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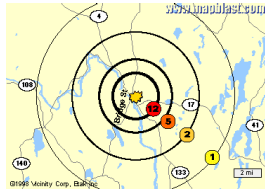
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BUNKER BLAST VIDEOS PANIC QUIZ CHARTS

1 Megaton Surface Blast: Fallout

One of the effects of nuclear weapons detonated on or near the earth's surface is the resulting radioactive fallout. Immediately after the detonation, a great deal of earth and debris, made radioactive by the blast, is carried high into the atmosphere, forming a mushroom cloud. The material drifts downwind and gradually falls back to earth, contaminating thousands of square miles. This page describes the fallout pattern over a seven-day period.



Assumptions
 Wind speed: 15 mph
 Wind direction: due east
 Time frame: 7 days

3,000 Rem*
 Distance: 30 miles
 Much more than a lethal dose of radiation. Death can occur within hours of exposure. About 10 years will need to pass before levels of radioactivity in this area drop low enough to be considered safe, by U.S. peacetime standards.

900 Rem
 Distance: 90 miles
 A lethal dose of radiation. Death occurs from two to fourteen days.

300 Rem
Distance: 160 miles
Causes extensive internal damage, including harm to nerve cells and the cells that line the digestive tract, and results in a loss of white blood cells. Temporary hair loss is another result.

90 Rem
Distance: 250 miles
Causes a temporary decrease in white blood cells, although there are no immediate harmful effects. Two to three years will need to pass before radioactivity levels in this area drop low enough to be considered safe, by U.S. peacetime standards.

"Rem: Stands for "roentgen equivalent man." This is a measurement used to quantify the amount of radiation that will produce certain biological effects.

NOTE: This information has been drawn mainly from "The Effects of Nuclear War" (Washington: Office of Technology Assessment, Congress of the United States, 1979). The zones of destruction described on this page are broad generalizations and do not take into account factors such as weather and geography of the target.

See damage from [another blast](#) or learn more about fallout and other [effects of a nuclear explosion](#).

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