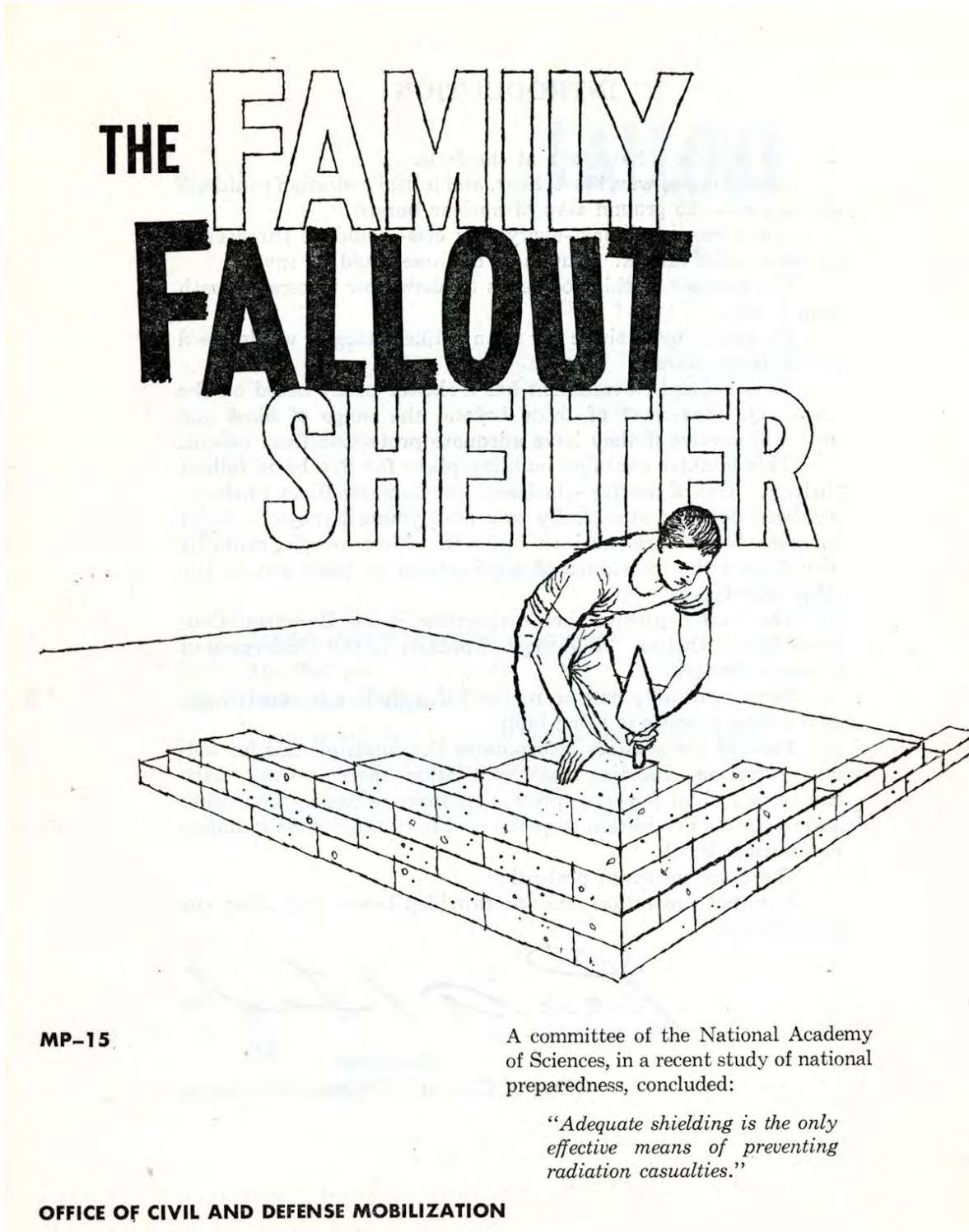


Lesson Plan - Cold War Politics and Culture in the Twentieth Century United States

The Family Fallout Shelter, 1959



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Many *more* millions—everybody else—could be threatened by radioactive fallout. But most of these could be saved.

