

Atomic Bomb Biggest Problem Facing Civil Defense Planners

(EDITOR'S NOTE)

The Defense Department has received a blueprint for setting up a vast Civil Defense Program in the event of atomic war. The subject has been worrying officials ever since Hiroshima. The next Congress probably will be asked to do something about it. Why? Because in atomic war the great majority of casualties would be civilians, not soldiers. What civilians? The residents of any city an enemy might pick as an atomic target. The city might be Washington because it is the seat of government. It might be Detroit because Detroit is a great industrial center. It might be New York or Chicago, Pittsburgh or San Francisco, Norfolk or Bremerton. The assumption is that an atomic attack would come without warning—"out of a clear sky" as it did at Hiroshima. The following tells what would happen to the people of a target city.

It is based on official reports and on published statements by atomic experts.

By JOSEPH L. MYLER
United Press Staff Correspondent

WASHINGTON—There are two absolute "defenses" against the atomic bomb. They are time and space.

All of us are absolutely safe from the bomb until an enemy gets it and decides to use it against us. It may be a year from now or 10 years before another nation has bombs. Atomic officials say nobody outside Russia really knows.

And if an enemy gets the bomb—and uses it in war with us—many millions of Americans still will be individually safe, thanks to space. The bomb is not continuous.

Bikini Example
At Bikini, persons aboard ships only nine miles from the burst felt only a slight thump. At a distance of two miles the chances of direct injury would have been fairly slight.

And according to the National Security Resources Board, even the latest thing in atomic bombs, the improved weapons tested at Eniwetok last spring, can kill and destroy directly over a distance of no more than three miles.

But within that three-mile radius, no human being, dog, cat, or insect would be safe. Many persons would survive without injury, but none could absolutely bank on it.

Just Suppose
Say the target is a city of 1,000,000. Say the bomb goes off at 2500 feet, the altitude from which it can do the most damage to the greatest area.

Forget that the New Yorkers or San Franciscans going about their business in the buildings and streets below are flesh and blood human beings with names and addresses and families. Think of them as a set of statistics fresh from a Pentagon adding machine.

Collectively they may be labeled "total numbers of fatal and non-fatal casualties." The office of civil defense planning says they number about 100,000.

Thousands of them never will know the bomb exploded. They will be dead before they know. Among the others, thousands may think they survived without injury because they felt no wound.

Not Just Bomb
But the atomic bomb is not just a bomb. It kills in many ways—in a split second or a matter of weeks. It is a triple-threat weapon, killing with blast, fire and poison. In all three categories the word for the bomb is "super."

In the split millionth of a second while detonation lasts, the bomb floods the target with blinding light and killing multi-million degree heat.

Quickly following are a crushing shock wave and a thousand-mile-an-hour wind. A white-hot fireball expanding from the center of the burst ignites everything inflammable which it touches.

'Firewind' Follows
The uprushing atomic cloud mushrooming over the city is fol-

lowed by a "firewind" generated by the conflagration spreading out from "round zero," the target point.

In the first split second, deeply penetrating neutron and gamma rays from the few pounds of splitting atoms at the bomb's center have flashed in all directions.

Thousands of persons far enough away to escape death by blast or flash or fire will die of "ionizing" radiation. This radiation, electronically unlocks the bonds which hold atoms together in living tissue of the body's deep interior. Depending on dosage, death is quick or slow.

The statisticians say that of the 100,000 casualties, 40,000 will be fatal. Of the 40,000, half will be killed outright. The other 20,000 will die later of radiation sickness.

There will be 60,000 non-fatal

casualties, with 20,000 serious cases in the first week. The other cases will develop over a period of three weeks.

Radiation Later

The peculiarly atomic casualties are those caused by radiation. Persons not killed outright sicken in three to 21 days. Symptoms include general weakness, nausea, vomiting, steady fever, loss of hair, reddening of the skin, loss of appetite, bloody diarrhea, hemorrhage, and a drop in the white blood cell count.

Victims may be saved if the radiation dosage has not been too great. Whole blood, penicillin, and anti-hemorrhage drugs like Rutin may help.

A lot of persons close enough to the burst to get a killing dose will survive because they were lucky enough to be accidentally shielded by a concrete wall or other shelter from neutron and gamma radiation.

The civilian defense planners, apparently basing their calculations on the known effects of the "obsolete" wartime bomb instead of the newer Eniwetok model, say casualties generally will be distributed as follows:

Within 500 yards, the length of five football fields: Practically everybody will be killed immediately by radiation, blast, burns, and collapsing buildings.
Between 500 and 1000 yards: Fatalities will be nearly 100 per cent with deaths occurring at various times within three weeks of the burst. In this area radiation will be a major cause of death.
Between 1000 and 1500 yards: Half of the people in this zone will die, with flash and fire being the chief killers. Many will suffer radiation injury but deaths from this cause will be fewer.
Between 1500 yards (nearly one

mile) and 2500 yards: About 15 per cent will die. Most of those exposed to radiation will survive.

