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 Paris today, the immediate health impact would be catastrophic. An estimated 520,330 people could die immediately and another 1,387,830 could be injured. That’s nearly one in six people given Paris’s population of around 11 million people in 2020.

At the reported COVID peak through 2021 on 31 December 2021, about 204,636 new COVID cases were reported in one day in all of France. After a nuclear attack, about three times more 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 Eiffel Tower, the Eiffel Tower and Champ de Mars would be engulfed in a nuclear fireball and instantly vaporized. Everyone within this radius would die instantly.

- **1.1 km**: To a distance of a little over 1 kilometer from the detonation point the explosion would likely generate a fatal dose of ionising radiation. This zone would include Trocadéro, several embassies, museums and other tourist attractions, as well as residential areas.

---

**Paris, France**

**1.39M**

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

FOR EVERY HOSPITAL BED

FOR EACH DOCTOR

France possesses about **290 nuclear warheads**
How could Paris respond to a health crisis of this proportion? Paris has around 35,995 doctors and around 126,375 nurses and midwives. They would be as affected by the nuclear explosion as everyone else. In the case that one in six of the population dies or is injured from the nuclear explosion, that leaves about 29,761 doctors and 104,487 nurses and midwives to treat more than a million injured people. That means every doctor in Paris would be responsible for treating about 47 people 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.

Within 4.38 km, people would suffer third-degree burns on all exposed skin. Technology may be disrupted by an electromagnetic pulse. This area includes Notre Dame, Centre Pompidou and Jardin du Luxembourg, as well as several more hospitals, including La Salpêtrière, Hôpital Hôtel-Dieu, Hôpital Cochin and Hôpital Saint-Louis.

A full 9km from the center of the blast, glass windows can be expected to shatter, causing additional injuries to anyone in the vicinity and some technology may be disrupted by an electromagnetic pulse.

France has 591 hospital beds per 100,000 people, thus around 65,112 hospital beds in Paris. 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 one million injured people. There are about 397,654 hospital beds in all of France, although of course many of them would already be in use to treat patients suffering from other ailments.

France 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.

Healthcare Response Capacity

How could Paris respond to a health crisis of this proportion? Paris has around 35,995 doctors and around 126,375 nurses and midwives. They would be as affected by the nuclear explosion as everyone else. In the case that one in six of the population dies or is injured from the nuclear explosion, that leaves about 29,761 doctors and 104,487 nurses and midwives to treat more than a million injured people. That means every doctor in Paris would be responsible for treating about 47 people simultaneously.

In Paris, there are 416 ICU beds and around 44 burn beds, but as many hospitals would be destroyed or damaged by the explosion, it would not be possible to use all of these beds.

France has 591 hospital beds per 100,000 people, thus around 65,112 hospital beds in Paris. 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 one million injured people. There are about 397,654 hospital beds in all of France, although of course many of them would already be in use to treat patients suffering from other ailments.

France 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.

About 18 times more people would immediately need medical attention in Paris, than at the peak of the COVID-19 pandemic in all of France.

What about hospital beds? There are around 39 hospitals in Paris, but many of them, the ones closest to the center of the city, would be destroyed by the blast. In Paris, there are 416 ICU beds (and in France 8,217 ICU beds) and around 44 burn beds (based on there being four burn beds per million inhabitants in France). But as many hospitals would be destroyed or damaged by the explosion, it would not be possible to use all of these beds.