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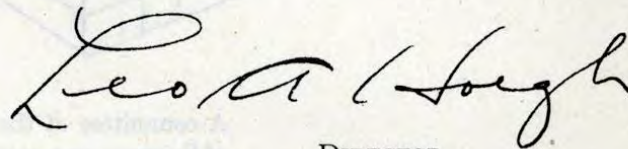
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Each of the shelters incorporates the fundamentals for fallout protection—shielding mass, ventilation, space to live. Each can serve a dual purpose—protection from tornadoes and other severe storms in addition to protection from the fallout radiation of a nuclear bomb.

There *are* means of protection.

But that protection must be provided before, not after, the sirens sound.



DIRECTOR

Office of Civil and Defense Mobilization

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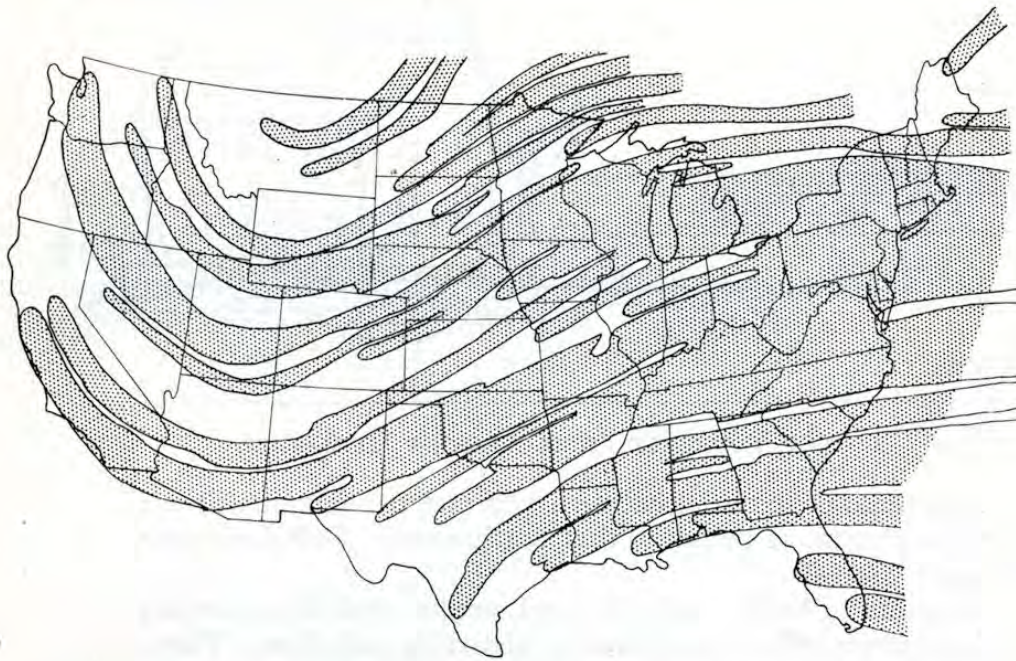


Figure 2.—Fallout areas at 24 hours after detonation

These maps show where the wind would have carried the fallout from the assumed attack on a given day. On another day, the wind could swing in any other direction and turn safe areas on these maps into areas of extreme fallout danger.

The fallout radiation threat indicated on the map is not uniform. The danger diminishes as the fallout drifts further from the points of nuclear explosion. But even on the extreme limits of the drift the fallout remains a menace to life and health for some time.

The lesson is: fallout shelter is needed everywhere.

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The Family Fallout Shelter, 1959

The illustration (fig. 11) shows this shelter with the roof at ground level and mounded over. The same shelter could be built into an embankment or below ground level. Plans for the shelter, with either a stairway or hatchway entrance, are shown on pages 26 and 27.

