A new IPPNW/PSR study offers compelling scientific evidence that most of the nuclear arsenals in the world—whether large or small—threaten everyone on Earth.

The consequences for global agriculture of a nuclear war using 100 Hiroshima-sized weapons, for example, would be so severe and long lasting that we must now fundamentally change our thinking about nuclear weapons and redouble our efforts to eliminate them, according to the study’s author, Ira Helfand.

Dr. Helfand previewed the findings at the Nobel Peace Laureates Summit in Chicago in April (photo upper right). He then traveled to Vienna to present the details at a symposium hosted by the Swiss Ministry of Foreign Affairs, which funded the research study.

Dr. Helfand has been working in close consultation with climate scientists who concluded in 2007 that even a fraction of the nuclear weapons contained in the massive US and Russian arsenals could disrupt the global climate so severely that the world’s major agricultural centers would sustain unprecedented damage for at least a decade.

The study spells out the likely percentage declines in specific crops, such as corn and rice, in specific agricultural regions, along with the effects on food availability and prices and the resultant nutritional impact on at-risk populations. The data developed by a team of research scientists organized by Dr. Helfand has been published in the peer-reviewed journal Climatic Change.

Among the key findings are a 10% average decline in US corn production for an entire decade; an average 21% decline in Chinese rice production in the first four years; and the addition of 215 million people to the rolls of the malnourished. The number of people threatened by nuclear-war induced famine would be well over one billion.

Dr. Helfand says there is only one policy conclusion to be drawn from these new findings.

“The danger identified in this report requires a fundamental change in our thinking about nuclear weapons. We must now recognize that it is not just the arsenals of the nuclear super powers that threaten all humanity. Even the smaller arsenals of emerging nuclear powers like India and Pakistan pose a global threat.”

The IPPNW/PSR study has been reported on widely in the global media, particularly in South Asia and Europe, but less so in the US press, where concerns about potential nuclear weapons in Iran seem to preempt reporting on the thousands of nuclear weapons that actually exist in the US, Russia, and the other nuclear-armed states.

Nevertheless, the significance of the findings has been recognized by at least one prominent abolitionist. Mikhail Gorbachev, the former Soviet president and founding chairman of Green Cross International, told Dr. Helfand he is convinced that “nuclear weapons must be abolished. ...[T]his new study underscores in stunning and disturbing detail why we must discard Cold War-style plans for the possible use of these weapons and move rapidly to eliminating them from the world's arsenals.”

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Nuclear Famine: A Billion People at Risk—Global Impacts of Limited Nuclear War on Agriculture, Food Supplies, and Human Nutrition
ippnw.org/nuclear-famine.html
ICAN UPDATES AND HIGHLIGHTS

NEWS FROM THE INTERNATIONAL CAMPAIGN TO ABOLISH NUCLEAR WEAPONS

Resources, reports, campaign materials online: icanw.org

Co-president Vappu Taipale and Ira Helfand, the author of IPPNW’s new nuclear famine study (see page 1), represented the federation at the 12th World Summit of Nobel Peace Laureates, which was held from April 23-25 in Chicago. Dr. Helfand joined a featured panel on “A World Without Nuclear Weapons,” where he summarized the findings of a new research study on nuclear famine.

ICAN has published a new guide to government positions on a nuclear weapons convention. Towards a Treaty Banning Nuclear Weapons, written by ICAN-Australia director Tim Wright, examines the policies of 194 governments and shows that 146 of them – roughly three-quarters – support the immediate commencement of negotiations leading to a convention. Only 26 are opposed to the idea, and 22 sit “on the fence.”

The guide is available at icanw.org/positions

At its international campaigners meeting the weekend before the NPT PrepCom in Vienna, ICAN adopted the humanitarian message about nuclear weapons as the thematic focus of its campaign for a global ban treaty. More than 100 activists from 30 countries participated, and many of them worked the halls during the PrepCom itself to encourage states to adopt humanitarian language in their statements.

About 200 scientists, doctors, and activists gathered at Bamako University in Mali on March 16 for a symposium on uranium and health sponsored by IPPNW and PSR Switzerland. Many participants came from the region of Falea, where the Canadian mining company Rockgate plans to open the first uranium mine in Mali. The symposium was a success, but the timing could not have been worse. A coup d’état toppled the government of Mali that week. Andi Nidecker of Switzerland and Dale Dewar of PGS-Canada were among those stranded in Bamako for several tense days before getting permission to leave from military authorities.

