EMERGENCY PREPAREDNESS

Demonstrations & Exhibit IDEAS

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Your Opportunity

Emergency preparedness means being ready for the unexpected. You have the opportunity to give interesting and worthwhile demonstrations about emergency preparedness. You can show your friends and neighbors how to prepare for emergencies caused by severe weather or radioactive fallout.

1. Have them become aware of the danger to people, livestock, and crops.
2. In turn, they can give people in their clubs and communities the basic facts needed to become prepared.

These demonstrations can be interesting to research, fun to give, and valuable to an audience.

Suggestions

These suggestions for young demonstrators are to help prepare and present demonstrations, illustrated talks, and exhibits.

Demonstrations may be used at 4-H Club meetings, community meetings, fairs, regular demonstration days, and on television. Emergency preparedness information is being improved constantly. Check with the county extension office to obtain the latest information.

Once a member has prepared a demonstration and appropriate visuals, he or she can use them as a tabletop or window display by adding more descriptive label cards.

Additional copies of the nine demonstrations and illustrated talk topics which follow may be obtained from your county agricultural extension agent:

1. Family Protection Areas for Storms and Fallout
2. Living In a Public Shelter
3. Emergency Sources of Water
4. Making Water Safe to Drink
5. Family Food Supplies for Emergencies
6. Preparing a Meal Without Heat
7. Supplies and Equipment for Emergencies
8. First Aid Supplies at Home
9. Farm Buildings as Fallout Protection for Livestock

Other Topics You Can Develop

How Radiation Affects People

It Looks Like A Tornado!

References


Other materials available from your county agricultural extension agent or civil defense director include the following:

Last Minute Preparation for Windstorms, Winter Storms, and Fallout, University of Minnesota, Agricultural Extension Service, RCD-4.

Last Minute Fallout Protection for Livestock, University of Minnesota, Agricultural Extension Service, RCD-5.

Improving Family Protection Areas in Basements, University of Minnesota Agricultural Extension Service, RCD-9.

Improving Fallout Protection in Basement Ceilings, University of Minnesota Agricultural Extension Service, RCD-10.


Your Community Shelter Plan (ask your local civil defense director).

Your agricultural extension agent and/or civil defense director also has films, slide sets, and exhibits you can borrow.

TIPS FOR DEMONSTRATORS

Don't attempt to memorize your demonstration. Study it until you know it well; read the references thoroughly; then make a few notes as guides to use during your presentation. Use your own words.

Charts usually help. The more visuals and action you can incorporate, the fewer charts you'll need. A presentation with no equipment and little action, using charts and photographs for visuals is called an illustrated lecture. This is acceptable if it is fairly advanced and clearly presented, but you need good background knowledge to do this well.

Lettering on charts should be large enough for those in the back of the room to read. A good rule follows: the height of the smallest letters should be
1/300th of the distance to the farthest row. Example: 25 feet distance \( \times 12 = 300 \) inches. This divided by 300 equals 1 inch for letter height. At 20 feet way, letter height should be about \( \frac{3}{4} \) inch; at 40 feet, about \( 1 \frac{1}{2} \) inches.

Look at your audience. Don't lose eye contact except while demonstrating something with your hands or referring to charts. Look at your audience frequently to hold their attention.

Project your voice. Talk to the people in the last row, not just to those in front. Speak slowly so you can pronounce words clearly. Practice ahead of time.

Evaluate your own demonstration. As you practice, evaluate your demonstration according to the Minnesota Demonstration Check Sheet, 4-H, M-24, available at your county extension office. Consider these items:

1. **Introduction** — Is it brief and clear? Do you tell them convincingly why you believe this topic is important?

2. **Body of demonstration** — is material organized logically? Is each action clear? Can people see what you're doing? Are signs and charts readable, not cluttered? Do you hold audience interest? Can the audience repeat what you did, or at least become interested enough to look up more information? Do you show good results?

3. **Conclusion** — Do you tell them where you got your information? Do you review the main points you want to put across — in the same order you presented them the first time? Are you prepared to answer questions?

4. **You personally** — Do you speak so all can hear? Are you dressed properly for the job? Are you well groomed? Do you smile, act friendly, and look as if you were enjoying yourself? Do you handle your equipment and material as if you were familiar with it? Do you use good English and speak neither too fast nor too slow?

- Introduce
- Demonstrate
- Explain
- Ask for questions
- Summarize
Family Protection Areas for Storms and Fallout

Every family has some natural protection from storms and fallout in the home. For instance, the basement is better protected than the first floor; a corner of the basement is better protected than the middle. Basements of two-story homes offer greater fallout protection than basements of one-story homes. Every family should have a definite family protection area which could protect against tornado and fallout.

