

VITAL SIGNS

NEWSLETTER OF THE INTERNATIONAL PHYSICIANS FOR THE PREVENTION OF NUCLEAR WAR (IPPNW)

Ban the bomb—before our luck runs out

[Adapted from an article by IPPNW co-president Ira Helfand in the June/July issue of The Progressive.]

To erase the threat of unparalleled catastrophe that has existed since the dawn of the nuclear age, we must articulate a clear strategy to eliminate these weapons before they eliminate us.

Our focus internationally is the Treaty on the Prohibition of Nuclear Weapons, which will ban the use and possession of nuclear weapons as well as activities that make it possible to build and maintain them.

In the United States, a grassroots campaign called “Back from the Brink” seeks to embrace the goals of the treaty with a “Green New Deal” for the nuclear threat, a comprehensive prescription for how to avoid nuclear war. It calls on the US to recognize that nuclear weapons, far from being agents of our security, are in fact the greatest threat to our safety and must be

eliminated as the only way to assure that they will not be used.

The core of the campaign is a five-point platform of policies that the United States should pursue. The central plank is to commence negotiations with the other eight nuclear weapons states for an enforceable, verifiable, timebound agreement to dismantle nuclear arsenals. There is no reason to assume that such



Dr. David Onazi (right) of IPPNW-Nigeria presented the NGO statement on humanitarian disarmament at the UN First Committee, as part of the ICAN team advocating signature and ratification of the TPNW.

an initiative will not be successful: it has never been tried.

The other four planks in the Back from the Brink platform are common-sense steps that can be taken to lessen the danger of nuclear war as these negotiations proceed and the weapons are being dismantled.

The US should adopt a No First Use policy, making it clear that it will not initiate nuclear war. This will reduce tensions during future crises and decrease the possibility of miscalculation by future adversaries.

We should end the sole unchecked authority of any President to launch a nuclear attack. The Constitution provides unequivocally that only Congress can declare war, but the current practice allows the President to initiate a nuclear war without Congressional authorization.

The US nuclear arsenal should be taken off hair-trigger alert. Hundreds of warheads in both the United States and Russia are mounted on missiles that can be launched in 15 minutes. This makes

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Nuclear ban treaty gains momentum

Eighty countries have now signed or acceded to the Treaty on the Prohibition of Nuclear Weapons (TPNW); 33 have ratified (see page 3). With 50 ratifications needed, that means we have hit the two-thirds mark for entry into force!

During a special High-Level Ceremony in September at the UN to mark the International Day for the Total Elimination of Nuclear Weapons, Bangladesh, Kiribati, Laos, Maldives, and Trinidad & Tobago submitted their ratification documents, joining Kazakhstan and

Ecuador as the newest TPNW member states.

Once the Treaty has the force of international law, member states will have a powerful tool for exerting legal, political, and moral pressure upon the nine nuclear-armed states and their allies.

IPPNW has been working closely with its partners at ICAN—the International Campaign to Abolish Nuclear Weapons—urging national

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NUCLEAR ABOLITION NEWS AND UPDATES

For more information, please contact Chuck Johnson (cjohnson@ippnw.org)

Kashmir: Flashpoint for nuclear war

IPPNW has been deeply troubled by the escalation of hostilities between India and Pakistan over the long-disputed Kashmir region. Three of the four wars the two countries have fought since partition in 1947 have started in Kashmir. With both sides now armed with nuclear weapons, a fifth major war could plunge the region—and the entire world—into Armageddon.

In February, a suicide bombing in Kashmir sparked a new round of recrimination and retaliation. In response, IPPNW called upon the Indian and Pakistani prime ministers to take immediate steps to reduce tensions and the risk of nuclear war.

The conflict worsened dramatically in August after the Indian government seized control of Kashmir, sending in thousands of troops, cutting all communication lines, and arresting political leaders. Kashmir's 70-year status as a semi-autonomous region was suddenly over.

India's Minister of Defense, Rajnath Singh, exacerbated the situation when he signaled that India might abandon its long-standing pledge not to use nuclear weapons first in a military confrontation.

Most recently, India formally divided the disputed Jammu and Kashmir state into two territories, to be directly ruled from New Delhi, sparking yet more violence and political turmoil.

The potential consequences of further military escalation are dire. IPPNW has called on the political leadership to initiate diplomatic talks to end the decades-old conflict.

Dr. Arun Mitra, IPPNW's Indian co-president said, "India and Pakistan must end their border clash before it engulfs the world. Leaders from both sides must sit down to finally resolve their issues peacefully at the negotiating table and to take immediate steps to reduce and eliminate the threat that their nuclear weapons pose to all humanity."

