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Stopping nuclear holocaust top of the agenda



One of the most powerful images of the 20th Century was the mushroom cloud of nuclear explosions. The nuclear age burst into human experience and consciousness with the atomic bombs that devastated Hiroshima and Nagasaki in 1945. For the next four decades we saw over 600 above-ground (atmospheric) nuclear 'test' explosions, some 1000 times more destructive than the Hiroshima/Nagasaki bombs. They were a stark reminder that humanity had for the first time in history devised a way to destroy civilization, the environment and possibly all life on the planet, and looked hell-bent on doing so.

As Einstein remarked: 'The splitting of the atom has changed everything, and thus we drift towards unparalleled catastrophe.'

So far we have been incredibly lucky that a nuclear catastrophe has not occurred, whether by accident, miscalculation or intent. Renowned U.S. scientist, Michio Kaku, coauthor of *To Win a Nuclear War: The Pentagon's Secret War Plans*, reports we have come close to a nuclear exchange, sometimes within minutes, on at least 15 occasions. We should not continue to rely on miracles, as John Hallam says (see p. 4).

The end of the Cold War has reduced tensions between the two largest possessors of nuclear weapons, but not led to a standing down of the nuclear forces of the U.S. and Russia. Global Zero leader Bruce Blair, former Minuteman ICBM launch control officer, has warned that the US and Russia keep thousands of nuclear weapons systems on high operational readiness, ready to be fired in minutes. Virtually every day their early warning systems have to instantly analyse events (rocket launches, unusual atmospheric conditions, airplane formations, even flocks of geese) before deciding whether or not to inform the President of a potential incoming attack. Under their 'launch on warning' procedures, the President then has less than five minutes to decide whether to launch a nuclear 'counter attack' before their nuclear weapons are hit.

The threat of a nuclear holocaust has increased in the 21st Century, with numbers of States possessing nuclear weapons growing to nine (China, France, India, Israel, North Korea, Pakistan, Russia, United Kingdom and the United States) and far greater capacity for non-State actors (terrorist organisations) to acquire or produce a nuclear explosive device. In a recent survey of 85 national security experts, U.S. Senator Richard Lugar found an average estimate of 29% for the 'probability of an attack involving a nuclear explosion occurring somewhere in the world in the next 10 years.' Former U.S. Secretary of Defense, William Perry has said that the odds of a nuclear attack within the next decade are roughly 50/50.

Recent computer modeling indicates that smoke from fires caused by detonating just a small number (50–100) of nuclear weapons regionally on cities or military targets would block out the sun, making the entire earth

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cold and dry for many years, causing agricultural collapse and starvation of more than one billion people. This is in addition to the many millions of people who would be incinerated or asphyxiated immediately after nuclear blasts (see 'Effects of using nuclear weapons', p. 15) Indirect effects of nuclear weapons would have devastating global consequences, say Alan Robock and others.

Arnold Schwarzenegger, former Governor of California, has noted: 'A nuclear disaster will not hit at the speed of a glacier melting. It will hit with a blast. It will not hit with the speed of the atmosphere warming but of a city burning. Clearly, the attention focused on nuclear weapons should be as prominent as that of global climate change.' (See p. 35)

It's not just the potential catastrophe of a nuclear war or terrorist use of nuclear weapons against a city that should concern us. Production of nuclear weapons, from uranium mining to fuel fabrication to waste disposal and nuclear testing, creates severe, trans-generational impacts on human health and the environment. In East Kazakhstan, one in twenty children continues to be born with severe genetic deformities due to Soviet atmospheric nuclear tests conducted in the region from 1950–63 (see 'The Atom Project', p. 29).

From Kazakhstan, to Nevada, to the Sahara and Australia, to the Marshall Islands, Kiribati, and French Polynesia (traditionally called Tahiti Nui or Te Ao Maohi), nuclear weapons tests above and below ground over decades have devastated lives and brought environmental contamination which continues today over half a century later (see p. 21).

Nuclear powers, the UK, US and France, used pristine Pacific atolls, far from their own countries to hone weapons of mass destruction, as if these places and their people did not matter. Radioactive contamination of Marshall Islanders' food sources and its effects on their health, hidden under US military secrecy orders, is only now, over 50 years later, being recognized (see p. 21). Then there's the huge amount of radioactive pollution from 30 years of French nuclear tests on Moruroa, stored in the crumbling atoll. This nuclear legacy, Australian scientist Matthew England reported, can be released at any time through earthquake or storm-induced rockslide, and will have significant long-term consequences across the Pacific (see p. 27).

It's remarkable that spending on research, development and production of new nuclear weapons and their delivery systems is higher now than during the Cold War. The missile tests of North Korea and Iran are well publicised, even though their missiles are, as yet, unable to carry nuclear weapons. Less well known or publicised are the missile developments and tests of nuclear-weapon States. The U.S. regularly fires 'test'

missiles from Vandenburg Base in California to Kwajalein in the Pacific, which take 20 minutes to travel 4200 miles (see p. 7). In May 2012, Russia tested a new generation of inter-continental ballistic missile (ICBM) designed to penetrate the ballistic missile defences (BMDs) being developed by the US and NATO. The UK is planning to spend over £100 billion to replace its Trident nuclear submarines and their nuclear weapons delivery missiles. India and Pakistan are in a missile race, with both sides regularly improving and testing their missiles (see p. 12).

The recent nuclear test by North Korea is, of course, cause for concern. But the answer is not to increase threats against North Korea, or to threaten Iran through concern about its nuclear programme, but to establish nuclear-weapon-free zones that meet the security needs of all countries in their regions (see pp.49–61).

In a time of financial crises and unmet Millennium Development Goals, the US\$100 billion spent annually on nuclear weapons and their delivery systems is a theft of human and financial resources needed to provide food security, safe water, education, basic medicine, environmental protection and safe sustainable energy for current and future generations (see 'The climate–nuclear nexus', p. 35).

Pacific Ecologist produces this issue as a reminder of the extraordinary dangers of nuclear weapons and militarism, and a guide to actions you can take to protect our planet from such dangers. The only effective protection is the global abolition and elimination of nuclear weapons. There are numerous organisations and several global networks/campaigns working to bring this about, but they are up against a powerful, obstructive political system dedicated to death more than life. We, the people, are needed to voice our wish for life and push for the essential changes to rid the world of nuclear weapons.

There are positive plans being worked on such as a global treaty to abolish nuclear weapons (see p. 38), establishing regional nuclear-weapon-free zones in North-East Asia, the Middle East and the Arctic, to add to those already existing (see p. 53), and actions to end the obscene investments in nuclear weapons (see p. 41). With a large, lively and vocal people's movement we can succeed in bringing an end to the ever present threat of a mass holocaust such as the earth has never seen. We must end these weapons before they end life on earth as we know it. We hope this issue will inspire you to take action.

ALYN WARE, Guest Co-editor, is the global co-ordinator of Parliamentarians for Nuclear Non-proliferation and Disarmament and winner of the 2009 Right Livelihood Award; and KAY WEIR, Editor *Pacific Ecologist*.