You Will Need the Following:

Simple drawings of fallout patterns, a shelter rating chart, four sketches including a two-story home with a basement, a one-story home with a basement, a home with a walkout basement and shelter, and an underground shelter. You may use small dolls and dollhouses instead of sketches and styrofoam cutouts for the shelter.

Where to Get Information

Improving Family Protection Areas in Basements, University of Minnesota Agricultural Extension Service, RCD-9.
Last Minute Preparation for Windstorms, Winter Storms, and Fallout, University of Minnesota Agricultural Extension Service, RCD-4.

What You May Do and Say

Using examples of fallout patterns and a shelter rating chart, show what possible fallout dangers there might be in a particular area.
Show the various degrees of protection against tornadoes and fallout a family would have in several locations in their home.
Using examples in the references, show and tell some last-minute measures that can be taken to improve fallout protection.
Summarize and answer questions.
Living in a Public Shelter

Many public fallout shelters have been designated, especially in urban areas. Most of these shelters have been supplied with water, survival biscuits, sanitation kits, medical supplies, and radiation monitoring equipment. Some communities have designated which shelter will be available to each person whether at home, at work, or at school.

Do the members of your family know which shelter to go to, when to go, how to get there, and what to bring?

You Will Need the Following:

Replica of fallout shelter sign, charts listing what is in public shelters and what to bring, your own community's shelter plan, samples of items in public shelters (obtainable from local civil defense agencies).

Where to Get Information


Your Community Shelter Plan (Ask your local civil defense director).

What You May Do and Say

Using the shelter plan map for your community, point out where you live, where you go to school, and where your parents work. For each location show which public shelter you would go to if necessary, and how you would be told when to go.

Use the sample supplies and/or charts to tell what supplies are in the public shelters in your community.

Describe typical life and daily routine in a public shelter. Mention such things as leadership, serving meals, health precautions, recreation, sleeping facilities, and sanitation.

Name the items your family would bring to the public shelter.

Summarize and answer questions.
Your body's most important nourishment need is water. Most people can live a longer time without food than water. Your home has several good emergency sources of water. Do you know what they are?

You Will Need The Following:

One chart — "Stored Household Water" with drawing of hot water tank, toilet flush box, water system tank.

One or more containers of canned fruit, vegetables, juice, soft drinks, milk. (NOTE: Empty labeled containers may be substituted for full ones.)

Some of these containers (with air-tight lids) — 1-gallon plastic and glass jugs, 1-gallon picnic jug, 2-quart glass canning jars, 1-quart thermos bottle, 1-quart plastic freezer containers, laundry starch jars, bleach containers, and newspapers (to wrap glass jars).

Where to Get Information

What You May Do And Say

Emphasize that to be prepared for a severe emergency, when we might have to live in austere conditions for up to 2 weeks, we should store extra water. Stress that water is one of our most important needs and though we can get along for quite a while without food, we can survive for only a short time without water. Explain that 7 gallons of water is the 2-week minimum (2 quarts per day) for one person for drinking and food preparation. For washing and possible first aid, twice this amount is needed.

Exhibit chart with water tank, etc. Explain how water in a hot water heater or home storage tank could be used during an emergency. Explain the precautions that must be taken to keep unsafe water out of the home during a fallout period.

Point to toilet flush box on chart. Tell your audience that water in toilet flush boxes could also be used for drinking when it is safe to leave the shelter. If there is sufficient warning time before fallout comes, suggest that bathtub, laundry tubs, washing machine, and pots and pans should be filled with water.

Mention sources of liquids, other than stored water, that could be used during confinement to a shelter area. Stress that such sources will reduce the amount of stored water needed. Name these sources and explain when and how they could be collected. Mention that additional water for a shelter should be collected systematically at the first warning of fallout danger.

Show audience one container each of canned fruit, vegetables, and juice. Point out that the liquid content of such products provides part of a person's daily water needs.

Hold up a bottle of soda pop. Suggest that any soft drinks in the house be placed where they can be reached easily from the shelter. Mention that such liquids may add variety to a possibly dull diet.

Show fresh fruit. As you show pieces of fruit, remind your audience that the water content of fruit is high. Stress that if fruit is exposed to any fallout it should be well washed before eaten.

Show various empty containers. Mention that metal containers can affect taste. Stress the importance of tight lids. Point out that household items, such as laundry bleach, come in unbreakable plastic jugs. Explain that the jugs are common in most homes. Tell your audience that most miscellaneous containers are suitable for water storage. Add that water which is pure when put into these clean containers will keep indefinitely and be drinkable — but it should be checked every 6 months and replaced at least every 2 years.

Summarize by naming each source of liquid you have demonstrated.