IPPNW's Indian affiliate also has been among the very few voices speaking out about the human impact that the deteriorating political and military situation is having on the local population.

IPPNW co-president and nuclear famine expert Ira Helfand warned that an exchange of nuclear weapons between

the two countries would not only quickly kill millions in the region, but would also cause an unprecedented global catastrophe. Soot lofted into the upper atmosphere as a result of firestorms created by nuclear explosions would severely disrupt the global climate, leading to worldwide crop shortages and mass starvation affecting more than a quarter of the world's population.

"All the nuclear-armed states, including India and Pakistan, need to comply with the prohibitions spelled out in the ban treaty and eliminate their nuclear weapons," Dr. Helfand said. VS



Medical students in Nepal light candles to commemorate atomic bombings of Hiroshima and Nagasaki.

Cardiac risk vs. nuclear risk

In "Cardiac events and nuclear war prevention," IPPNW co-founders James E. Muller and John O. Pastore compare the "low-probability, high-consequence" risks faced by patients in their care with that which humanity faces in the threat of nuclear war. Writing in the American Heart Association journal *Circulation* in June, the authors chart the rise and fall of the threat of nuclear war and note that "when the threat is most visible, the possibility of change is greatest – a linkage familiar to cardiologists when a lifelong smoker quits after having a heart attack." VS

Disturbing new nuclear winter effects study

A new study in *Science Advances* shows what would happen if there were a nuclear war today involving nuclear arsenals currently available to India and Pakistan.

According to IPPNW science adviser and Rutgers University professor Alan Robock and the study's co-authors, such a war would likely kill 50 to 125 million people outright, and the global climate effects would be even more catastrophic than previous projections of 2 billion people at risk of famine worldwide.

Another new paper by much of the same research team, in the journal *JGR Atmospheres* concludes that in an all-out nuclear war between the US and Russia, using current arsenals, much of the land in the Northern Hemisphere would have temperatures below zero in the summertime, with growing seasons slashed by nearly 90 percent in some areas.

"Indeed, death by famine would threaten all of the earth's 7.7 billion people," said Robock. VS


Back from the brink

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them vulnerable to cyber attack, accidents, and impulsive or unauthorized decisions.

The US should cancel the plan to replace its entire nuclear arsenal. The current plan calls for spending some \$1.7 trillion over the next 30 years, assuring the existence of nuclear weapons for decades to come (or until they are used). This plan, mirrored by similar efforts in the other nuclear-armed states, will fuel a new and destabilizing arms race.

Back from the Brink, led by a coalition of US groups including Physicians for Social Responsibility, has won the support of a rapidly growing list of cities, towns, and states. Legislation addressing the campaign's goals has been introduced in both the House and the Senate.

Incremental changes to our nuclear policy are valuable, but they must be part of an explicit and clearly articulated plan to actually achieve the security of a world free of nuclear weapons. We must pursue that overall plan now. Time is not on our side. 



Learn more about Back from the Brink at preventnuclearwar.org

Ban treaty gains momentum

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leaders to accelerate their accession to the treaty.


"The United States and other nuclear-weapon states have called the ban treaty meaningless, yet they are strongly pressuring non-nuclear countries not to join it—especially those with whom they have military and economic alliances," said IPPNW nuclear program director Chuck Johnson. "How can the TPNW be meaningless if they are so worried about it entering into force?"

A focus on Africa

A special effort to mobilize IPPNW leadership in Africa began this summer. In collaboration with the World Federation of Public Health

Associations and the World Medical Association, we identified several African health organizations and leaders who are now helping us promote the TPNW.

At this point, 23 African countries have signed the ban treaty but have not yet ratified. Therefore, ICAN and IPPNW are focusing special attention here, hoping to find 17 additional governments willing and able to complete the ratification process.

The 1996 Treaty of Pelindaba made the African continent a Nuclear Weapons Free Zone. With the IPPNW World Congress coming to Mombasa, Kenya on 25-29 May, African health professionals have an opportunity to reaffirm that commitment. 



