

Cambridge and Nuclear Weapons

~~Is there a place to hide?~~

Cambridge and Nuclear Weapons

City of Cambridge, Massachusetts

Robert Healy, City Manager

Cambridge City Council

Francis H. Duehay, Mayor

Leonard Russell, Vice Mayor

Kevin P. Crane

Thomas W. Danehy

Sandra Graham

David Sullivan

Walter J. Sullivan

Alfred E. Vellucci

David A. Wylie

Cambridge Civil Defense Department

Chester Hallice, Director

1493 Cambridge Street

Cambridge, MA 02139

547-5355

Publication Editor

Larry Beeferman

Publication Design

Cambridge Community Development Dept.

Claudia Thompson

Maxine Novek

Why should I read this booklet?

This booklet is about something unpleasant and frightening: nuclear war and the death and destruction of all that you treasure. The danger is real. The risks are great. You should read this booklet because you will learn what is at stake. Then you can decide what you wish to do about it.

Why did the city council order that this booklet be made?

After holding a hearing on this subject and learning the kinds of things described here, members of the Cambridge City Council felt a sense of disbelief, despair, and anger — much the same feelings you may have after reading this booklet. They concluded, as you may conclude, that “the sole means of protecting Cambridge citizens from nuclear warfare would be for nations with nuclear arms to destroy those arms and renounce their use”. The City Council felt a deep responsibility to make the citizens of Cambridge aware, as it had been made aware, of the chances for survival from a nuclear war and so ordered that this booklet be written.

What this booklet describes.

This booklet is in five parts. The first three describe who has or might get nuclear weapons, how many there are, and how powerful those weapons can be; what would happen if a single nuclear weapon were to strike our city; and what a full-scale attack on our country would mean for us. Worse things could happen about which we can hardly guess. Some of those are described in the fourth part. We have the power to prevent these terrible things from happening. The last section describes what we can do.

Nuclear Weapons: How many? How powerful?

The United States and the Soviet Union have the most weapons. France, Great Britain, and China have them as well. India, Pakistan, Israel, South Africa, and others may have them or be trying to get them. Even terrorist groups may be able to make and deliver nuclear bombs. The general public does not know at whom all of these weapons are aimed.

The United States, Soviet Union, Great Britain, France and China (all shown in dark grey) are known to have nuclear weapons. Many other countries in addition (shown in light grey) have at least the technology necessary to explode nuclear devices.



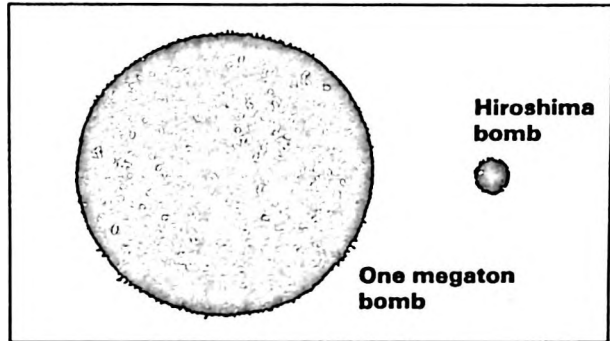
Harold Brown, the Secretary of Defense under President Carter, reported that the United States has about 9,000 warheads and the Soviet Union has approximately 7,000. Both the U.S. and the Soviet Union can hit each other with nuclear warheads by means of hundreds of missiles launched from land, by sea from submarines, or dropped or shot from bombers. Many of the missiles and bombers can carry more than one warhead.

Nuclear warheads are stockpiled by the United States, Soviet Union, and other countries. (While the U.S. is reported to have more warheads, the Soviet Union is reported to have more missiles.)



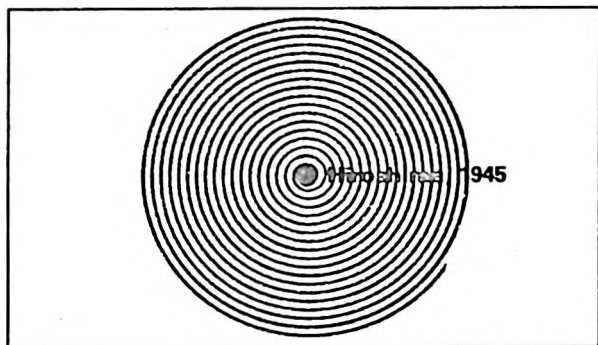
Each nuclear warhead is, of course, extremely powerful. The explosive power of a bomb or warhead is described by the word "megaton". A one-megaton bomb would have the explosive power of one million tons of TNT. The bombs which destroyed the Japanese cities of Hiroshima and Nagasaki to end World War II had the explosive power of only 10 to 20 thousand tons of TNT. *So a one-megaton bomb — the size of the kind which could hit us — is about 50 to 100 times more powerfull*

A one-megaton bomb (large circle) has about 70 times the explosive power of the bomb dropped on Hiroshima (small circle). 68,000 people were killed, and 76,000 injured by the Hiroshima bomb.