Show the bulletins you used for information. Name your reference and ask if there are any questions. (You may need to repeat questions asked aloud so everyone knows what you're answering.) Close your demonstration and thank your audience. Hand out copies of the bulletin.
Our home water supplies are usually very dependable. An extended electrical outage caused by severe weather or nuclear war can result in a shortage of pure water. We may need to melt snow or obtain water from ponds, rivers, or lakes which may be unsafe without treatment. Every family should be able to make questionable water safe for drinking. The treatment described in this demonstration will only kill harmful bacteria and won't remove or destroy fallout particles. Fallout must be filtered out or allowed to settle.

You Will Need The Following:
- One chart showing amount of bleach or iodine to use
- One chart for summarizing
- Water purification tablets
- Three containers of water
- One bottle iodine
- One medicine dropper

Where to Get Information

What You May Do And Say
Make it clear that if there are any doubts about the safety of water available for drinking, and it can't be boiled, it should be purified. Emphasize that the methods of water purification that you will demonstrate will not remove radioactive materials, but they will kill harmful bacteria.

Demonstrate adding bleach to water. Show bottle of bleach and 1-gallon container of water. Explain that the chlorination method can be employed easily by using a liquid household laundry bleach. Explain each step of the purification method and stress that if the water does not have a slight chlorine odor after it has settled, the process should be repeated.

Display and read quantity chart. Use a pointer. Tell your audience this information can be found in a bulletin you'll mention later.

Use a glass quart jar of water to demonstrate using water purification tablets. Explain how water can be purified using special tablets. Tell your audience where they can buy these tablets and mention where you bought yours.

Demonstrate adding iodine to a quart of water. Explain each step of water purification using ordinary household iodine. Mention that more iodine must be used if the water is cloudy.

Display summarizing chart. Repeat the names of the three water purification methods you have demonstrated. Stress again that these purification methods will not remove radioactive materials from water.

Hold up information booklet. Name your reference and tell your audience where they can obtain copies. Ask for questions. Close and thank your audience.
Families who keep at least two weeks' supply of food on hand can be well prepared for severe emergencies. A snowstorm or blizzard may mean isolation for several days. Windstorms and ice storms may cut off electricity for cooking. Reserve foods should include ones prepared with little or no heat. A nuclear attack may cut off electric power for up to 2 weeks.

You Will Need the Following:
- Clean, empty food containers with labels. (Containers can represent factory- and home-canned, frozen, and/or dried fruits, vegetables, meats.)
- Choose can sizes to represent family needs for one meal.
- Diagram of home showing where food supplies are normally stored (kitchen cabinets, basement storeroom, freezer, shelter area).
- Charts showing your family's foods needs for 2 weeks.

Where To Get Information


What You May Do And Say
- As you go through the chart showing the kinds of food in your home, show the types of containers in which they come. Use the home diagram to tell where these foods are kept.
- Show where the check list is kept. Tell how often it is reviewed, who would gather the food together in an emergency, and where it would be put.
- Summarize and answer questions.
Preparing a Meal Without Heat

Every year some Minnesota families face the problem of preparing meals with little or no heat. A windstorm or ice storm may have torn down electric lines over a wide area causing a power outage of several days. A nuclear attack could cause the same situation. Heatless meals can be colorful and appetizing.

You Will Need

- 6 1/4 oz. can of tuna
- Canned spaghetti or macaroni
- Mixed pickles (chopped)
- Canned shoestring potatoes
- Canned vegetable-asparagus, tomatoes, green beans
- Instant pudding mix
- Nonfat dry milk
- Water
- Can opener
- Plastic knife, fork, spoon
- Paper plates
- Small bowl
- Measuring cup

Where To Get Information


What You May Do And Say

Point out food and utensils on table in front of you. Emphasize that in an emergency, when electricity and gas may be cut off for days, a homemaker may have to prepare interesting, nourishing meals without cooking facilities. Stress that the items on the table should be on hand before an emergency.

Begin preparing the main dish. Mix canned, drained tuna with spaghetti or macaroni and about 2 tablespoons prechopped pickles. Place a serving on a paper plate. Point out that some meat or fish should be consumed every day because of human need for protein foods. Mention that the potatoes improve the texture of the food. Point out the implements you're using: can opener, plastic fork, disposable plates, etc. Mention that disposable items are good to have in an emergency, as there may be no water for washing utensils.

Place a serving of canned, drained vegetable on the plate. Explain that many vegetables taste good even when cold. They provide minerals and vitamins needed every day.

Prepare instant pudding using nonfat dry milk, water, and instant pudding mix. Tell how important milk is in the diet—even if it isn't fresh cows' milk. Say that desserts of this kind add an extra touch to a meal.