The Nuclear Weapons Ban Monitor, a project of ICAN partner organization Norwegian People's Aid, documents progress toward TPNW entry into force, and evaluates compliance with the treaty's core obligations.



banmonitor.org

TPNW Ratification Update

As of mid November, 80 states had signed or acceded to the Treaty on the Prohibition of Nuclear Weapons; **33 states** had ratified. The Treaty will enter into force once 50 states have ratified it. **We are two-thirds of the way there!**

Algeria, Angola, Antigua and Barbuda, **Austria**, **Bangladesh**, Benin, **Bolivia**, Botswana, Brazil, Brunei, Cabo Verde, Cambodia, Central African Republic, Chile, Colombia, Comoros, Congo, **Cook Islands**, **Costa Rica**, Cote d'Ivoire, **Cuba**, **Dominica**, Dominican Republic, DRC (Congo), **Ecuador**, **El Salvador**, Fiji, **Gambia**, Ghana, Grenada, Guatemala, Guinea-Bissau, **Guyana**, **Holy See**, Honduras, Indonesia, Ireland, Jamaica, **Kazakhstan**, **Kiribati**, **Laos**, Lesotho, Libya, Liechtenstein, Madagascar, Malawi, Malaysia, **Maldives**, **Mexico**, Myanmar, Namibia, Nepal, **New Zealand**, **Nicaragua**, Nigeria, **Palau**, **Palestine**, **Panama**, Paraguay, Peru, Philippines, St. Kitts & Nevis, **St. Lucia**, **Saint Vincent and Grenadines**, **Samoa**, **San Marino**, Sao Tomé and Príncipe, Seychelles, **South Africa**, Tanzania, **Thailand**, Timor-Leste, Togo, **Trinidad & Tobago**, Tuvalu, **Uruguay**, **Vanuatu**, **Venezuela**, **Vietnam**, Zambia



ONLINE: www.icanw.org/status-of-the-treaty-on-the-prohibition-of-nuclear-weapons/

"To every president and prime minister of every nation of the world, I beseech you: join this treaty; forever eradicate the threat of nuclear annihilation." Hiroshima survivor Setsuko Thurlow was honored in Boston in October, when the Longwood Symphony Orchestra hosted a concert at the New England Conservatory of Music as a benefit for IPPNW and Greater Boston Physicians for Social Responsibility. Photo by Steven Lipofsky.



Dr. Ruby Chirino of IPPNW's Mexican affiliate (right) sits with former South African president F. W. de Klerk at the 17th World Summit of Nobel Peace Laureates in Merida, Mexico in September. Dr. Chirino, Jans Fromow-Guerra, and IPPNW co-president Ira Helfand represented the federation at the Summit, which adopted a statement calling for the elimination of nuclear weapons and urging the leaders of India and Pakistan to resolve their differences and forswear any use of nuclear weapons.



Chuck Johnson, director of IPPNW's nuclear programs, is joined by program assistants (from left) Erica "Eust" Eustis, Molly McGinty, and Valeria Hernandez at the United Nations on September 26. Twelve countries signed or ratified the TPNW at a formal ceremony on the International Day for the Elimination of Nuclear Weapons.





Members of IPPNW-Germany joined a “Don’t nuke the climate” protest at the International Conference on Climate Change and the Role of Nuclear Power on October 7 in Vienna. The action drew attention to the health and environmental impacts of uranium mining and radioactive and toxic waste, as well as the inextricable ties between nuclear energy and nuclear weapons.



“The catastrophic effects of nuclear weapons on health, society, and the environment must be at the center of all discussions about nuclear disarmament,” said IPPNW co-president Arun Mitra at an international conference in Kazakhstan in September. The conference marked the 30th anniversary of the “Nevada-Semipalatinsk” movement, which organized protests against nuclear testing in the 1990s.

Indian Doctors for Peace and Development (IDPD) release doves at their 11th National Conference in September. More than 170 physicians and medical students called for all nuclear weapons possessing countries to join the TPNW. IDPD has also called on India and Pakistan to cease hostilities and restore freedoms in Kashmir, and has expressed particular concern about health conditions in the disputed territory.



“The Look”—a special exhibition at the National Portrait Gallery in Canberra, Australia—features a portrait of Dr. Tilman Ruff, IPPNW co-president and the founding chair of ICAN in Australia, taken by photographer Nikki Toole. Exhibition curator and gallery historian Dr. Sarah Engelow (left), said that “Tilman looks indomitable. He looks determined...as if he’s looking into the future.” Also pictured are MAPW president Sue Wareham (second from left) and Charlotte Laemmle-Ruff.



Nuclear power powers the bomb

New report shows how military and civilian programs go hand-in-hand

Reuters recently reported that nuclear energy is both too slow and too expensive to present a meaningful response to the climate catastrophe facing our planet. So why are countries like the UK, France, Russia, or China still investing in it?

The answer lies in the demands of the military, who require a robust backbone of civil nuclear infrastructure for their nuclear weapons programs. This backbone includes the mining, refinement, trans-

associated nuclear infrastructure, nuclear weapons programs would not be sustainable due to the high costs, risks and need for trained personnel.