Another type of shelter which gives excellent fallout protection can be built as an added room to the basement of a home under construction. It would add about \$500 to the total cost of the home. The shelter illustrated in figure 12 is based on such a room built in a new home in the Washington, D.C., area in the Spring of 1959.

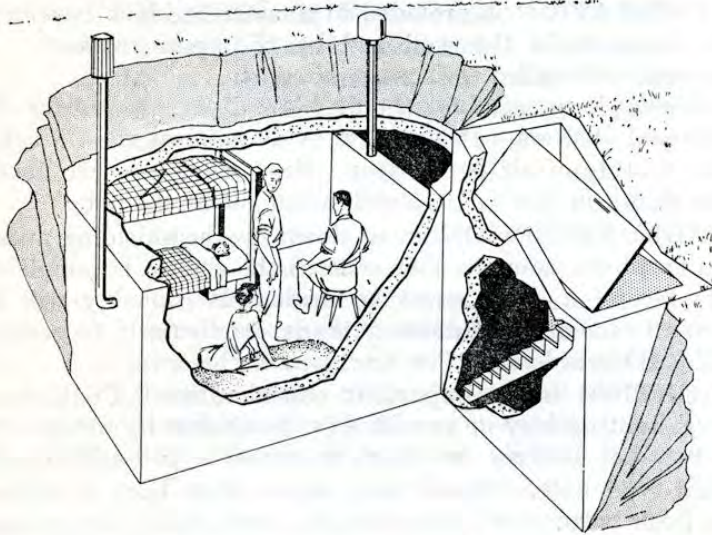
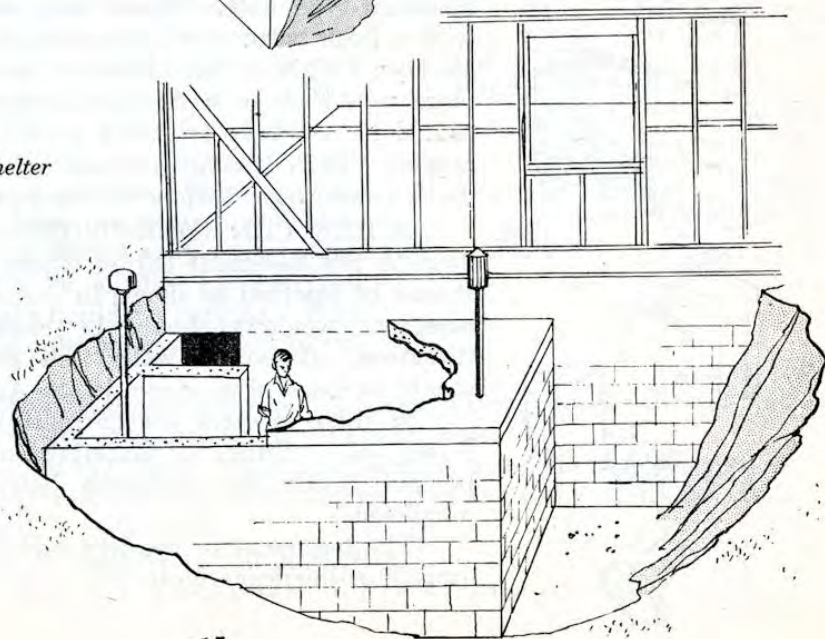