“Even though our stay was prolonged by the coup,” Dr. Nidecker said, “we hope our symposium provided an important health perspective and will help prevent Mali from entering the deadly business of uranium mining.”

VITAL SIGNS
VOLUME 24 ISSUE 1 2012

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As this issue of Vital Signs went to press, hundreds of IPPNW members were en route to Hiroshima for the federation’s 20th World Congress and related events that will extend from August 7-26.

Recent Congresses have opened with the “IPPNW Bike Tour” organized by medical students, and this year is no exception. The historic location has provided an opportunity for a group of 40 young activists to bike 500 km from Nagasaki to Hiroshima—the two cities destroyed by nuclear bombs in August of 1945. For two weeks along the way, they will hold public events and speak with politicians and local media.

The cyclists will arrive in Hiroshima just in time for the two-day Student Congress on August 22, which precedes three days of plenaries, workshops, and regional meetings to plan the next two years of IPPNW action for a nuclear-weapons-free, more peaceful world. ICAN will host a one-day campaigners meeting at the International Conference Center in Hiroshima on August 21.

Immediately after the Hiroshima Congress, a group of IPPNW affiliates will co-sponsor a special symposium in Tokyo on the public health repercussions of the Fukushima nuclear reactor disaster. They will then travel to Fukushima prefecture for a one-day tour of the affected region, including consultations with local doctors. Look for updates in the peaceandhealthblog.com.

Cycling approximately 500 km / 310 miles from Nagasaki to Hiroshima.

A - Nagasaki University
B - Nagasaki Peace Park
C - Seihi
D - Takeo
E - Saga
F - Onojo
G - Fukuoka
H - Kitakyushu
I - Akiyoshidai
J - Hikari
K - Miyajimaguchi
L - Hiroshima

Cyclists / medical student activists are chronicling the journey on a special edition blog. www.ippnwbiketour.blogspot.com
IPPNW Plays Key Health Role in ATT Treaty Negotiations at UN
 Agreement Delayed but NGOs Remain Optimistic

IPPNW leaders played a key role in bringing a critical health voice to the monthlong July 2012 negotiations for an Arms Trade Treaty in New York. As the only health member on the Steering Board of the Control Arms NGO coalition, our active participation in meetings with delegates from countries around the world ensured they understood the dire health consequences that result from the unregulated spread of armaments worldwide.

IPPNW doctors and Central Office staff who participated in the negotiations experienced a roller coaster of emotions, from optimism at the outset that a strong and humanitarian treaty was within the world’s grasp, to huge disappointment on the last day of the conference when a number of countries including the United States blocked an agreement and asked for more time to work on the text.

A statement on the last day read by Mexico on behalf of 90 states gave a strong signal that supporters will not allow the treaty process to fail: “we are determined to secure an Arms Trade Treaty as soon as possible. One that will bring about a safer world for the sake of all humanity.” IPPNW’s participation along with others from civil society remains crucial. UN Secretary General Ban Ki-moon told us that “Your determination has helped us get this far - and your continued pressure and activism will help make this Treaty a reality.”

Efforts are now underway to bring the treaty text to the UN General Assembly this fall. “There is already considerable common ground and States can build on the hard work that has been done during these negotiations,” Ban Ki-moon said at the end of the conference, while also noting that his commitment to the pursuit of “a robust ATT is steadfast.”

IPPNW Delivers Medical Alert to Ban Ki-moon, Conducts Panel on Health

IPPNW had a strong presence at the opening week of the conference. On Tuesday July 3rd IPPNW Nigeria’s Ogebe Onazi, MD, presented UN Secretary General Ban Ki-moon with IPPNW’s “Medical Alert for a Strong ATT” with over 1700 physicians, nurses, and other medical professionals’ signatures. Later that week, IPPNW’s July 6 side event sponsored by the Permanent Mission of Nigeria to the United Nations, A Framework on Global Health and the ATT, was both well-attended and well-received.

IPPNW delegates during the month included Drs. Shannon Gearhart, Cathey Falvo, Donald Mellman, Andrew Kanter and Shreedhar Paudel from the US, Kay Tyler from the US, Dr. Bob Mtonga from Zambia, and Central Office Aiming for Prevention Director Maria Valenti.