In all nuclear weapon states, the military utilizes the civilian nuclear industry through hidden subsidies regarding human resources, research funds and investments in dual-use nuclear infrastructure.

The modernization of nuclear arsenals in nuclear-weapon states is driving the development of new small modular reactors (SMRs). Although allegedly intended for civilian use, SMRs are used primarily for military purposes, in particular for the propulsion of nuclear submarines, which have become the most important component of the nuclear weapons doctrines of the major nuclear powers.

If nuclear propulsion units of submarines can be operated with high-assay low-enriched uranium (HALEU), with enrichment levels of 5–20 %, instead of high-enriched uranium (HEU), with enrichment levels of >20 %, the civilian nuclear industry can provide relatively cheap and uncomplicated nuclear fuel for nuclear submarines.

A further field of application for SMRs is the electricity supply of the military in remote combat zones.

Ever since the beginning of the civil

nuclear industry in the 1950s, its advertising slogans have had to be met with extreme caution. Nuclear energy does not reduce electricity prices but actually drives them up. Nuclear energy also offers no answer to the climate catastrophe.

The German Institute for Economic Research comes to a clear conclusion in its 2019 report: “The lack of economic efficiency goes hand in hand with a high risk with regard to the proliferation of weapons-grade materials and the release of radioactivity, as shown by the accidents in Harrisburg (1977), Chernobyl (1986), and Fukushima (2011). For all these reasons, nuclear energy is not a relevant option for supplying economical, climate-friendly, and sustainable energy in the future.”

Drs. Boulton, Claussen, and Rosen have urged the peace movement, ICAN, and the anti-nuclear movement to work much more closely together in view of the evident connection between civil and military nuclear industries.

VS



Angelika Claussen of IPPNW-Germany holds banner outside an IAEA climate conference in October.

portation, enrichment, and safeguarding of uranium, as well as research and development and a large number of nuclear engineers and scientists. Hence the investments in civil nuclear energy.

Frank Boulton (MedAct), Angelika Claussen (European regional vice president of IPPNW), and Alex Rosen (IPPNW-Germany) have just published *How nuclear power powers the bomb*, which explains the inherent interdependencies between the civil and military nuclear industries.

The report concludes that without a “robust” civil nuclear industry and the



Simon Sheikh of Future Super, Sue Wareham of MAPW, and Gem Romuld of ICAN Australia at the launch of the Quit Nukes campaign, urging Australian financial institutions to divest from nuclear weapons.

“Change happens because of those who believe it can happen” An interview with Carlos Umaña

Dr. Carlos Umaña, president of IPPNW-Costa Rica, is the federation's Latin American regional vice president. He has been an active ICAN campaigner in Latin America, working with the network of regional peace organizations to organize conferences and roundtables on the humanitarian consequences of nuclear weapons and on the ban treaty.

VS: Why did you first get involved with IPPNW?

CU: It was very appealing to be part of something so significant, and in early 2013 a lot was happening, including the Oslo conference on the Humanitarian Impacts of Nuclear Weapons and the Paper Cranes project. I got to host Vappu and Ilkka Taipale from PSR-Finland. Spending five full days with such remarkable people was a tremendous experience. IPPNW felt like a family from the very beginning.

VS: Latin America declared itself a nuclear-weapon-free zone with the Treaty of Tlatelolco. You have also been active in Spain, where political parties have indicated support for the TPNW. Do you see a leadership role for these countries in nuclear disarmament today?

CU: Latin America and the Caribbean have played a central role for the TPNW. The region's en bloc support along the political path towards the ban has helped foster a platform of multilateral coopera-

tion that is cultivating nuclear abolition. On the other hand, Spain, as a NATO member, has until now opposed all steps towards the nuclear ban. Recently, however, support for the ban has strengthened in many sectors. When Spain finally does sign and ratify the TPNW, as promised by the Spanish prime minister last year, it will be groundbreaking.

VS: While in Spain, you received an Alan



Turing award for LGBTIQ Visibility in the "Social Organization Award" category. Congratulations! What do you think the role of intersectional politics plays in facing all of today's challenges?

CU: Intersectionality is crucial. If we understand that the same structural violence that is behind the nuclear arms race is also behind forms of injustice such as sexism, racism, colonialism, homophobia, anthropocentrism, and even climate

change, we realize that it is impossible to be involved in one cause without impacting the others. The more we are aware of this, the better we'll be able to cooperate to face these challenges effectively and the more significant our impact will be.

VS: How do you remain positive and motivated in this movement during such a politically tumultuous time?

