



# HUMANITARIAN IMPACT & RISKS

**ICAN CAMPAIGNERS MEETING/GENEVA**

## Humanitarian consequences and risks of nuclear weapons

The growing risk that nuclear weapons will be used—either deliberately or through some mishap—has made it far too likely that we will face a humanitarian catastrophe from which there can be no recovery.

As ICAN campaigners, we are faced with the challenge of presenting the facts correctly and persuasively and explaining how those facts support our case for a ban treaty.

Most of us don't have the technical knowledge or training to present complex medical and scientific data. Nor are we experts in risk analysis. We don't need to be. The evidence and what it means can be explained by anyone.

Here are the facts, in a nutshell, about what makes nuclear weapons more dangerous and destructive any other weapon ever made:

**1** A single nuclear weapon can destroy a city and kill most of its people. Several nuclear explosions over modern cities would kill tens

of millions of people. Casualties from a major nuclear war between the US and Russia would reach hundreds of millions.

**2** The extreme destruction caused by nuclear weapons cannot be limited to military targets or to combatants.

**3** Nuclear weapons produce ionizing radiation, which kills or sickens those exposed, contaminates the environment, and has long-term health consequences, including cancer and genetic damage.

### FOR MORE INFO ON THE HUMANITARIAN IMPACT :

Banning Nuclear Weapons: The Humanitarian Facts, IPPNW  
[www.hinwcampaignkit.org](http://www.hinwcampaignkit.org)

and

Catastrophic humanitarian harm, ICAN.  
[www.icanw.org/the-facts/catastrophic-harm/](http://www.icanw.org/the-facts/catastrophic-harm/)

**4** Less than one percent of the nuclear weapons in the world could disrupt the global climate and threaten as many as two billion people with starvation in a nuclear famine. The thousands of nuclear weapons possessed by the US and Russia could bring about a nuclear winter, destroying the essential ecosystems on which all life depends.

**“ Even a single nuclear detonation in a modern city would strain existing disaster relief resources to the breaking point. ”**

**5** Physicians and first responders would be unable to work in devastated, radioactively contam-

inated areas. Even a single nuclear detonation in a modern city would strain existing disaster relief resources to the breaking point; a nuclear war would overwhelm any relief system we could build in advance.

Displaced populations from a nuclear war will produce a refugee crisis that is orders of magnitude larger than any we have ever experienced.

**6** Whether or not they are detonated, nuclear weapons cause widespread harm to health and to the environment. ■



## The risks of nuclear weapons

Nuclear weapons have not been detonated in violent conflict since 1945. The decades since then are commonly perceived – particularly in those countries that possess nuclear weapons – as an era of successful nuclear non-use and a vindication of the framework of nuclear deterrence.

In this narrative, the fear of massive retaliation and a shared understanding and set of behaviours are believed to have prevented the use of nuclear weapons. Yet the decades since 1945 have been punctuated by a series of disturbing close calls.

Evidence from many declassified documents, testimonies and interviews suggests that the world has, indeed, been lucky, given the number of instances in which nuclear weapons were nearly used inadvertently as a result of miscalculation or error.

A shared belief in nuclear deterrence is not the only plausible explanation for this avoidance of nuclear war. Rather, individual decision-making, often in disobedience of protocol and political guidance, has on several occasions saved the day.

Whereas the popularized image of the ‘Moscow–Washington

hotline’ gives the illusion that vital communication in times of crisis is possible, these incidents reveal the reality that those who possess nuclear weapons will continue to be distrustful of one another and remain reliant on data transmitted by systems that are vulnerable to error or misjudgment, particularly when leaders have to respond too quickly to be able to make fully informed decisions.

