PUBLIC SAFETY

# Your Cellar Could Mean Your Life

Here are some simple but life-saving steps that the ordinary housewife can take to protect her family from major destruction by nuclear blasts, floods or tornadoes.

WHAT WOULD YOU DO right now, as you are reading this very print, if you heard a siren signaling an actual enemy attack? Chances are you would look up from the newspaper, ponder for a moment, then continue reading.

But it would not be very long before you, and millions of Americans just like you, would panic. The panic would result from frustration based on a feeling of helplessness. You might not know what to do.

On the other hand, some Americans would know what to do and would be busy doing it before the last blast of the warning alarm. And they would be doing things that every person can do with just a little planning and careful thought.

If you have ever camped out doors, or for that matter, even just packed the trunk of your car for a vacation, you can rapidly learn how to provide for your family in any disaster emergency.

Here are the recommendations of the Office of Civil and Defense Mobilization:

First of all, determine which is the safest area of the house. Usually, it is the basement. Civil defense officials have plans available for building a shelter with concrete or sandbagged walls and ceilings. Such shelters provide protection from fallout and radiation.

Concrete, bricks, sand or earth, are heavy enough to afford protection by absorbing radiation. Eight inches of concrete will shield as adequately as 12 inches of earth, 16 inches of books or 30 inches of wood. These thicknesses would offer ample protection in most of the country except those areas hit by the heaviest fallout.

### "Do It Yourself" Shelters

The shelters themselves can be built by homeowners. Basement shelters are generally the least expensive, ranging in price from \$150 to \$200. Plans are also available for shelters that can be built by those who do not have basements available to them.

However, for the family caught without a shelter, the ground floor of a dwelling offers some protection. The radiation on the ground floor would be half the amount outdoors.

But a shelter is no good unless its occupants keep strict sanitary rules. Impure water and unsafe food can cause illness or even death. Garbage and human wastes can help spread disease if not disposed of properly. It is important to keep clean and to keep the home clean. Yet most persons take for granted the public services that now guard families against infections of all kinds.

Many of these public services might be temporarily knocked out by an enemy attack or natural disaster. If local water utilities are damaged, household water supplies would be cut off until repairs could be made. If sewer mains were broken, it would not be possible to dispose of human wastes in the usual manner. Lack of garbage collection and garbage disposal service would encourage the increase of rats, flies, and other disease-carrying agents.

Both garbage and human waste must be disposed of. Water flush toilets cannot be used when water service is interrupted. The water remaining in the fixture will not be enough to flush the wastes down the sewer and clogging could result. Besides, all available water may be necessary to fight fires.

Nonetheless, some provisions can be made. Almost any metal covered container or pail will suffice. Human waste can be stored in a 10-gallon garbage can until it can be buried. Garbage must be handled in a like manner, and disinfectant should be used generously at all times.

It is a known fact that humans can survive a considerable period of time without food. But every person needs safe water to drink. Not only could water supplies be interrupted as a result of a major disaster, but sewage, chemicals, radioactive materials or even disease-carrying organ-

isms from biological warfare could leak into water pipes. If household pipes were broken, homeowners would shut them off or civil defense authorities might request that they be shut off to maintain fire-fighting pressures in some other part of the city.

However, an adequate supply of water can always be maintained by storing at least seven gallons of water or other fluids for each member of the family. This may sound like a great deal of fluid to attempt to store, but there are usually on hand, in each home, fluids other than water that can be used for drinking purposes such as fruit juice, soft drinks and liquids from water packed fruits and vegetables.

# Store Water Safely

Water can safely be stored in glass jugs with tight-fitting covers or stoppers. Fruit jars, quart bottles or other types of glass containers will do just as well, however, It is not necessary to boil water before storage. Fresh tap water is safe provided the containers are clean.

These containers should be packed tightly to avoid damage by blast or shock. Wadded newspapers, excelsior or other packing material can be stuffed between the jars.

Every three months the complete water supply should be changed. Empty the containers, rinse them, and refill with fresh water.

Emergency sources of drinking fluids can be found in citrus fruits that have been



HOME WITHIN A HOME. This may not be your idea of how to live, but these provisions in a homemade shelter may save the lives of your family. Knowing what to do and when are important points that discourage the development of panic, as this posed picture by the Office of Civil and Defense Mobilization demonstrates.

covered. If they have been exposed to radioactive dust, they should be peeled before squeezing, while fruit such as apples and peaches should always be peeled. Another source of water is the ice in the refrigerator and the water in the storage tanks of hot water heaters.

Tap water should not be used immediately following an attack. Questionable water supplies should be treated by boiling for five minutes, adding chlorine or any household bleach that contains hypochlorite, purification tablets or iodine. Emergency water rations may be delivered to distribution points in neighborhoods, or well sup-

plies may be tapped for purification.

The preservation of food supplies requires different precautionary measures. The contents of jars, cans, cartons and other food packages that have not been broken by a nuclear blast would be perfectly safe to eat. However, it would be wise to wipe or wash carefully any can, bottle or other containers, or any covered dish, that has been exposed to radioactive "mist." Radioactive dust on cooking utensils is another problem. Such dust cannot be made harmless by boiling or by the use of soap and water. Washed-off particles will still be "hot" and will remain in the wash water and on cleaning cloth.

An adequate food supply for any disaster should include enough food for a family for two weeks. It should consist of foods regularly eaten by the family. For example, children, the aged and the ill need milk and other foods that are easily digested. Large supplies of canned fruits and vegetables should be substituted for fresh foods that will spoil quickly in the event of refrigeration failure. Powdered, evaporated or condensed milk may be substituted for fresh milk.

Supplies should consist of those foods that do not need refrigeration and which can be eaten without cooking, if necessary. This might include canned fruits, fruit juices, vegetables, soups, milk, fish, meat, and baby foods as well as packaged cereals and dried foods.

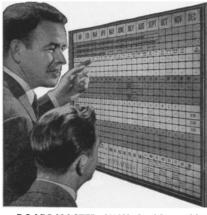
Before an attack occurs, the Office of Civil and Defense Mobilization urges every citizen to plan for any major disaster by providing the following:

- 1. Seven gallons of water or other liquid for each person in the household.
- 2. A two-week supply of proper foods, paper plates and napkins.
- 3. Cooking and eating utensils, measuring cup, can and bottle openers, pocket knife and matches.
- 4. Special food for babies and the sick.
- 5. Large garbage can, smaller one for human waste. Also a covered pail for bathroom uses, toilet tissue, disposable diapers,
- 6. Rubber sheeting and special equipment for the sick, as well as sleeping accommodations for all.
- 7. Grocery bags, week's supply of newspapers for sanitary uses, waterproof gloves, two pints of household chlorine, a wrench, screwdriver and shovel.

Complete information on preparing for a major disaster can be purchased through the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

Science News Letter, May 21, 1960

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