CU: I'm not always positive, but even in my darkest times, I am motivated by duty, by the realization that if something is wrong—like nuclear weapons—and I can do something about it, I should do it. I'm also moved by hope, particularly from the disarmament community. Standing among so many brilliant people who work together and choose to spend their resources, time, and energy to help humanity is a constant source of inspiration.

VS: What would you like to say to people who don't think we will achieve abolition?

CU: We were called optimistic and naïve to pursue the ban treaty, and we achieved it. And we are achieving abolition through the TPNW. Pessimists and deniers have always resisted every major change in human history and will, of course, resist us. Optimism is not unrealistic; it is the fuel behind any progress. The ones behind progress have been the hopeful, not the hopeless. Change happens because of those who believe it can happen. **VS**

Nuclear weapons and climate change – risks and solutions are linked

By Carlos Umaña

[Excerpted from Pressenza/International Press Agency op-ed, September 23, 2019]

The solution to climate change must include nuclear disarmament. Nuclear weapons represent an unacceptable cost and risk and undermine the foundations of international cooperation and goodwill

essential to resolving global crises.

To alleviate the climate crisis, a massive mobilization of resources is required. A large part of this capital investment could come directly from the substantial resources that will be released once nuclear disarmament is implemented. At the same time, the scientific talent and political resources currently involved in nuclear weapons can then be redi-

rected to seek ecological innovations.

On the other hand, the solution to both the climate crisis and nuclear weapons must necessarily involve the entire international community. It is essential to channel the efforts of humanity towards fostering a culture of peace and strengthening the multilateral regime.

Register now for IPPNW's first African World Congress

Almost four decades have passed since IPPNW held its 1st World Congress at Airlie House in Virginia where seventy-three physicians from twelve countries met to launch "the ultimate in preventive medicine"—our international medical movement to eliminate nuclear weapons.


Now comes IPPNW's 23rd World Congress, to be held in Mombasa, Kenya from May 25-29, 2020. Representatives from throughout IPPNW's federation of sixty-two national affiliates will meet to plan the next steps in our work for a more peaceful world without nuclear weapons. The theme of the Congress is "Disarmament, Development and Health."

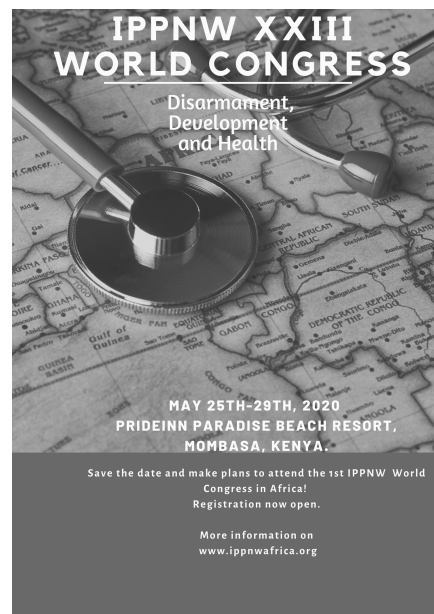
This will be IPPNW's first congress on the African continent, and will afford all IPPNW supporters and peace and disarmament activists the opportunity to discuss the threat nuclear war, rampant militarism, climate change and conflict, and the impacts of these crises on peace, health, and sustainable development in an African context.

A key focus in Mombasa will be on shoring up African action on the

Treaty on the Prohibition of Nuclear Weapons (TPNW). More than fifty African countries have expressed support for the treaty. The main challenge is simply getting them to focus on the ratification process, given the many other issues vying for their attention. At present, twenty-five African countries have signed and two have gone on to ratify the treaty.

Building on Africa's strong record on nuclear disarmament – including South Africa's unilateral decision to destroy its nuclear arsenal to the establishment of the African Nuclear-Weapon-Free-Zone Treaty – our aim is to ensure that all African nations join the TPNW as an urgent matter of global health and survival. This would strengthen significantly the new international norm that nuclear weapons are categorically inhumane, illegal, and immoral and, in turn, the pressure on the nine nuclear-armed nations to divest themselves of these heinous instruments of mass destruction.

To learn more about the 23rd IPPNW World Congress, and to register to attend, please visit ippnwafrica.org and click on the Congress tab. 



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IPPNW is a non-partisan federation of national medical organizations in 62 countries dedicated to safeguarding health by working to ban nuclear weapons and to address the impact of militarism and war on human health.

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339 Pleasant Street, Malden, MA 02148 USA
Tel: +1.617.443.1733 || Email: director@ippnw.org

IPPNW Staff: Michael Christ, Chuck Johnson, Maria Valenti, Molly McGinty, George Cani; editing and layout: John Loretz