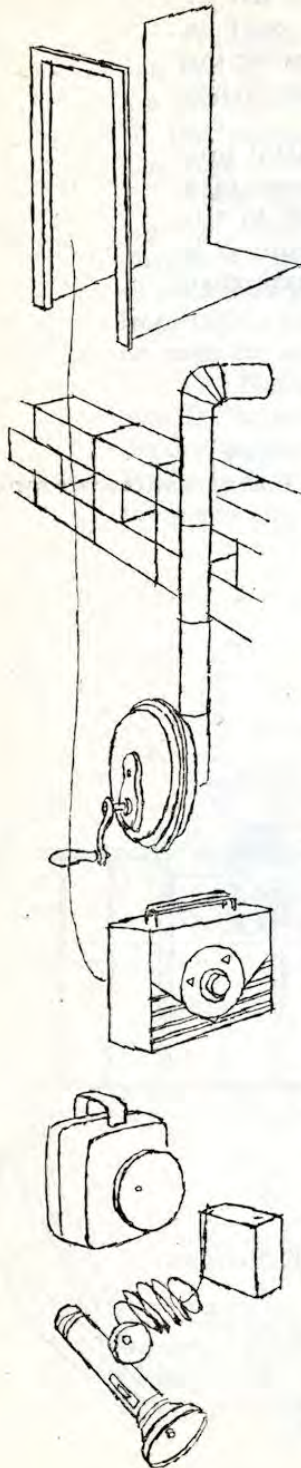
Figure 11.—
Underground concrete shelter

Figure 12.—Concrete basement shelter
in new housing



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IMPORTANT CONSIDERATIONS common to each type of shelter are:

1. Arrangement of the entrance.
2. Ventilation.
3. Radio reception.
4. Lighting.

THE ENTRANCE must have at least one right-angle turn. Radiation scatters somewhat like light. Some will go around a corner. The rest continues in a straight line. Therefore, sharp turns in a shelter entrance will reduce radiation intensity inside the shelter.

VENTILATION is provided in a concrete block basement shelter by vents in the wall and by the open entrance. A blower may be installed to increase comfort.

A blower is essential for the double-wall shelter and for the underground shelters. It should provide not less than 5 cubic feet per minute of air per person. Vent pipes also are necessary (as shown in figs. 9, 10, and 11), but filters are not.

RADIO RECEPTION is cut down by the shielding necessary to keep out radiation. As soon as the shelter is completed a radio reception check must be made. It probably will be necessary to install an outside antenna, particularly to receive CONELRAD broadcasts.

LIGHTING is an important consideration. Continuous low-level lighting may be provided in the shelter by means of a 4-cell hot-shot battery to which is wired a 150-milliamper flashlight-type bulb. Tests have shown that such a device, with a fresh battery, will furnish light continuously for at least 10 days. With a spare battery, a source of light for 2 weeks or more would be assured. A flashlight or electric lantern also should be available for those periods when a brighter light is needed. There should be a regular electrical outlet in the shelter as power may continue in many areas.

OTHER CONSIDERATIONS.—If there are outside windows in the basement corner where you build a shelter, they should be shielded as shown in the Appendix, page 29. Other basement windows should be blocked when an emergency threatens. Basement walls that project above the ground should be shielded as shown in the Appendix, page 29.

In these shelters the entrance should be not more than 2 feet wide. Bunks, or materials to build them, may have to be put inside the enclosure before the shelter walls are completed.

The basement or belowground shelters also will serve for tornado or hurricane protection.

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III.

Living In A Shelter

The radioactivity of fallout decays rapidly at first. *Forty-nine hours after an atomic burst the radiation intensity is only about 1 percent of what it was an hour after the explosion. But the radiation may be so intense at the start that one percent may be extremely dangerous.*

Therefore, civil defense instructions received over CONELRAD or by other means should be followed. A battery-powered radio is essential. When radiation meters suitable for home use are available they will be of value in locating that portion of the home which offers the best protection against fallout radiation. There is a possibility that battery-powered radios with built-in radiation meters may become available. One instrument thus would serve both purposes.

Your local civil defense will gather its own information and will receive broad information from State and Federal sources. It will tell you as soon as possible:

How long to stay in your shelter.

How soon you may go outdoors.

How long you may stay outside.