Summarize and ask for questions.
Supplies and Equipment for Emergencies

Severe weather emergencies (tornadoes, sleetstorms, snowstorms, blizzards, floods) can cause very difficult problems for families. Every family should be able to cope with problems caused by such things as extended electrical outages, being snowbound for several days, and radioactive fallout. There are practical things for makeshift living until situations return to normal, but the family needs to have emergency supplies and equipment on hand and ready to use.

You Will Need the Following:

Examples of emergency equipment, especially the most important ones such as a first aid kit, transistor radio with extra batteries, flashlight, can opener, cooking and eating utensils, table games, fire extinguisher, and canned food. (Don’t try to bring everything needed to equip a fallout shelter.) Make your own large charts of portions of a checklist and an outline drawing of a house with family protection area marked.

Where To Get Information


Last Minute Preparation for Windstorms, Winter Storms, and Fallout, University of Minnesota Agricultural Extension Service, RCD-4.

What You May Do and Say

Using the checklist charts and a diagram of your home, point out in the shelter area, basement storeroom, kitchen cabinets, and medicine chest just where your family keeps the emergency supplies you’ve brought.

Locate the safest storage place.
Show where check list is kept (such as back of basement stairway door).
Tell how often supplies are checked and replenished.
Describe how your family would assemble supplies in an emergency.
Tell how various articles will be used in an emergency.
Summarize and answer questions.
First Aid Supplies at Home

A complete first aid kit is handy to have at home for immediate temporary treatment of cuts, bruises, broken bones, or burns. Sometimes serious wounds need immediate treatment to save the life of an injured person. There's little time for making or hunting for bandages. If the family is homebound by severe weather or radioactive fallout, first aid supplies can suddenly become a matter of life and death. Every family should have ready access to a complete supply of first aid materials.

Where To Get Information


You Will Need

One or more charts listing, for example:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open wounds</td>
<td>Antiseptic solution</td>
</tr>
<tr>
<td>Faintness</td>
<td>Spirits of ammonia</td>
</tr>
</tbody>
</table>

Specimen drawings of the items listed in the second column of table 10 in Bulletin No. 313. (Most of these items are used in the average household.)

What You May Do And Say

Display topic chart. Introduce your subject by emphasizing the problems of severe weather and radioactive fallout and the fact that all of us might be affected to some degree. Stress importance of being prepared and ability to collect emergency supplies quickly.

Mention several injuries. For each type of injury show the appropriate items to your audience, explain their purpose, and give the suggested reserve quantity for a family of four.

Display the bulletin. Tell the audience what source you used and where they may get a copy. In summarizing, re-emphasize the value of advance preparation and urge your audience to begin assembling supplies for their own use. Ask for questions. Answer to the best of your ability. Close and thank your audience.
If radioactive fallout ever occurs, most farmers will have to depend on their buildings to protect their livestock. Some buildings offer better fallout protection than others. Some livestock need better protection than others. There are practical ways to improvise and improve fallout protection for livestock.

You Will Need:
- A toy barn with styrofoam hay bales to demonstrate additional shielding.
- Charts and drawings made up from information in the reference bulletin list which follows.

References
- Last Minute Fallout Protection for Livestock, University of Minnesota Agricultural Extension Service, RCD-5.
- Protecting Family and Livestock From Nuclear Fallout, University of Minnesota Agricultural Extension Service (Midwest Plan Service).

What You May Do And Say
Using your charts and drawings you may demonstrate the following:
- How fallout affects animals.
- How farm buildings rate as livestock fallout shelters. (Show toy barn.)
- What water and feed are safe from fallout.
- How livestock rate in their need for shelter.
- Caring for livestock after fallout.
- Removing fallout from animals, buildings, and feed.
  (Don't include pastures and field crops unless you can cover both topics in 15 minutes.)
- Tell where people can obtain copies of your references or pass them out if you have a supply.
- Summarize and answer questions.
Emergency Preparedness Exhibits

Here are three ideas for setting up tabletop exhibits with an emergency preparedness theme. Add your own signs and labels for clarification.

Farm survival includes protection of the following:
People — Construct model home showing family protection area in basement.
Animals — Show a model barn — basement type preferred — hay in loft, windows covered. Or show models of temporary shelters such as a roofed shed with bales of straw at sides for shielding.
Food, Feed, and Water — Show a livestock watering tank covered with tarpaulin, hay stack with black plastic or tarpaulin cover, a tight well cover, and perhaps a roofed-hay shelter if they are prevalent in your area.

Put bags of feed inside under cover.

Emergency Preparedness Bulletin Display

Your 4-H Club can help tell others about preparedness. You can set up a bulletin display and hand out bulletins at county fairs, achievement days, annual meetings, home shows, and other events. Obtain a tabletop display and a supply of appropriate bulletins from your county extension office or civil defense director.

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