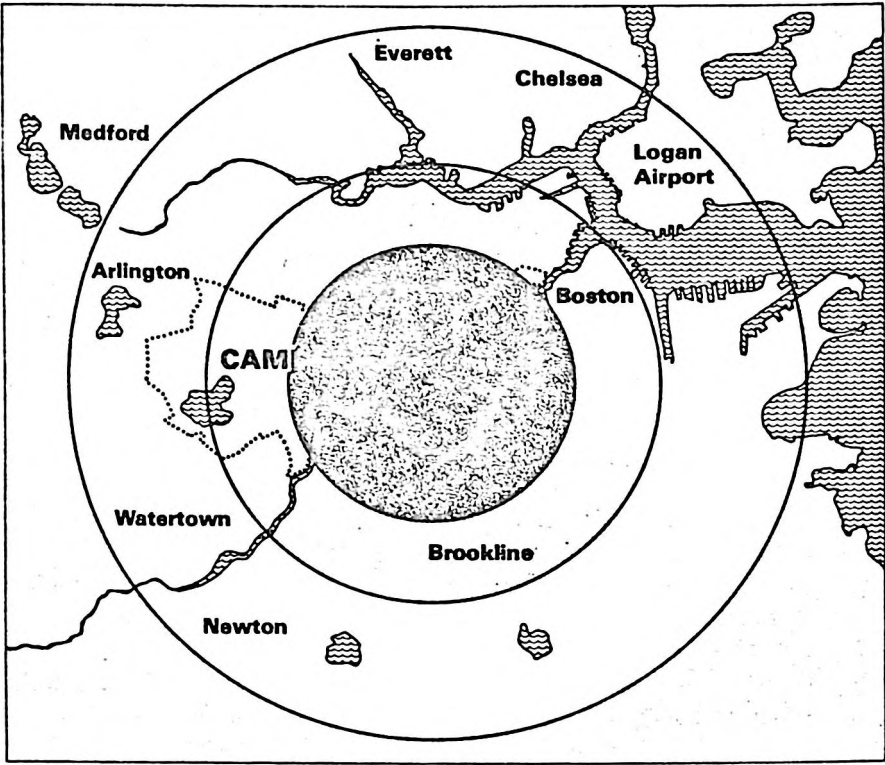


Altogether the United States and the Soviet Union have so many megatons of nuclear weapons that in a war they would produce nearly 1,000,000 times the explosive power used against Hiroshima. This doesn't include all the smaller, so-called tactical nuclear weapons each side has, or the nuclear weapons held by all those countries mentioned above. As the sections that follow show, it means that if a nuclear war were started — by accident or on purpose — by a superpower, or another nation or group — the destruction would be beyond anything ever before experienced by the human race.

The total destructive power of the nuclear weapons located throughout the world is more than *one million times* that of the bomb which destroyed Hiroshima.

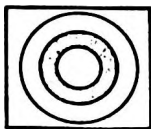


What one nuclear weapon would do to Cambridge.



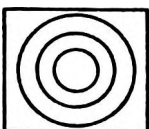
If You Were In Cambridge (0.0 to 1.7 miles from the bomb)

Suppose a one-megaton bomb were dropped near ground level over Cambridge City Hall. Almost all Cambridge citizens would be killed. City Hall, the Central Square Post Office, and the YMCA and YWCA — all would disappear into a crater about 20 stories deep. A rim of deadly radioactive soil would be thrown up twice as far as where the Police Station, the City Hall Annex and the Manning Apartments for the elderly had been. Nothing recognizable would remain from the riverfront to City Hospital. Little of significance would be left standing in the rest of the City. This "end of the world" as we know it would occur within seconds.



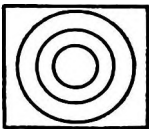
**If You Were Further Away
(1.7 to 2.7 miles from the bomb)**

Suppose you were away from Cambridge — doing errands, visiting a friend at work — outside this circle of complete and immediate devastation. Imagine that you were one of a group of 10 persons, in Watertown (or Brookline or downtown Boston). Half would die and four of five of you would be injured. Of the survivors of the blast of the explosion as many as half might ultimately die from burns. Others would die, sooner or later, from exposure to radiation. If it were downtown Boston, tall buildings would collapse and fill the streets with debris. Most automobiles, police cars, buses and firetrucks would be destroyed.



**If You Were Still Further Away
(2.7 to 4.7 miles from the bomb)**

Imagine instead that you were fortunate to be further away from Cambridge, working in Revere, Everett, or Forest Hills. Even at that distance half the people would be killed or injured. Most of the planes and hangars at Logan Airport would be destroyed. Factories would be severely damaged. Buildings would lose their windows and frames and interior partitions. The contents of upper floors would be blown out and walls would crack. Debris in the streets would prevent vehicular traffic. Fires would spread throughout much of the area and burn for at least a day, destroying at least half the buildings. Under certain circumstances a vast "firestorm" might occur, burning out of control at temperatures of thousands of degrees. Where this happened so much air would be sucked up that thousands of people would die from lack of oxygen.