You should be prepared to stay in your shelter full time for at least several days and to make it your home for 14 days or longer. A checklist in the Appendix, (page 30) tells what is needed. Families with children will have particular problems. They should provide for simple recreation.

There should be a task for everyone and these tasks should be rotated. Part of the family should be sleeping while the rest is awake.

To break the monotony it may be necessary to invent tasks that will keep the family busy. Records such as diaries can be kept.

The survival of the family will depend largely on information received by radio. A record should be kept of the information and instructions, including the time and date of broadcast.

Family rationing probably will be necessary.

Blowers should be operated periodically on a regular schedule.



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There will come a time in a basement shelter when the radiation has decayed enough to allow use of the whole basement. However, as much time as possible should be spent within the shelter to hold radiation exposure to a minimum.

The housekeeping problems of living in a shelter will begin as soon as the shelter is occupied. Food, medical supplies, utensils, and equipment, if not already stored in the shelter, must be quickly gathered up and carried into it.

After the family has settled in the shelter, the housekeeping rules should be spelled out by the adult in charge.

Sanitation in the confines of the family shelter will require much thought and planning.

Provision for emergency toilet facilities and disposal of human wastes will be an unfamiliar problem. A covered container such as a kitchen garbage pail might do as a toilet. A 10-gallon garbage can, with a tightly fitting cover, could be used to keep the wastes until it is safe to leave the shelter.

Water rationing will be difficult and should be planned carefully.

A portable electric heater is advisable for shelters in cold climates. It would take the chill from the shelter in the beginning. Even if the electric power fails after an attack, any time that the heater has been used will make the shelter that much more comfortable. Body heat in the close quarters will help keep up the temperature. Warm clothing and bedding, of course, are essential.

Open-flame heating or cooking should be avoided. A flame would use up air.

Some families already have held weekend rehearsals in their home shelters to learn the problems and to determine for themselves what supplies they would need.

IV. If An Attack Finds You Without A Prepared Shelter

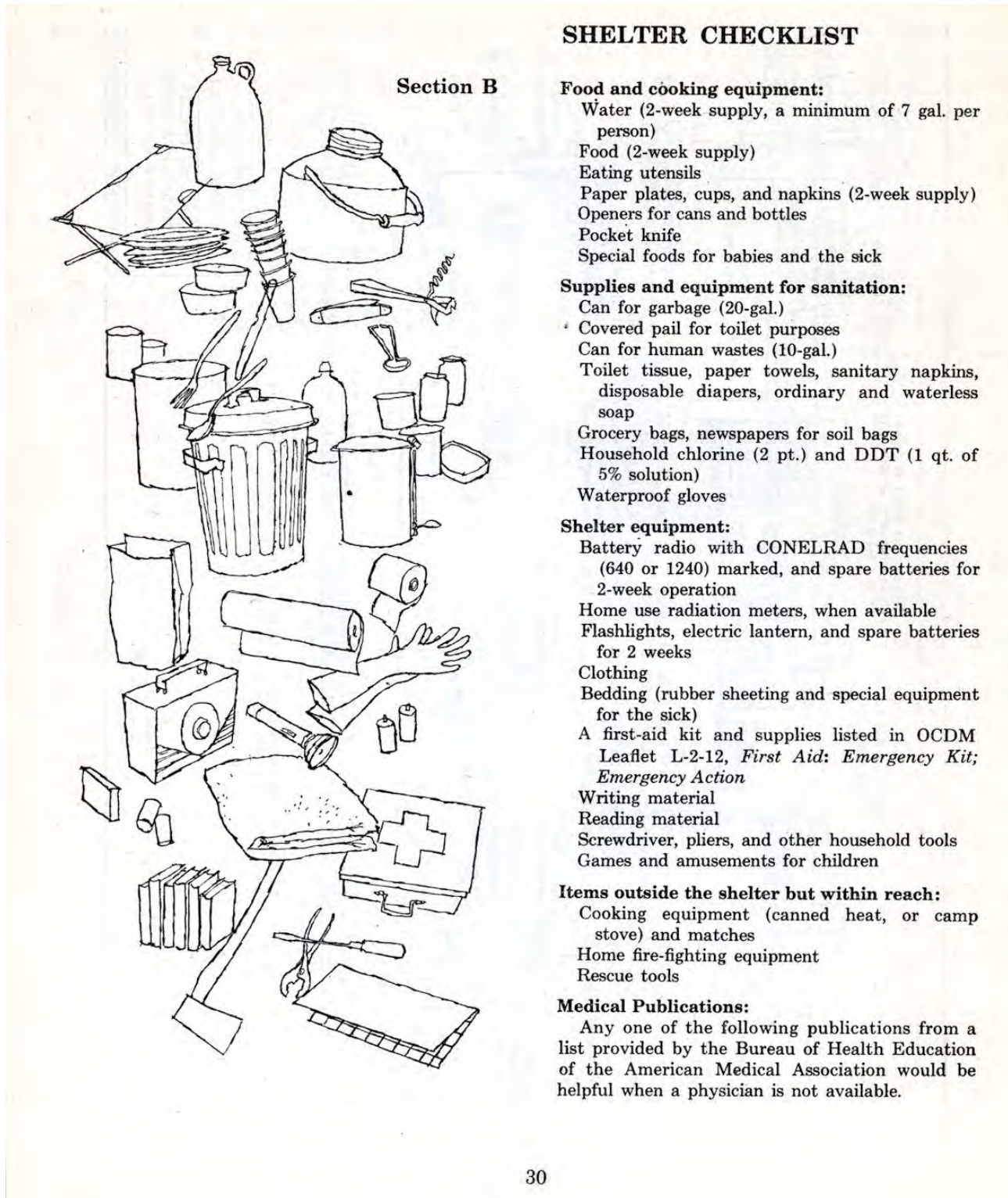
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Transcription