Between 2500 and 3000 yards (nearly two miles): Not more than one or two per cent of persons in this area will die, most of them of burns or "indirect effects of the blast."

Beyond 3000 yards: Relatively few injuries.

These computations relate only to the air burst, which normally leaves practically no lingering radiation because the bomb's wrecked atoms are dissipated high in the air.

Defense planners believe for

military reasons that "it is probable" an enemy would "use" air bombs. But he might detonate a bomb under water, as was done in the second test at Bikini. In that event a large part of the target area, drenched by falling water and spray, would be contaminated with long-lasting radioactivity comparable to thousands of tons of radium.

Many experts believe a region

LOANS

Get a cash loan here on the friendly basis that made "Personal" the choice of over one million persons last year.
Simple to Get!
If you can repay small monthly installments—which you select—you should not hesitate to see Personal's YES MAN for a loan. Come in or phone today.

Loans \$25 to \$200 on Salary - Partials, up to \$500 on

Personal FINANCE
788 Williamette

Leo McGee, YES MAN
Phone 3040
Lic. M-167-S 118

HIGH SCHOOL DIPLOMA AT HOME — SPARE TIME

Go as fast as your ability permits. Prepare at home, during your spare time. NO CLASSES! NO TIME WASTED GOING TO AND FROM SCHOOL! Quality for College or Business.

AMERICAN SCHOOL P.O. Box 294, Eugene, Oregon
Please Send Me Free Information at Once

I work: DAY SHIFT [] SWING [] NIGHT []
Name _____ Age _____
Address _____ Town _____
Have Completed _____ Years Grade _____ Years High School _____

MIGHTY FAST RELIEF in RHEUMATIC ACHES-PAINS MUSTEROLE



MODERN GLASS SERVICE
From replacing a costly store front to the modest domestic job — this establishment is equipped and carries the stock and has the experienced glazier to do the work right. The character grade glass you want is installed promptly. Call us for Glass Service of any nature.

SPRINGFIELD GLASS SERVICE
325 Main St.
Ph. Sp. 2600

COMPACT VACUUM CLEANER
Handsker Electric Sales & Service
699 No. 99 Ph. 7054-J



Westinghouse CLOTHES DRYER



with exclusive DRY-DIAL
No timer to set
No guesswork

Choose the dryness you want. The Dry-dial automatically shuts the Dryer off when clothes are bone dry... ready to fold and put away... or just right for ironing.

NOW Every Day's a Perfect Drying Day!

No Weather Worries. You'll dry clothes any time... rain or shine... day or night... whenever you wish. Save Time and Work. No more lifting, carrying, hanging heavy wet clothes. No lines to string or take down. Bright, Fluffy-Sweet Clothes. Gentle tumbling through heated air keeps garments soft, new-looking.

LET THE WESTINGHOUSE LAUNDRY TWINS MAKE WASHDAYS COMPLETELY AUTOMATIC

Laundromat washes, triple-rinses, damp-dries, cleans itself, shuts itself off at the set of a dial.

Clothes Dryer tumbles garments to whatever degree of dryness you want... automatically.

YOU CAN BE SURE... IF IT'S Westinghouse

SEE YOUR WESTINGHOUSE DEALER TODAY



FOR A *Merrier Christmas*
GIVE WASHDAY FREEDOM

GIVE THE

Pays for itself while working for you

5 year Guarantee
ON THE SEALED-IN-STEEL TRANSMISSION

ACT TODAY! GET PROOF... this convincing, easy way...



Just phone your Westinghouse dealer. Tell him you want to see the Laundromat wash a load of your clothes free.



Dealer will call and bring a load of your soiled clothes to his store demonstration room.



You come to the store; see your clothes washed clean in the new Laundromat.



Your clothes are returned to your home sparkling clean washed the Laundromat way.

INSTALLS ANYWHERE
NO BOLTING TO THE FLOOR • NO VIBRATION
NO SHIMMY • NO SHAKE

SEE How a Laundromat in Your Home Will...

SAVE WATER—Precious hot water and soap. Important savings that help the Laundromat pay for itself while working for you. WASH CLEANER—Exclusive patented washing action washes gently, thoroughly. Soiled water drains away from clothes, not through them. END WASHDAY WORK—No bending or stooping. Completely automatic. Fills, washes, triple-rinses, damp-dries, cleans itself, shuts itself off.

You can be SURE... if it's Westinghouse

SEE YOUR WESTINGHOUSE DEALER TODAY

Tune in TED MALONE... every morning, Monday through Friday... ABC Network