than if the road were clear and dry?

a. Twice as far.

b. Three and a half times as far.

c. Seven times as far.

8. Cent Sense

A fuse blows. You are out of replacements but have plenty of pennies. What are the facts on using a penny instead of a fuse?

a. It is safe if it isn't left in the fusebox more than 24 hours — then it may become dangerous from arcing damage.

b. It is okay if you insert it carefully because the real danger is electric shock.

c. Using a penny would make it possible for wires to dangerously overheat and cause a fire.

9. Man Overboard!

You are in a small boat and someone falls overboard. What is the best way to try to save him?

a. Immediately jump in after him with a life preserver.

b. Stay in the boat. Throw him something large enough to hold on to that floats, or extend something he can grasp like a fishing pole.

c. Jump in after him. Overturn the boat so both of you will have something to hang on to, then try to assist him.

10. Pull What?

When disconnecting an electric cord you should:

a. pull it out by the cord?

b. pull it out by the plug?

c. hold both cord and plug to pull it out?

11. Tight Squeeze

You are being passed. Another car suddenly looms up ahead and you are afraid the passing car won't have room enough to make it. The safest thing to do is:

a. maintain your speed so the driver behind can better judge the distance between him and the oncoming car.

b. increase your speed hoping that it will discourage him and he will drop back.

c. reduce speed and steer to the right of your lane.

12. The Needle

Should you or shouldn't you get a tetanus shot? Which one of the following statements is true and should influence your decision?

a. Tetanus is a disease that affects children, rarely striking anyone over the age of 12.

b. Although tetanus can make you ill, it is rarely fatal.

c. Once tetanus takes hold in your body there is no drug that can stop its progress and more than 60 percent of its victims die.

13. Bomb?

That aerosol spray can on the shelf has squirted its last squirt. You want to get rid of it. The safest way to dispose of it is to:

a. depress the dispenser button until all pressure is gone, then throw it in a trash can.

b. use a screwdriver with a plastic handle, puncture near the top, and then discard in a trash can.

c. toss it in an incinerator.

14. Braking

The best way to stop on a slippery surface is to:

a. step on the brake and hold it down until you start to skid, then let up.

b. pump your brakes — that is, rapidly alternate locked wheels and rolling action.

c. try to steer a steady course without using brakes.

15. Pencil Pointers

Which one of these statements is correct?

a. It is okay to carry lead pencils in your shirt pocket if the points are down.

b. Hexagon-shaped pencils are safer than round ones because they won't roll when stepped on.

c. Constantly moistening the tip of a pencil with your tongue can give you lead poisoning.

16. Fire!

Your clothes catch on fire. There is no water or anything to wrap around you. Your best bet is to:

a. drop to the floor or ground, put your left hand on right shoulder and right hand on left shoulder, pull arm against face, then roll over slowly.

b. stand still so as not to stir up the air and beat at the flames with your hands.

c. start running as fast as you can to create a vacuum so the flames will die for lack of oxygen.

17. Overdose

A small child swallows a large quantity of aspirin. The first thing you should do before getting him to a doctor is:

a. have him lie on his stomach, then slap him on the back.

b. make him vomit.

c. try to hold him upside down.

d. have him lie on his back while you apply slight pressure to his stomach.

18. Fouled-Up Fuse

When a fuse blows it is an indication that:

a. the fuse is probably worn out.

b. the fuse is too weak and you need one with a higher rating.

c. there is an overload and possibly a short.

d. the temperature of the surrounding area is too high.

19. Machine Memo

You are going to oil and adjust a machine. Be sure to:

a. get someone to stand by so he can get help in an emergency.

b. wear a cap.

c. shut off the machine.

d. use one hand to work and keep the other one free to turn off the machine if something happens.

20. Resuscitation

You may know how to give artificial respiration (manual or mouth-to-mouth), but do you know when? How do you know if an accident victim is short of oxygen and may need artificial respiration?

a. Blue coloration of the lips, ear lobes, and fingernails.

b. Redness of the skin.

c. Eyes open, although victim seems unconscious.

ANSWERS TO "WHAT'S YOUR SAFETY I. Q.?"

1. c. The SMV emblem is used on vehicles that travel less than 25 mph, such as farm, construction, and road maintenance equipment.

2. b. A ladder could tip backward if the distance from the foot of the ladder to the base of the wall is too short. At too great an angle, it would be "springy", difficult to climb, and it might break.

3. a. Tests made at Purdue University indicate that a tractor can tip to the critical angle in $^{7}/_{10}$ of a second. The time in which a driver can take action, after realizing the front end is rising, is only $^{4}/_{10}$ of a second. A sideways overturn, particularly at high field or transport speeds, may occur so quickly that an operator has little time to react or jump clear.

4. c. If you double the travel speed of a car, your braking distance (after you get your foot on the brake) is multiplied by four, assuming you have good brakes, tires, road surface, and normal weight distribution. The distance it takes to stop a car traveling at a particular speed can be found by using the formula $E = MV^2$. E is the total energy that the brakes must stop. The total energy can be calculated by multiplying the weight of the car (M) by the speed squared (V^2). Remember: the total stopping distance depends on how long it takes you to react — that is, how long it takes you to get your foot on the brake after you first perceive danger.

5. c.

6. b and c. Also, never purchase a fire extinguisher that has carbon tetrachloride as its extinguishing agent. Dry chemical extinguishers are better and much safer.

7. c. Remember, ice is twice as slippery at 30 F than at 0 F.

8. c.

9. b.

10. b.

11. c. Act quickly and decisively. Leave no doubt about what you are going to do.

12. c. Farm people should have tetanus shots because in working the soil they often receive deep puncture wounds from substances carrying tetanus infection. (Tetanus spores are commonly found in soil.)

