



CIVIL DEFENCE

SUPPLEMENT NO. 33
CANADA'S HEALTH & WELFARE

UNTIL we have achieved a permanent secure peace;

UNTIL we can be sure that no enemy can make a successful attack on this country...

CANADA NEEDS CIVIL DEFENCE

FEDERAL

CD

CIVIL DEFENCE is not "the government's job"—any government's. Federal CD is a small coordinating organization, planning a national civil defence program; ensuring an advance air raid warning system; providing central training facilities and training aids and equipment; carrying out research; and working toward coordination with other NATO countries.

PROVINCIAL

CD

Provincial CD is the area planning and training organization through which projects involving various municipalities are coordinated.

MUNICIPAL

CD

Municipal CD, with the aid of private and public agencies and services, organizes evacuation, reception and rehabilitation techniques to fit local conditions.

CIVIL DEFENCE IS A CITIZENS' MOVEMENT

The threat of atomic warfare cannot be dismissed or treated lightly.

We can hope to avert it by...

unremitting efforts toward peace...
the power to retaliate...
preparedness to survive attack.

IN CANADA...

We have few cities likely to be attacked as primary targets; we have a vast country with few centres of dense population; we have an excellent transportation service and now in the final stages of development a distant early warning system.

BUT... if war should ever come, the skies of Canada might well be the scene of the vital air battle and we are likely to receive bombs dropped from enemy aircraft on secondary targets or through damage to the aircraft.

FORTUNATELY, ALL-OUT ATOMIC WARFARE WOULD LIKELY LAST A MATTER OF DAYS RATHER THAN OF WEEKS OR MONTHS.

If we are prepared with knowledge and planning, if our people understand what to do and are ready and willing to do it under rugged survival conditions, Canada and Canadians have a good chance of survival and of rehabilitation.



When a city is destroyed...

by modern war weapons, devastation can be total. In a flash, homes, stores, offices, factories become hideous, ruinous death-traps.

There is a breakdown of local utilities, possibly the collapse of local government and public morale faces breakdown. Unless there is advance planning and a good information service, the struggle for survival is of the grimmest order, and the only possibility of survival lies in earlier evacuation of anticipated targets.

Mass evacuation of large cities cannot be undertaken overnight. It is an extremely complicated process, requiring months and years of planning and technical knowledge of the highest order. Training of key people and actual practices are essential. Like any form of insurance, this costs money.

That is why, in many cities in Canada, there is now a core of people trained in the techniques of communications, transportation, emergency feeding, registration, rescue, fire-fighting, first aid and medical care, morale, shelter-building, radiation detection, and rehabilitation.

That is why many cities have undertaken, at great effort and expense, practice evacuations and other emergency exercises, and will be doing more of them.



"THERE ARE FOUR SORTS OF MEN..."

He who knows not and knows not he knows not: he is a fool—shun him.

He who knows not and knows he knows not: he is simple—teach him.

He who knows and knows not he knows: he is asleep—wake him.

He who knows and knows he knows: he is wise—follow him."

(Arabian proverb).

THE BEST WAY TO SURVIVE ATOMIC WARFARE

EVACUATION *from a target area*

There will be practically no chance of survival for anyone living within five miles of the spot where a big atomic weapon—equivalent to five to ten million tons of high explosive—strikes.

There will be very little chance of survival for anyone living within eight miles of the spot where an atomic weapon strikes.

People living from nine to twelve miles from the explosion might survive the blast and heat if they were in shelters.

But nobody knows the exact point of explosion.

There is no defence . . . EXCEPT EVACUATION

Civil Defence is in 4 stages.

phase A

Pre-attack evacuation of the people who could not be used for essential work—people like children, mothers with small children, expectant mothers, old people, invalids, hospital patients and staffs.

These people—roughly one-half of any community—would be moved to pre-arranged destinations by pre-arranged transportation along certain routes. Fire, police and civil defence workers would move to their posts to safeguard evacuated areas.

Phase A should be capable of being put into operation and completed within 8 hours.

phase B

Evacuation of the remaining population for at least 50 miles from the city during the three hours warning of an attack.

phase C

After the bomb has gone off, those moving out from a target area should keep going. Those who have taken shelter should stay where they are until told to come out. Trained rescuers should move into the damaged area to help save life.

phase D

Rehabilitation. Civil defence workers would try to bring families together and plan for people who had lost their homes. Registration techniques would ensure that it would soon be possible for people to find out where other members of their families were.

IF YOU LIVE IN A TARGET CITY, YOU ARE ENTITLED TO KNOW WHAT PLANS ARE BEING MADE FOR YOUR SAFETY.



IF NONE HAVE BEEN MADE, YOU ARE ENTITLED TO ASK "WHY?"

IS NOT TO BE THERE WHEN THE BOMB FALLS

ACTIVITIES *in a reception area*

In cities and towns where there is little chance of a bomb being deliberately directed against them, there are three things to do;

1. STAY PUT

This involves public education, a well-trained Warden Service, enforcement by police if necessary, and adequate public information services.

2. ARRANGE TO RECEIVE EVACUEES

Phase "A" Evacuees will arrive over a period of six hours and will be billeted on about a one-to-one or doubling-up basis.

Phase "B" Evacuees will arrive over a shorter period to be billeted at first on a five-to-one basis. They will require mass feeding. Whether a community is required to receive Phase "A" or Phase "B" evacuees will depend on its distance from a target city and the size of both the community and the target area to be evacuated.

A reception area can expect about two hours warning. Accordingly, long before Bomb Day, plans must be made for . . .