This fall, Aiming for Prevention activists will again be at the UN, participating in the Review Conference for the UN Programme of Action on Small Arms and Light Weapons (UN PoA) which will take place at the UN in New York August 27-September 7. IPPNW was at the forefront in 2001 working for the UN PoA, and Aiming for Prevention was launched at an IPPNW-organized international health meeting in Helsinki shortly thereafter.
While IPPNW doctors worked at the UN to pass a strong ATT, around the world IPPNW doctors are working on the ground to save lives and improve health through a number of projects on armed violence prevention. Two of note include the following. First, a Victim Assistance Pilot Clinic research project in Lusaka, Zambia, a North/South collaborative effort between IPPNW Austria and IPPNW Zambia. Drs. Michael Schober and Stephanie Hametner in Austria are the co-investigators with Dr. Bob Mtonga in Zambia. Over the next year, 30 Austrian medical students will conduct research alongside Zambian medical students in the Lusaka University Hospital emergency room as well as at social service agencies with a goal to help improve care and rehabilitation for victims of violence.

Further north in Africa, IPPNW New Zealand doctors Andrew Winnington (photo on left) and Lucie Collinson will be conducting a second round of armed violence research in Liberian hospitals to help fill important data gaps for the Liberian Armed Violence Observatory and to help inform prevention strategies. They will be utilizing some innovative research techniques that will be discussed at a workshop in Hiroshima. Geneva-based Small Arms Survey is providing some funding to support this effort.

These doctors truly are on the front lines of helping to foster healthier and less violent communities for all. 😊

Photo above: Austrian medical students, led by Drs. Schober and Hametner, participated in a daylong training to prepare for research in Zambia.

Left to right: Drs. Ogebe Onazi, Shannon Gearhart with Kay Tyler and Dr. Don Mellman at the UN ATT.

Dr. Andrew Kanter addresses health and the ATT at IPPNW UN side event. Video: vimeo.com/45339938
AFFILIATES IN ACTION

INTERVIEW WITH SHANNON GEARHART, MD, MPH

psr.org/about/board-of-directors/shannon-gearhart.html

Armed violence is a global public health problem. An international Arms Trade Treaty (ATT) would help prevent injuries and save lives. The Diplomatic Conference to negotiate an ATT took place in July at the United Nations in New York. As an active member of Physicians for Social Responsibility, and now Northeast Regional Representative, Dr. Shannon Gearhart has been deeply involved in supporting efforts to develop and pass a strong and humanitarian-based ATT. She has been a leader in gathering US signatures for IPPNW’s Medical Alert for a Strong ATT, which was handed over to UN Secretary General Ban Ki-moon in a July 3rd ceremony.

VS: You have been involved in meetings on the Arms Trade Treaty for many years now. Do you feel that you and your medical colleagues have brought an important voice to these proceedings?

SG: It has been quite an honor to be part of the IPPNW delegation at the ATT Preparatory Conferences. We represent not only the medical voice, but also the voice of the patients and families we treat that have been affected by armed violence. This voice brings a human face to the discussions and reminds the diplomats that there is more than just statistics that are impacted by this Treaty.

VS: What role can medical professionals from all of IPPNW’s affiliates play in the ongoing violence prevention work worldwide, especially armed violence?

SG: Personally, medical professionals can play a role by simply asking their patients and families about violence occurring at home. Ask if there are any firearms in the home. If you don’t ask, you won’t know. Locally, medical professionals can work with their community to promote violence prevention by holding seminars in medical schools and hospitals. At a more global scale, IPPNW affiliates can, first get involved with the Aiming for Prevention campaign and help work on the ATT.

VS: What are your plans to engage with IPPNW and PSR’s Aiming for Prevention campaign during the next few years?

SG: We were very disappointed that an ATT was not realized after month-long talks in July. Civil society will continue to work for a Treaty, and I plan to actively represent PSR and IPPNW in these efforts and help remind the delegates about the health consequences of armed violence. Also, I would like to get involved with the research part of the Aiming for Prevention’s work by working on a collaborative project between the U.S. and global South.

VS: Tell us how you became involved with PSR and IPPNW.

SG: I was first exposed to IPPNW as a first year medical student when several Norwegian medical students visited my medical school and led a discussion on the need for nuclear abolition. The students’ passion and enthusiasm inspired me. After this discussion, I felt a need to get involved, especially as an American student.

I initially was more involved with the Nuclear Weapons Inheritance Project. However, after returning from Kenya and Nicaragua, where I witnessed the effects of poverty and scarce resources, I wanted to become more involved with issues more closely affecting the global South.

