



# Washington D.C., United States

## 383,210

est. injured after one nuclear detonation (100kt) over the Capitol

FOR EVERY HOSPITAL BED



FOR EACH DOCTOR



The United States possesses about [5,600 nuclear warheads](#)

A nuclear war would realistically involve many nuclear weapons targeting many cities in a country, making for an enormous humanitarian catastrophe basically impossible for any health care system to deal with. But even if just one average-sized nuclear weapon (100 kiloton) were to be detonated over Washington, D.C. today, the immediate health impact would be catastrophic. An estimated 177,650 people could die immediately and another 383,210 could be injured. That’s one out of every eleven people based on Washington’s metropolitan population of around [6.3 million people](#) in 2020.

At the reported COVID peak through 2021 on 31 December 2021, about [472,163 new COVID cases](#) were reported in one day in the United States. After a nuclear attack, nearly as many people would need medical attention immediately in just one city.

## Immediate Health Impacts



380 m  
↔

A fireball would extend out [about 380 meters](#) in every direction from the detonation point. If the bomb were dropped over the Capitol, the seat of the US Congress would be engulfed in a nuclear fireball and instantly vaporised, together with several museums and monuments. Everyone within this radius would die instantly.



1.1 km  
↔

To a distance of [a little over 1km](#) from the detonation point the explosion would likely generate a fatal dose of ionising radiation. In Washington, for this bomb dropped on the Capitol, this would include the Mall, the Supreme Court, the Senate office buildings and all three House office buildings, Democratic National Committee as well as BridgePoint Hospital.



3.26 km  
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Within [3.26 kilometers](#) in every direction from the center, there would be blast damage, with most residential buildings collapsing, and local fires starting from the destruction. Everyone in this zone would be injured, and many would die. In Washington, this circle includes the White House, as well as monuments, memorials and museums such as the Washington Monument, Lincoln Memorial, Martin Luther King Memorial and the National Portrait Gallery.



4.38 km  
↔

Within [4.38 km](#), people would suffer third-degree burns on all exposed skin. Technology may be disrupted by an electromagnetic pulse. Several hospitals lie in this zone, such as George Washington University Hospital, Howard University Hospital and MedStar Washington, including the Burn Center at MedStar Washington.



9.18 km  
↔

A full [9km](#) from the center of the blast, glass windows would shatter, causing additional injuries to anyone in the vicinity and some technology may be disrupted by an electromagnetic pulse.

## Healthcare Response Capacity

How could Washington respond to a health crisis of this proportion? We estimate Washington has about [16,490 doctors](#) and around [91,843 nurses and midwives](#). In the case that one in eleven of the population dies or is injured from the nuclear explosion, that leaves 15,025 doctors and 83,684 nurses and midwives. That means every doctor needs to treat 26 people, many with severe injuries, simultaneously.

**With one out of eleven of doctors and nurses dead or injured, every remaining doctor would need to treat 26 people simultaneously.**

What about hospital beds? There are around [13 hospitals](#) in Washington, but about almost half of those hospitals, the ones closest to the center of the city, would be destroyed by the blast. Thousands of people will have severe injuries and burns. In Washington, there are [about 345 ICU beds, and one burn center with a total of 30 burn beds](#). However, the one burn center would be destroyed or damaged by the explosion.

**The remaining available beds would be woefully inadequate to care for over 383,000 injured people.**

The US has [287 hospital beds per 100,000](#) people, thus around 18,119 hospital beds in Washington. Many beds would of course already be occupied and some destroyed by the blast. The remaining available beds would be woefully inadequate to care for over 383,000 injured people.

The United States may prepare to use nuclear weapons but its health care infrastructure is not and cannot be prepared for the humanitarian catastrophe that would result from the use of just one nuclear weapon.