

LEARN ABOUT NUCLEAR WEAPONS

When the doctor falls ill

We always expect there to be a doctor when we fall ill. A phone call to the health care centre or in the worst case an ambulance to the emergency room should be the only thing needed to get in touch with competent medical staff. But what happens if a nuclear explosion has razed all hospitals and care centres in town, if all streets are more or less destroyed, if all electronic equipment is knocked out and hundreds of thousands of people need health care? What happens when hundreds or thousands of doctors, nurses and other medical staff have been killed or too badly injured to work to save the lives of others?

When the atom bomb was dropped on Hiroshima on 6 August 1945, there were about 150 doctors in the city. Of these, 65 died in the explosion and almost all of the others were badly injured. At the largest hospital, run by the Red Cross, six doctors and ten nurses were healthy enough to work – only one completely uninjured: Doctor Sasaki. Injured, bleeding, burned, vomiting, ragged, crying and screaming people poured in en masse at the hospital. At least ten thousand people came to the hospital. Dr Sasaki had no chance to save them all – not even a fraction of them. He did what he could to stop people from bleeding to death, but soon his patient started developing terrible symptoms of radiation sickness: uncontrolled bleedings, severe problems with internal organs, hair loss and extreme susceptibility to infections. It was practically impossible to save anyone, since all hospitals in the city had been destroyed and almost all medical staff had been killed or injured. ¹

Burns

The massive heat wave created by the nuclear explosion causes severe burns. Heat moves at the speed of light, and it is impossible to find protection from the thermal pulse unless warned in advance. The thermal radiation leads to immediate burns on bare skin. Burning clothes will also cause severe burns. Treatment of burns is among the most resource-demanding treatments. Treating all burns victims will be one of the greatest challenges to the health system in the event of nuclear war.

Also under normal circumstances, the number of hospital beds for treatment of severe burns is most limited, around the world. In Sweden, it is possible to treat approximately twenty badly burned patients at a time with specialised intensive care. In all of Europe, possibly some hundreds. And this goes for ordinary situations, when neither hospitals nor medical staff have been knocked out by a nuclear explosion.

In Nagasaki, it was estimated the 95 percent of all victims suffered from burns. In Hiroshima, the corresponding number was 60 percent. This data derives from the Manhattan Engineer District (MED), that estimate much lower numbers of dead and injured than do many others. MED estimate

69 000 injured in Hiroshima and 25 000 in Nagasaki. It does not take a rocket scientist to figure out that if 95 percent of 25 000 injured are suffering from severe burns, the intensive care for burn victims at hospitals will not suffice. Neither can one expect to transport victims to intensive care in other countries after a nuclear explosion, which can be done under ordinary circumstances.

The world of rats and cockroaches

It is often said that the only living things surviving a nuclear war would be rats and cockroaches. It may not be entirely true, but many vermin and insects stand a greater chance of surviving than us humans.

A nuclear war will make it difficult for survivors to take care of their hygiene. The water will be contaminated, people will have to share tight quarters and it will be hard to keep a functioning waste management system. Insects and micro-organisms with a high tolerance to radioactivity will flourish. Bad hygiene and an increase of insects and vermin will lead to an increase of infectious diseases, which may lead to epidemics and pandemics. The use of nuclear weapons would also lead to a nuclear winter with cold climate and bad harvest. The food and water scarcity would in turn lead to global famine, leading to armed conflicts over scarce resources. It has also been observed that famines are often followed by pandemics of infectious disease.

1 John Hersey. Hiroshima. New York: Vintage Books, 1989 in <http://www.ippnw.org/Resources/NWC/nwc3.pdf>