[brochure cover]

The Family Fallout Shelter

MP-15 Office of Civil and Defense Mobilization

A committee of the National Academy of Sciences, in a recent study of national preparedness, concluded: "Adequate shielding is the only effective means of preventing radiation casualties."

[page 2]

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Leo A Hough [signature] Director

Office of Civilian Defense

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[page 5]

Figure 2. [U.S. map]—Fallout areas at 24 hours after detonation

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[page 16]

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[page 16 continued]

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[page 30] SHELTER CHECKLIST

Section B

Food and cooking equipment:

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Food (2-week supply)

Eating utensils

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Transcription

[page 30 Shelter Checklist continued]

Paper plates, cups, and napkins (2-week supply)

Openers for cans and bottles

Pocket knife

Special foods for babies and the sick

Supplies and equipment for sanitation:

Can for garbage (20-gal.)

Covered pail for toilet purposes Can for human wastes (10-gal.)

Toilet tissue, paper towels, sanitary napkins, disposable diapers, ordinary and waterless soap Grocery bags, newspapers for soil bags

Household chlorine (2 pt.) and DDT (1 qt. of 5% solution)

Waterproof gloves

Shelter equipment:

Battery radio with CONELRAD frequencies (640 or 1240) marked, and spare batteries for 2-week operation

Home use radiation meters, when available

Flashlights, electric lantern, and spare batteries for 2 weeks

Clothing

Bedding (rubber sheeting and special equipment for the sick)

A first-aid kit and supplies listed in OCDM Leaflet L-2-12, *First Aid: Emergency Kit; Emergency Action*

Writing material

Reading material

Screwdriver, pliers, and other household tools

Games and amusements for children

Items outside the shelter but within reach:

Cooking equipment (canned heat, or camp stove) and matches

Home fire-fighting equipment

Rescue tools

Medical Publications: Any one of the following publications from a list provided by the Bureau of Health Education of the American Medical Association would be helpful when a physician is not available.

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