NUCLEAR DETONATIONS

SINGLE 150 KILOTON NUCLEAR STRIKE ON ANCHORAGE ALASKA

The purpose of this illustration is to show effects of a 1 atomic 150 kiloton detonated on the 1 major population hub in Anchorage, Alaska.

Alaska

298,695 Population

Anchorage

NOTE:
There are more U.S. military bases in Alaska than in Hawaii and at a closer range. Based on current population, 1 nuclear strike could theoretically kill everyone in Anchorage.
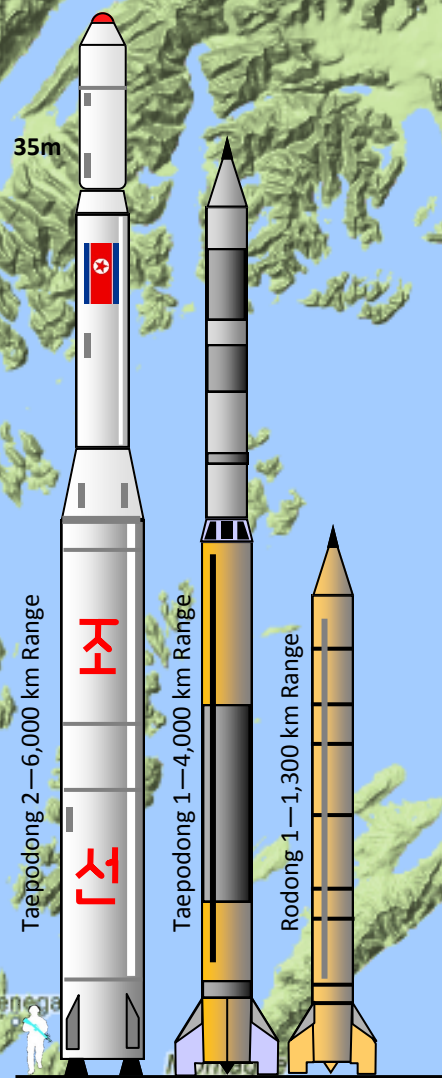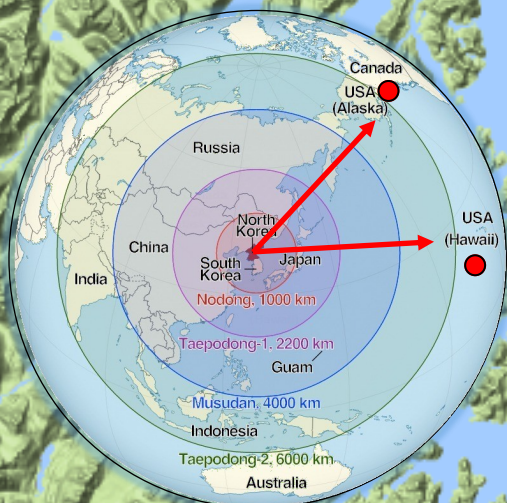
⚠ EMERGENCY ALERTS

Emergency Alert
BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.
Slide for more

January 13, 2018 Hawaii false missile alert.

Condition	Description	Color
DEFCON 1	Nuclear War is imminent	White
DEFCON 2	Prepare for Nuclear War	Red
DEFCON 3	Increase in force readiness above required normal readiness	Yellow
DEFCON 4	Increased intelligence watch and strengthened security measures	Green
DEFCON 5	Lowest state of readiness	Blue

DEFCON DESIGNATIONS

35m

Nuclear Fallout

Taepodong 2—6,000 km Range
Taepodong 1—4,000 km Range
Rodong 1—1,300 km Range

Canada
USA (Alaska)
Russia
North Korea
China
South Korea Japan
USA (Hawaii)
India
Nodong, 1000 km
Taepodong-1, 2200 km
Guam
Musudan, 4000 km
Indonesia
Taepodong-2, 6000 km
Australia

NUKEMAP 2.42 : FAQ

Drag the marker to wherever you'd like to target.

Anchorage, Alaska

Enter a yield (kilotons): 150

North Korean weapon tested in 2017 (150 KT)

Total initial estimated fatalities:

26,960

Total Estimated injuries:

44,480

In any given 24-hour period, there are approximately ~152,000 people in the 1 psi range of the most recent detonation.

Effects radii for 150 kiloton airburst* (smallest to largest):

○ **Fireball radius: .59 km (1.09 km²)**
Maximum size of the nuclear fireball; relevance to lived effects depends on height of detonation. If it touches the ground, the amount of radioactive fallout is significantly increased.

○ **Air blast radius (20 psi): 1.16 km (4.2 km²)**
At 20 psi overpressure, heavily built concrete buildings are severely damaged or demolished; fatalities approach 100%.

○ **Radiation radius (500 rem): 1.94km (11.8km²)**
500 rem radiation dose; without medical treatment, there can be expected between 50% and 90% mortality from acute effects alone. Dying takes between several hours and several weeks.

○ **Air blast radius (5 psi): 2.43 km (18.6 km²)**
At 5 psi overpressure, most residential buildings collapse, injuries are universal, fatalities are widespread.

○ **Thermal Radiation radius (3rd degree burns) 500 rem: 4.67 km**
Third degree burns extend throughout the layers of skin, and are often painless because they destroy the pain nerves. They can cause severe scarring or disablement, and can require amputation. 100% probability for 3rd degree burns at this yield is 13.9 cal/cm2.

Estimated total-dose fallout contours for a 150 kiloton surface burst (50% fission) with a 15 mph wind.

Created by **Alex Wellerstein**, 2012-2017.