IPPNW Statement
Preparatory Committee of the Nuclear Non-Proliferation Treaty, 2018
Delivered by Dr. Carlos Umaña
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On the humanitarian consequences of nuclear weapons

I speak on behalf of the International Physicians for the Prevention of Nuclear War, founding member of ICAN.

The need to place the catastrophic humanitarian consequences at the center of discussions regarding nuclear weapons has been manifested many times, most notably at the 2010 NPT Review Conference in its outcome document, at the Humanitarian Conferences in Oslo, Nayarit and Vienna, and as part of the preamble of the Treaty to Prohibit Nuclear Weapons.

In the hopes that an evidence-based understanding will prevail in the decision-making process, we will continue to present said consequences at this and other relevant forums.

At large, the consequences of a nuclear detonation, derive from the blast, the heat and the ionizing radiation, which have immediate, short-term and long-term effects in the local, regional and global settings.

Alone, the blast wave and associated overpressures and hurricane-force winds reduce most buildings and infrastructure to rubble. The heat, in the hundreds and thousands of degrees, produce large areas of coalescent fires that, either by incineration, or oxygen depletion, eliminate all forms of life therein.

Ionizing radiation can be part of the detonation itself or be spread regionally as part of a nuclear fallout. It causes acute and long-term illnesses that are often deadly, as well as genetic and inter-generational health effects.

Acute radiation sickness can cause death within hours, days, or weeks, and those who recover may remain ill for months or even years. Lower doses of ionizing radiation can cause cancers and other chronic diseases even many years after exposure. Radiation also causes dramatic birth defects and genetic damage; severely deformed babies continue to be a common occurrence today in regions affected by nuclear tests. Furthermore, survivors of nuclear attacks will have seen their homes and their cultural and natural heritage reduced to a nuclear wasteland, and they will suffer a lifetime of stigma and prejudice.

No meaningful medical or disaster relief response to the detonation of nuclear weapons is possible, as the physical and social infrastructure required for recovery would be destroyed. Healthcare workers would be killed, or severely injured and dangerous levels of radiation would prevent emergency responders from entering affected areas. Medical facilities would be destroyed or disabled, and essential supplies would be unavailable.
Moreover, a resulting electromagnetic pulse would disrupt the electricity supply grid and electronic equipment and systems. All forms of international travel, such as planes and trains, would likely be disrupted for an indeterminate time. Electronic communications could fail, likely having a major impact on the global economy.

Nuclear weapon detonations also have extreme and long-lasting environmental consequences. A limited, regional nuclear conflict involving only 100 Hiroshima-size nuclear bombs, such as would happen with less than half the arsenals of India and Pakistan, would severely disrupt the global climate and agriculture for over 20 years, affecting crops and producing a famine that would kill 2 billion people, most of them far from where the original conflict took place. This famine would also trigger social unrest and violent conflict, both within and between nations. At a larger scale, the thousands of nuclear weapons possessed by the US and Russia would bring about a nuclear winter, destroying the essential ecosystems on which life depends. Agriculture would stop, human civilization would be extinguished, ecosystems would collapse, and many species, perhaps even our own, would become extinct.

This dramatic scenario is not a theoretical possibility. It is a reality that we have escaped from by mere chance. Over 1000 near accidents with nuclear weapons have been documented in the United States alone. The ever-increasing reliance on automated systems has raised the risk of cyberterrorism and machine and human error, to the point that it has been determined that the most probable nuclear war will be an accidental one. The urgency of nuclear disarmament is hence, no exaggeration. As this existential threat knows no boundaries, the responsibility to procure a nuclear weapons free world befalls on the entire international community.

Ever cognizant of the fact that there is no cure for the effects of nuclear weapons, as healthcare professionals, we must advocate for primary prevention through the elimination of nuclear arsenals. Considering that prohibition has preceded elimination with other weapons of mass destruction, it is logical to presume prohibition will be effective in nuclear disarmament. We thus add to the voices that have spoken today and call on all states to sign and ratify the Treaty to Prohibit Nuclear Weapons

Thank you.