**SURVIVAL UNDER ATOMIC ATTACK  
THE OFFICIAL U.S. GOVERNMENT BOOKLET**

Executive Office of the President  
National Security Resources Board  
Civil Defense Office  
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**You can survive**

You can live through an atom bomb raid and you won't have to have a Geiger counter, protective clothing, or special training in order to do it.

The secrets of survival are:

**KNOW THE BOMB'S TRUE DANGERS. KNOW THE STEPS YOU CAN TAKE TO ESCAPE THEM**

To begin with, you must realize that atom splitting is just another way of causing an explosion. While an atom bomb holds more death and destruction than man has ever before wrapped in a single package, its total power is definitely limited. Not even hydrogen bombs could blow the earth apart or kill us all by mysterious radiation. Because the power of all bombs is limited, your chances of living through an atomic attack are much better than you may have thought. In the city of Hiroshima, slightly over half the people who were a mile from the atomic explosion are still alive. At Nagasaki, almost 70 percent of the people a mile from the bomb lived to tell their experiences. Today thousands of survivors of these two atomic attacks live in new houses built right where their old ones once stood. The war may have changed their way of life, but they are not riddled with cancer. Their children are normal. Those who were temporarily unable to have children because of the radiation now are having children again.

**WHAT ARE YOUR CHANCES?**

If a modern A-bomb exploded without warning in the air over your home town tonight, your calculated chances of living through the raid would run something like this:

Should you happen to be one of the unlucky people right under the bomb, there is practically no hope of living through it. In fact, anywhere within one-half mile of the center of explosion, your chances of escaping are about 1 out of 10.

On the other hand, and this is the important point, from one-half to 1 mile away, you have a 50-50 chance.

From 1 to 1.5 miles out, the odds that you will be killed are only 15 in 100.

And at points from 1.5 to 2 miles away, deaths drop all the way down to only 2 or 3 out of each 100.

Beyond 2 miles, the explosion will cause practically no deaths at all.

Naturally, your chances of being injured are far greater than your chances of being killed. But even injury by radioactivity does not mean that you will be left a cripple, or doomed to die an early death. Your chances of making a complete recovery are much the same as for everyday accidents. These estimates hold good for modern atomic bombs exploded without warning.

And remember: All these calculations of your chances of survival assume that you have absolutely no advance warning of the attack.

Just like fire bombs and ordinary high explosives, atomic weapons cause most of their death and damage by blast and beat. So first let's look at a few things you can do to escape these two dangers.

**WHAT ABOUT BLAST?**

Even if you have only a second's warning, there is one important thing you can do to lessen your chances of injury by blast: Fall flat on our face.

More than half of all wounds are the result of being bodily tossed about or being struck by falling and flying objects. If you lie down flat, you are least likely to be thrown about. If you have time to pick a good spot, there is less chance of your being struck by flying glass and other things.

If you are inside a building, the best place to flatten out is close against the cellar wall. If you haven't time to get down there, lie down along an inside wall, or duck under a bed or table. But don't pick a spot right opposite the windows or you are almost sure to be pelted with shattered glass.

If caught out-of-doors, either drop down alongside the base of a good substantial building - avoid flimsy, wooden ones likely to be blown over on top of you - or else jump in any handy ditch or gutter.

When you fall flat to protect yourself from a bombing, don't look up to see what is coming. Even during the daylight hours, the flash from a bursting A-bomb can cause several moments of blindness, if you're facing that way. To prevent it, bury your face in your arms and hold it there for 10 or 12 seconds after the explosion. That will also help to keep flying glass and other things out of your eyes.

**WHAT ABOUT BURNS?**

To prevent flash burns, try to find a shelter where there is a wall, a high bank or some other object between you and the bursting bomb. You can expect that the bomber will aim for the city's biggest collection of industrial buildings.

A little bit of solid material will provide flash protection even close to the explosion. Farther out, the thinnest sort of thing - even cotton cloth - will often do the trick.

If you work in the open, always wear full-length, loose-fitting, light-colored clothes in time of emergency. Never go around with your sleeves rolled up. Always wear a hat - the brim may save you a serious face burn.

**WHAT ABOUT RADIOACTIVITY?**

In all stories about atomic weapons, there is a great deal about radioactivity.

Radioactivity is the only way - besides size - in which the effects of A or H bombs are different from ordinary bombs. But, with the exception of underwater or ground explosions, the radioactivity from atomic bursts is much less to be feared than blast and heat.

Radioactivity is not new or mysterious. In the form of cosmic rays from the sky, all of us have been continually bombarded by radiation every hour and day of our lives. We all have also breathed and eaten very small amounts of radioactive materials without even knowing it. For over half a century, doctors and scientists have experimented and worked with X-rays and other penetrating forms of energy. Because of all this experience, we actually know much more about radioactivity and what it does to people than we know about infantile paralysis, colds, or some other common diseases.

It is easy to understand how radioactivity works if we think of how sunlight behaves.

In the northern part of the world, winter's slanting sun rays seldom cause sunburn, but the hotter rays of the summer sun often do. Still, just a few moments in the midsummer sun will not give you a tan or sunburn. You have to stay in its hot rays for some time before you get a burn. What's more, bad sunburn on just the face and hands may hurt, but it won't seriously harm you. On the other hand, if it covers your whole body, it can make you very sick, or sometimes even cause death.

**WHAT ABOUT RADIOACTIVE CLOUDS?**

In spite of the huge quantities of lingering radioactivity loosed by atomic explosions, people fortunately are not very likely to be exposed to dangerous amounts of it in most atomic raids. Since high-level bursts do the greatest damage, that is the kind we can expect most often. When atomic weapons are exploded in mid-air, the violent, upward surge of super-hot gases and air quickly sweeps practically all the radioactive ashes and unexploded bits of bomb fuel high into the sky. Most of them are carried harmlessly off in the drifting bomb clouds. High-level explosions definitely will not create "areas of doom" where no man dares enter and no plant can grow, In fact, they will leave very little radioactivity on the ground, even near the point of explosion. Firefighters and rescue teams can move promptly toward the center of destruction with little danger of facing harmful radiation.

And regardless of all you may have heard or read concerning the dangers of radioactive clouds, after the first minute and a half there is actually little or nothing to fear from those produced by high-level bursts. While most of the radioactive materials swept up into the sky eventually fall back to earth, they are so widely and so thinly spread that they are very unlikely to offer any real dangers to humans. Thousands of bombs would have to be set off in the air before serious ground contamination would be found over really large areas. There was no ground-level pollution of any importance following either of the two Japanese atomic bombings.

**TO SUM UP**

To sum up, always remember that blast and heat are the two greatest dangers you face. The things that you do to protect yourself from these dangers usually will go a long way toward providing protection from the explosive radioactivity loosed by atomic explosions.

While the lingering radioactivity that occasionally follows some types of atomic bursts may be dangerous, still it is no more to be feared than typhoid fever or other diseases that sometimes follow major disasters. The only difference is that we can't now ward it off with a shot in the arm; you must simply take the known steps to avoid it.

If you follow the pointers in this little booklet, you stand far better than an even chance of surviving the bomb's blast, heat, and radioactivity. What's more, you will make a definite contribution to civil defense in your community, because civil defense must start with you. But if you lose your head and blindly attempt to run from the dangers, you may touch off a panic that will cost your life and put tremendous obstacles in the way of your Civil Defense Corps.