Traffic Control	<i>a police responsibility</i>
Billeting	<i>a warden's responsibility</i>
Feeding	<i>a welfare responsibility</i>
Information	<i>the combined responsibility of communications, welfare, information services</i>
Registration	<i>a welfare responsibility</i>
Employment	<i>a headquarters responsibility</i>
Hospitalization	<i>a health services responsibility</i>
Public Health	<i>a health services responsibility</i>

Every community can build a reserve of leaders trained in all these services by seeing that advantage is taken of civil defence training courses at the Canadian Civil Defence College, Arnprior, Ontario.

3. GET PROTECTION *against radioactive fallout*

Sufficient protective shelter in cellars of homes or elsewhere must be equipped for a 48-hour stay. Police, wardens and firemen must be prepared to control the public. Adequate communications must be available to keep the public informed. Control of public utilities must be maintained. People must know what to do and be prepared to do it.

radiation fallout

An atomic bomb has four damaging effects: blast, heat, and two types of radiation. Blast and heat lay their mark on the immediate vicinity of the bomb; radioactive fallout may spread for thousands of square miles around the target area.



When the hydrogen bomb bursts, radioactive dust and debris may be sucked up to a height of 80,000 feet (15 miles). These particles drift in the air and fall back to earth. As they fall, their danger deteriorates with time. After 48 hours their effect is only one per cent of what it was originally. Therefore the first period of fallout is the most dangerous.

Radioactivity is measured by roentgens per hour. You can receive the same amount of radioactivity by exposure for one minute at 600 roentgens per hour as you would in one hour at 10 roentgens per hour. The pattern of fallout of radioactive particles is irregular and may extend over hundreds or thousands of square miles. The stronger the wind, the longer and thinner the radioactive cloud; the milder the wind, the shorter and thicker is the cloud.

There is, fortunately, a time-lag between the burst of the bomb and the beginning of radioactive fallout. With a normal wind velocity of 25 m.p.h., fallout will begin 25 miles downwind from the explosion approximately one hour after it happened.

People who are not in a target area and are not affected by blast and heat may be in extreme danger from fallout.

Protection from fallout consists in staying under cover in adequate shelter. Such shelter can be provided by most people in their own homes, but it must be built and stocked ahead of time, and a heating device should be included in winter.

In addition to the proper provision and preparation of shelter, communications are of the utmost importance.

how and where to take shelter



To save the lives of people in reception areas, including those evacuated from target areas, adequate shelter from radiation fallout should be provided. "Adequate" is defined as "1/10th Shelter", i.e., a shelter that reduces radiation intensity to one-tenth of that outside the shelter, or better. This can be simply provided.

THREE TYPES OF SHELTER...

- 1 "Garrison shelters" (probably in the cellars of existing buildings), for certain Civil Defence workers who have to remain on the fringe of evacuated cities. These shelters should provide protection against blast, heat and radiation and will possibly have to be occupied for 7 days. They will be located in large buildings near evacuation routes of target cities.
- 2 Existing buildings adapted for shelter against fallout in non-target areas and designed for occupancy by a large number of people for two days. Residents and evacuees should be planned for.
- 3 Family shelters against fallout built on the slit-trench design or improvised in a house. Plans for such shelters on a "do-it-yourself" basis for \$8 to \$15 per person may soon be obtained from Civil Defence authorities.



ESSENTIAL SUPPLIES FOR A HOUSEHOLD SHELTER...

... A three-day supply of canned food, can opener, powdered milk and water in covered containers at the rate of one quart per person per day.

Candles, matches, cigarettes, chocolate bars, hard candy.

Bedding and extra clothing.

Reading material, playing cards, games for children.

Battery operated radio.

First aid kit, flashlight, spare batteries.

Sanitary pail, toilet tissue.

Axe and shovel.

Whistle. (In the event of being trapped, this could direct rescuers).

Facilities for washing and for keeping food covered.

In planning for shelter you are planning for SURVIVAL, not comfort. Shelters will only be occupied, except for short periods, when death lurks outside.

CIVIL DEFENCE

needs

money

Last year \$646,835 was paid out under the Federal Civil Defence Financial Assistance Program as follows:

British Columbia.....	\$187,271	Ontario.....	\$190,776
Alberta.....	\$118,001	New Brunswick.....	\$ 12,758
Saskatchewan.....	\$ 39,356	Nova Scotia.....	\$ 30,780
Manitoba.....	\$ 37,126	Newfoundland.....	\$ 30,763

Under this program the federal government agrees to contribute 25 per cent of the cost of certain classifications of Civil Defence expenditures, irrespective of whether the provincial government contributes funds; if the provincial government contributes, the federal government matches the provincial contribution dollar for dollar to a maximum contribution of 50 per cent.

For certain types of civil defence expenditures which also have a peacetime value, the federal government matches the provincial contribution dollar for dollar.

information

Posters, leaflets, training charts, radio programs, newsclips, films have been provided as well as a special newsmen's conference.

planning

for the development and rehearsal of evacuations, the use of transportation facilities, communications, a warning system, welfare and health services.

training

of Civil Defence leaders. Last year 63 regular courses for nearly 2,000 candidates and 15 special courses for special groups were given at the Civil Defence College on welfare, emergency feeding, emergency clothing, emergency lodging, registration and inquiry, health services, rescue and fire-fighting.

personnel

Up to March 31, 1956, 189,185 people were enrolled in the Civil Defence Movement. Of these 72,005 are full-time provincial and municipal employees such as fire, police, utilities and CD personnel and 107,180 are part-time civilian volunteers of whom 106,863 have taken Civil Defence training.

For information on Civil Defence apply to your local or provincial Civil Defence organization.



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