My interest in armed violence prevention was strengthened when, during my internship, I became inspired by one of my patients who had been shot, yet had not given up with her life.
The nuclear-weapon-state parties to the Non-Proliferation Treaty (NPT) got an unsettling surprise at the first Preparatory Committee session (PrepCom) for the 2105 NPT Review.

The idea that nuclear weapons represent a humanitarian catastrophe—language that was part of the outcome document of the 2010 NPT Review—was taken up as a thematic building block of this PrepCom, not only by NGOs but also by a growing and energized group of states. A group of 16 states, in a joint statement on the humanitarian dimension of nuclear disarmament, declared their intent to change the nature of the whole NPT debate about nuclear weapons.

Tilman Ruff, regional vice president and chair of the ICAN core group, emphasized the shift in perspective away from deterrence-based arguments and toward the nature of the weapons themselves during the NGO session at the PrepCom. Dr. Ruff read a paper on the risks and consequences of nuclear weapons prepared by IPPNW.

“In our view,” Dr. Ruff said, “there is not nearly enough anxiety about the existing nuclear arsenals...the consequences of their possession and use, and the dangerous message they send about the political value of nuclear weapons.”

Dr. Ruff linked the nuclear weapons threat with the Fukushima disaster, which still endangers Japan and the world more than a year after its outset.

“The twin attempts to provide security with nuclear weapons and to meet global energy needs with nuclear power share the same flawed premise: that we can prevent the most dangerous technologies ever created by human hands from ever failing. The premise regarding nuclear weapons is that deterrence works and will never fail. The premise with nuclear energy is that plant designs and safeguards keep getting better, and will stop failing. Neither premise holds up to logical scrutiny or to experience.”

“Real progress on [a nuclear weapons convention],” he concluded, “at as rapid a rate as possible, needs to be pursued as a human survival imperative.”

“The Government’s goal is a world without nuclear weapons.”

~Jonas Gahr Store, Norwegian Minister of Foreign Affairs

One week before the PrepCom opened, Norway’s foreign minister Jonas Gahr Støre announced a high-level international conference, to be held in Oslo in March 2013. IPPNW, the ICRC, and others have been invited to participate and to consult on the substantive program for the conference. ICAN has made civil society support for the conference and its outcomes a priority for the coming year. We will report on this extremely important development in future issues of Vital Signs.

The complete statement is available on IPPNW’s blog. Please use the tag search: humanitarian consequences. peaceandhealthblog.com
### CALENDAR

<table>
<thead>
<tr>
<th>Date/Region</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>August 9, 2012, Nagasaki, Japan</td>
<td>Nagasaki Memorial Day Ceremony</td>
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<tr>
<td>August 21, 2012, Hiroshima, Japan</td>
<td>ICAN Campaigners Meeting</td>
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<tr>
<td>August 22-23, 2012, Hiroshima, Japan</td>
<td>IPPNW Student Congress</td>
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<tr>
<td>August 24-26, 2012, Hiroshima, Japan</td>
<td>20th World IPPNW Main Congress</td>
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<tr>
<td>August 27-September 7, 2012, New York City, USA</td>
<td>UN PoA Review Conference</td>
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<tr>
<td>September 16, 2012, Berlin, Germany</td>
<td>Musikfest Berlin 2012 / IPPNW-Benefit Concerts with the Berlin Philharmonic Orchestra to benefit the “Soma Children's Orchestra” in Fukushima.</td>
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<tr>
<td>October 10, 2012, German Mission to the UN, New York City, USA</td>
<td>Middle Powers Initiative Panel Discussion: Creating the Conditions and Building the Framework for a Nuclear Weapons-Free World</td>
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<tr>
<td>February 21-22, 2013, Berlin, Germany</td>
<td>Middle Powers Initiative Framework Forum</td>
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<tr>
<td>March 4-5, 2013, Oslo, Norway</td>
<td>International Conference on Catastrophic Humanitarian Consequences of Nuclear Weapons</td>
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Congratulations to the newly established ICAN Sweden hub!

Together with the Swedish chapters of WILPF and IPPNW, campaign coordinator Pernilla Lundmark organized a public event in the central square of the city of Visby, during Almedalen Week, a popular annual forum on Swedish politics.

Bottom left photo: Josephin Lind was a panelist on security policy called: “Do nuclear weapons make us safer?”

[icanw.org/node/6094](https://icanw.org/node/6094)