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 New Delhi today, the immediate health impact would be catastrophic.

An estimated 614,290 people could die immediately and another 2,140,370 could be injured. Based on New Delhi’s population of 30.3 million in 2020, about one out of every 11 people in New Delhi would be injured or killed.

At the reported COVID peak through 2021 on 7 May 2021, over 400,000 new COVID cases were reported in one day in all of India. After a nuclear attack, about five times more people would need medical attention immediately in just one city.

**Immediate Health Impacts**

A fireball would extend out about 380 meters in every direction from the detonation point. If the bomb were dropped over the Parliament House, that means that the Parliament complex, the Ministry of Home Affairs and the State Bank of India would be engulfed in a nuclear fireball and instantly vaporised.

To a distance of a little over 1 km from the detonation point the explosion would likely generate a fatal dose of ionising radiation. In New Delhi, for this bomb dropped on the Parliament, this would include the Prime Minister’s Office, the Ministry of Defense, the Mughal Gardens and at least one hospital.

India possesses about **150 nuclear warheads**
How could New Delhi respond to a health crisis of this proportion? India has about 86 doctors per 100,000 people and 173 nurses per 100,000 people, which translates to roughly 25,962 doctors and 52,315 nurses in New Delhi. If every 11th person of that population is injured or dies from the nuclear explosion, that leaves about 23,601 doctors and 47,558 nurses to treat about 2,140,370 injured people. That means every doctor in New Delhi would be responsible for treating about 91 people, many with severe injuries, simultaneously.

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 New Delhi, this circle includes at least fourteen hospitals as well as several embassies, parks, museums and hotels.

Within 4.38 km, people would suffer third-degree burns on all exposed skin. Technology may be disrupted by an electromagnetic pulse. This zone would include at least ten additional hospitals, an airport and the National Zoo.

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 New Delhi respond to a health crisis of this proportion? India has about 86 doctors per 100,000 people and 173 nurses per 100,000 people, which translates to roughly 25,962 doctors and 52,315 nurses in New Delhi. If every 11th person of that population is injured or dies from the nuclear explosion, that leaves about 23,601 doctors and 47,558 nurses to treat about 2,140,370 injured people. That means every doctor in New Delhi would be responsible for treating about 91 people, many with severe injuries, simultaneously.

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What about hospital beds? New Delhi reportedly had 57,194 total hospital beds in 2019. 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 two million injured people.

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For all of the burn victims, in all of India there are 1,339 burn beds at 67 centres (hospitals with dedicated burn-care units), according to data compiled in 2016 by the National Academy of Burns-India (NABI). This is one of the most comprehensive assessments of the state of burn-care management in India by the academy, which counts 1,200 burn-care professionals as its members. Of the 1,339 beds, 297 are in intensive care units (ICUs) meant exclusively for patients with critical burn injuries. But these beds would not be sufficient to care for the burn victims in New Delhi.

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