

Reducing the risks of nuclear war: the role of health professionals

Reducir los riesgos de una guerra nuclear: el papel de los profesionales de la salud

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On January 2023, the Science and Security Board of the Bulletin of the Atomic Scientists advanced the hands of the 90s doomsday clock ahead of midnight, reflecting the growing risk of nuclear war.¹ In August 2022, United Nations (UN) Secretary-General António Guterres warned that the world is now in “an era of nuclear danger not seen since the height of the Cold War.”² Growing tensions between many nuclear-armed states have accentuated the danger.^{1,3} As editors of health-related biomedical journals worldwide, we call on health professionals to alert the public and our leaders to this grave danger to public health and the planet’s essential life-support systems. We urge that action be taken to avert it.

Current nuclear arms control and nonproliferation efforts need to be improved to protect the world’s population against the threat of nuclear war by design, error, or miscalculation. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) commits each of the 190 participating nations to “pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control”.⁴ Progress could have been much faster, and the last

NPT review conference, held in 2022, ended without a consensus statement.⁵

There are many examples of near catastrophes that have highlighted the risks of relying on nuclear deterrence for the indefinite future.⁶ Modernization of nuclear arsenals could increase the risks; for example, hypersonic missiles decrease the time available to distinguish between an attack and a false alarm, increasing the likelihood of rapid escalation.

Any use of nuclear weapons would be catastrophic for humanity. Even a “limited” nuclear war involving only 250 of the world’s 13,000 nuclear weapons could kill 120 million people and cause global climate disruption, leading to a nuclear famine endangering 2 billion people.^{7,8} A full-scale nuclear war between the U.S. and Russia could kill 200 million people or more in the short term and potentially trigger a global “nuclear winter” that could kill between 5 billion and 6 billion people, threatening the survival of humanity.^{7,8} Once a nuclear weapon is detonated, a nuclear war could quickly ensue. Preventing any use of nuclear weapons is, therefore an urgent public health priority, and fundamental steps must also be taken to address the root of the problem: the abolition of nuclear weapons.

Health-focused communities have played a crucial role in reducing the risk of nuclear war



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and must continue to do so in the future.⁹ In the 1980s, the efforts of health professionals, led by the International Physicians for the Prevention of Nuclear War (IPPNW), helped end the Cold War arms race by educating policymakers and the public on both sides of the Iron Curtain about the medical consequences of nuclear war. This was recognized by the award of the 1985 Nobel Peace Prize to IPPNW¹⁰ (<http://www.ippnw.org>).

In 2007, IPPNW launched the International Campaign to Abolish Nuclear Weapons, a global civil society campaign with hundreds of partner organizations. A path to nuclear abolition was created with the adoption of the Treaty on the Prohibition of Nuclear Weapons in 2017, for which the International Campaign to Abolish Nuclear Weapons received the 2017 Nobel Peace Prize.

International medical organizations such as the International Committee of the Red Cross, the IPPNW, the World Medical Association, the World Federation of Public Health Associations, and the International Council of Nurses played a crucial role in the process leading up to the negotiations and in the talks, themselves, presenting the scientific evidence on the catastrophic health and environmental consequences of nuclear weapons and nuclear warfare. They continued this essential collaboration during the First Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons, which now has 92 signatories, including 68 member states.¹¹

We now call on health professional associations to inform their members worldwide about the threat to human survival and to join the IPPNW in supporting efforts to reduce the near-term risks of nuclear war, including three immediate steps by the nuclear weapons states and their allies: first, adopt a no-first-use policy;¹² second, take their nuclear weapons off hair-trigger alert; and, third, urge all states involved in current conflicts to publicly and unequivocally commit not to use nuclear weapons in these conflicts.

In addition, we call on you to work for a definitive end to the nuclear threat by supporting the urgent commencement of negotiations among the nuclear-armed states to

reach a verifiable and time-bound agreement to eliminate their nuclear weapons under NPT commitments, opening the way for all nations to accede to the Treaty on the Prohibition of Nuclear Weapons.

The danger is significant and growing. Nuclear-armed states must eliminate their nuclear arsenals before they eliminate us. Health-focused communities have played a decisive role during the Cold War and, more recently, in developing the Treaty on the Prohibition of Nuclear Weapons. We must once again take up this challenge as an urgent priority, working with renewed energy to reduce the risks of nuclear war and eliminate nuclear weapons.

This editorial is published simultaneously in several journals: <https://www.bmj.com/content/full-list-authors-and-signatories-nuclear-risk-editorial-august-2023>

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