13. a. Never toss a pressurized aerosol can into an incinerator. It could explode with enough violence to put out an eye, or even kill a bystander.

14. b.

15. a. Pencil "lead" isn't really lead. It is graphite and is relatively harmless. Stepping on a hexagonally shaped pencil can "put you down for the count" about as quickly as a "round one" could.

16. a. Never run because it fans the flames — supplies more oxygen rather than less. Beating at the flames is usually ineffective and results in severe burning of the hands.

17. b. But don't induce vomiting if the victim is unconscious, or has swallowed strong acid, caustic materials, or petroleum products. Acids, caustics, and petroleum products must be diluted, instead of vomited, to minimize serious burning of gullet, throat, and mouth tissues.

18. c.

19. c. No matter what the machine, farm or shop, shut off the power before adjusting, servicing, or unblocking.

20. a.

Check Your Home for Safety

Circle Y for Yes or N for No

FALLS

1.	Do you use a sturdy ladder or stepstool instead of a wobbly chair or stack of boxes?	Y	N
2.	Have you removed the hazards of clutter indoors and out—toys, brooms, garden tools, broken glass, boards with nails?	Y	N
3.	Do you have convenient storage places for toys, mops, brooms, garden tools, and other small equipment?	Y	N
4.	Do you have a secure hand rail or grab bar		
	on all stairways?	Y	N
	over bathtub or in shower?	Y	N
5.	Do you promptly repair		
	loose stair treads?	Y	N
	loose floor boards or tiles?	Y	N
	wobbly railings?	Y	N
6.	Have you removed the hazards of slipping on stairs by		
	eliminating small rugs near stairs?	Y	N
	fastening stair carpets securely?	Y	N
7.	Are stairways and steps—indoors and out—well lighted?	Y	N
8.	Do you carry small enough loads so you can see where you are going?	Y	N
9.	Have you anchored all small throw rugs to prevent slipping and tripping?	Y	N
10.	Do you immediately wipe up spills on the floor?	Y	N

FIRE

1.	Do you have a family fire escape plan?	Y	N
	Do you have regular fire drills?	Y	N
2.	Does your house have a smoke detector or fire alarm system?	Y	N
	Does everyone know what to do when the alarm sounds?	Y	N

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3. Do you make certain that matches are
   - kept out of children's reach? Y N
   - really extinguished after use? Y N
   - stored in tin or glass? Y N
4. Do you keep all fabrics, plastics and paper far enough from the range or heater that they cannot catch fire from the hot surface or flame? Y N
5. Have you cleared out all fire hazards of rubbish in the garage, closets, basement, attic, and under stairs? Y N
6. Do you store gasoline, charcoal lighter fluid, turpentine, paint thinner, and other flammable liquids
   - in the original, or clearly labeled containers? Y N
   - outside the house? Y N
   - out of the reach of children? Y N
7. Does everyone in your home observe the universal fire protection rule: NO SMOKING IN BED? Y N
8. If you have a fireplace
   - does the screen fit snugly? Y N
   - do you let the fire go out before you retire? Y N
9. Have you had vents and chimneys inspected within the last year, and cleaned and repaired if necessary? Y N
10. Do you have vents for clothes dryers and range fans cleaned out often? Y N
11. Do you keep your distance from open fires and household heaters so that your clothing will not catch fire? Y N
12. Do you immediately dispose of all rags and papers used with oil, paint thinner, wax, and other flammable materials, or keep them in a metal container with a tight-fitting lid? Y N

BURNS AND CUTS

1. Are the handles of pots and pans
   - secure? Y N
   - turned away from edge of range when in use? Y N
2. If young children play in the kitchen, have you fenced off a play space away from knife storage, electrical appliances, and the range? Y N
3. Are knives stored safely? Y N

ELECTRICITY

1.	Are light switches or sockets placed so you cannot touch them when you touch a grounded metal object such as a sink or bathtub?	Y	N
2.	Is all electrical equipment in good condition?	Y	N
3.	Have you repaired or replaced all worn cords?	Y	N
4.	Are all electrical receptacles or outlets covered so there is no danger of children getting a shock?	Y	N
5.	Do you disconnect the iron and other appliances when they are not in use?	Y	N
6.	Are electric circuits protected with proper size fuses or circuit breakers?	Y	N

POISON AND POISONOUS GAS

1.	Do you always keep garage doors open when the car motor is running inside?	Y	N
2.	Do you always have adequate ventilation in rooms where gas or oil heaters are used?	Y	N
3.	Do you keep all poisons (pesticides, disinfectants, medicines, drain cleaners, bowl cleaners, etc.) in their original containers?	Y	N
4.	Do you keep all poisons in a locked cabinet or out of the reach of small children?	Y	N
5.	Do you read the label before taking ANY medicine?	Y	N
6.	Do you read and follow label precautions on how to use and store household cleaners, pesticides, medicines, etc.?	Y	N
7.	Is toilet bowl cleaner used by itself, without the addition of bleach, scouring powder, detergent, or other cleaner?	Y	N

MISCELLANEOUS

1.	Do you have a closed container for old razor blades?	Y	N
2.	Do you keep guns unloaded and locked up?	Y	N
3.	Do you know the location of water, gas, and electric shutoffs?	Y	N
4.	Do you have a first-aid kit?	Y	N
5.	Have you replenished supplies in the first-aid kit this year?	Y	N

MISCELLANEOUS—continued

6. Do you follow directions on spray cans for storing and disposing of them? Y N

7. Do you dispose of plastic drycleaning bags or keep them out of the reach of babies and small children? Y N

8. Are emergency phone numbers for the following posted near the phone?

   Fire Department Y N

   Police Department Y N

   Doctor Y N

I plan to make the following changes this year:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

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