If You Were Even Further Away

For up to hundreds of miles away, depending upon wind patterns, the nature of the bomb, and other factors, radiation would kill thousands more. The radiation would be spread by tons and tons of particles of contaminated soil and debris floating and drifting away from the blast area. The deaths would be rapid or slow and would include unborn generations due to the effect of radiation on genetic characteristics. For many of those who survived, the recovery would be long and painful, perhaps with permanent disability.

What a nuclear war would do.

What if an enemy attacked the United States with only 1/20th of the weapons that could be used against us? One U.S. government study described the effects on Massachusetts:

Right after the attack there would be 3,200,000 killed or injured — over ½ the population. In the long run many more people would die from injuries, exposure to radiation, lack of food, water and adequate shelter.

There would be little medical care and few facilities for the hundreds of thousands of people with burns, or suffering from radiation sickness, blast effects, shock, or other injuries. Epidemics of plague, typhus, cholera, or other diseases would break out.

There would be serious shortages of food with stocks largely destroyed and little hope of replacing them. Children, the elderly and the sick would suffer the most. Others would find their effort to survive and recover hampered by the lack of food.

There would be widespread destruction of homes and schools. People would not be able to return home for weeks, months, or even years. Basic services such as sanitation, fire, police, and even sewage disposal and water supply would be severely disrupted. There would be severe energy shortages. Economically, Massachusetts would be virtually destroyed.

The worst may be unknown.

What is likely to happen is horrible; what can't even be guessed at could be worse. This was the conclusion of an important U.S. government study of the effects of nuclear war. It's almost impossible to calculate what would happen to our environment — air, water, plants, trees, animals, etc. More serious, society as we know it might collapse under the combined pressure of massive death and destruction, fear, despair, conflict and anarchy.

What can we do?

After learning about the things described in this booklet the City Council felt a responsibility to act. It ordered that this pamphlet be prepared to inform you of the risks and dangers we all face. It directed the Civil Defense Department to "conduct a program through all the media urging the citizens of Massachusetts to communicate to their representatives in Congress and the Legislature the necessity of continuing negotiations with foreign powers" to control nuclear arms. The School Committee also acted to establish a curriculum to support "children's and young people's understanding of the history, scientific background, economics and politics of waging peace in the nuclear age."

You, too, can act. You can:

LEARN MORE. There are lots of materials about nuclear weapons, the effects of nuclear war, etc. Many of them are available at the Cambridge Public Library (498-9080).

DISCUSS THE PROBLEM. Start discussions around the dinner table, at your church, school, or club. Ask questions and get answers from the government agencies involved:

Federal Emergency Management Agency
442 John W. McCormack and
Post Office Building
Boston, Massachusetts 02109
223-4741

**Massachusetts State
Civil Defense Agency**
400 Worcester Road
Framingham, Massachusetts 01701
237-0200

There are also concerned groups and organizations which you can contact:

American Friends Service Committee
2161 Massachusetts Avenue
Cambridge, Massachusetts 02140
661-6130

The Catholic Connection
27 Isabella Street
Boston, Massachusetts 02117
482-6295

Council for a Livable World
11 Beacon Street
Boston, Massachusetts 02108
742-9395

Council for a Nuclear Weapons Freeze
2161 Massachusetts Avenue
Cambridge, Massachusetts 02140
491-7809

Educators for Social Responsibility
25 Kennard Street
Brookline, Massachusetts 02146
734-1111 ext. 335

**Institute for Defense and
Disarmament Studies**
251 Harvard Street
Brookline, Massachusetts 02146
734-4216

Jobs With Peace
10 West Street
Boston, Massachusetts
451-3389

Lawyers Alliance for Nuclear Arms Control
P. O. Box 9171
Boston, Massachusetts 02114
227-0118

Mobilization for Survival
13 Sellers Street
Cambridge, Massachusetts 02139
354-0008

Physicians for Social Responsibility

23 Main Street, P. O. Box 144
Watertown, Massachusetts 02171
924-3468

Science for the People

897 Main Street
Cambridge, Massachusetts 02139
547-0370

Union of Concerned Scientists

1384 Massachusetts Avenue
Cambridge, Massachusetts 02138
547-5552

University Christian Movement

11 Garden Street
Cambridge, Massachusetts 02138
354-6583

U. S. Peace Council

P. O. Box 426, Astor Station
Boston, Massachusetts 02123
969-5571

Women's Party for Survival

56 North Beacon Street
Watertown, Massachusetts 02172
923-9542

**Draw your own
conclusion. Take action.**

You may or may not agree with the City Council, but try and reach your own conclusion. Do not assume that someone else can be smarter than you are about this. Tell your City Council and School Committee members what else you think they should do. Tell President Reagan, Congressman O'Neill, and Senators Kennedy and Tsongas what you think they should do.