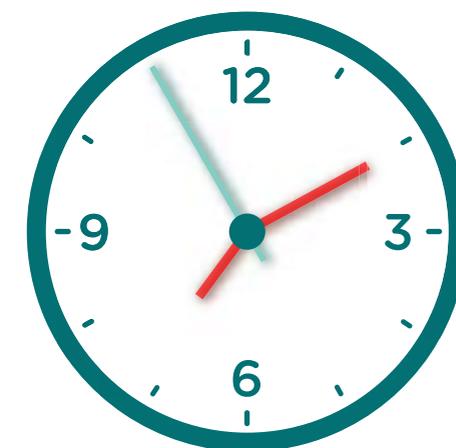
Historical cases of near nuclear use resulting from misunderstanding demonstrate the importance of the ‘human judgment factor’ in nuclear decision-making. In addition to cases from the Cold War, recent incidents, such as the 2009 collision of French and UK submarines, along with cases of misconduct in the US Air Force revealed in 2013, suggest cause for concern regarding current laxity in safety and security measures and in command and control.

Incidents similar to those that have happened in the past are likely to happen in the future. ■

From ‘Too close for comfort: Cases of Near Nuclear Use and Options for Policy’ by Chatham House

Several factors have heightened the risk that nuclear weapons could be used at any time:

- Tensions among states and within regions where nuclear weapons are deployed—the US, Russia, and Europe; India and Pakistan; the Middle East; the Korean peninsula—are higher than at any time since the end of the Cold War. Ukraine is a prime example of a place where armed violence could escalate to the use of nuclear weapons.
- The US (and its nuclear-sharing allies in NATO), Russia, and Pakistan refuse to renounce dangerous first-use policies.
- Deterrence—the policy of nuclear intimidation—has been invoked with increasing frequency by nuclear-armed states attempting to threaten adversaries, whether states or those identified as terrorists.
- The US and Russia maintain thousands of nuclear missiles on high alert, ready to be launched on short notice. China is said to be following suit. Short decision times for launching nuclear mis-



**“ The world’s most recognized harbinger of risk, the Doomsday Clock, moved forward from 5 to 3 minutes to midnight in 2015 and remained there in 2016. ”**

siles present an unconscionable risk that they will be used by mistake.

- Obsolete computer systems, inadequate security at nuclear facilities, growing concerns over cyber attacks, and failures of hu-

man judgment compound the risk of accidental or unauthorized use.

- All nuclear-armed states are engaged in expensive programs to add new warheads and delivery systems, to enhance the accuracy and destructive capacity of existing weapons, and to ensure a steady flow of new weapons into their arsenals for decades to come. The US alone plans to spend \$1 trillion on nuclear weapons over the next 30 years.
- The world's most recognized harbinger of risk, the Doomsday Clock, moved forward from 5 to 3 minutes to midnight in 2015 and remained there in 2016.

Weapons like biological and chemical weapons, landmines, and cluster munitions have been prohibited by treaty because of their devastating humanitarian impact and indiscriminate nature.

We have an urgent need to commence negotiations on a new treaty to unequivocally prohibit nuclear weapons and provide for their elimination—before an unprecedented humanitarian catastrophe occurs. ■



## Nukes of Hazard

The humanitarian consequences approach includes an understanding of risk, for example as highlighted by publications such as Eric Schlosser's 2014 book *Command and Control* and the Chatham House report 'Too Close for Comfort', as well as ongoing work by many others.

The risk of possessing nuclear weapons - the way people in nuclear-armed states are themselves put at risk, even if those weapons are never fired at other countries - is generally little understood and under-reported. For example, fully assembled nuclear warheads are regularly transported along ordinary roads between England and Scotland, through towns and cities, past homes and schools. 'Nukes of Hazard', a new project by ICAN UK, aims to focus attention on the unacceptable risks arising from these dangerous convoys.

The 'Nukes of Hazard' project will make the international humanitarian approach local and personal, by highlighting the dangers of the UK's nuclear weapons programme to its own citizens. ICAN UK will empower local people along the route to put pressure on local authorities

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and elected politicians to speak out against the unacceptable risks of nuclear weapons possession. The project will link local meetings and actions about nuclear weapon risks with broader efforts to prevent the replacement of Trident, and promote UK engagement in international humanitarian initiatives for a nuclear ban treaty. ■

### LEARN MORE:

'Too close for comfort: Cases of Near Nuclear Use and Options for Policy' by Chatham House

<https://www.chathamhouse.org/publications/papers/view/199200>

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