

**World Medical Association's Regional Expert Meeting in Pacific on the WMA Declaration of Helsinki**  
**Theme: Pandemics and Health Emergency**  
**Session 2: The DoH & Non-pandemic Health Emergencies**  
**November 30, 2023 Tokyo**

# **Preparedness and activity for a more peaceful and secure world**

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## Netanyahu Suspends Israeli Minister Who Said Dropping a Nuclear Bomb on Gaza Was an Option

The prime minister's swift move appeared to reflect his concerns with his waning popularity among voters, and with international criticism of Israel's attacks on Gaza.

Share full article



Prime Minister Benjamin Netanyahu of Israel suspended a far-right minister, Amichay Eliyahu, from his government on Sunday. Kenny Holston/The New York Times

## In a First, South Korea Declares Nuclear Weapons a Policy Option

President Yoon Suk Yeol said that if North Korea's nuclear threat grows, his country may build a nuclear arsenal of its own or ask the United States to redeploy in the South.

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President Yoon Suk Yeol of South Korea in Seoul on Tuesday. Lee Jin-Man/Associated Press

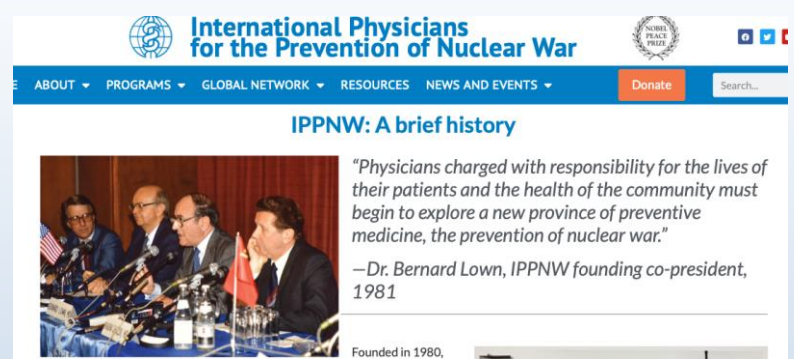
## Nuclear Talks With China Are Essential and Long Overdue

Nov. 4, 2023




Illustration by Rebecca Chew/The New York Times

# What is IPPNW?



The screenshot shows the top navigation bar of the IPPNW website. It includes the organization's logo, the name 'International Physicians for the Prevention of Nuclear War', and a 'Nobel Peace Prize' emblem. The navigation menu contains links for 'ABOUT', 'PROGRAMS', 'GLOBAL NETWORK', 'RESOURCES', and 'NEWS AND EVENTS'. A 'Donate' button and a search bar are also visible.

**IPPNW: A brief history**



*"Physicians charged with responsibility for the lives of their patients and the health of the community must begin to explore a new province of preventive medicine, the prevention of nuclear war."*

—Dr. Bernard Lown, IPPNW founding co-president, 1981

Founded in 1980.

- IPPNW is the only international medical organization dedicated to the abolition of nuclear weapons.
- Founded by US and Russian physicians in 1980, IPPNW is credited with raising public awareness about the devastating effects of nuclear weapons and with persuading American and Soviet leaders that the Cold War nuclear arms race was jeopardizing the survival of the entire world.
- IPPNW received the 1985 Nobel Peace Prize in recognition of this accomplishment.
- Today IPPNW mobilizes doctors, medical students, and concerned citizens in over 60 countries in the service of a broader war prevention mission.

# Why are doctors involved in a security issue?

- Doctors have been expected to treat injured soldiers and civilians, and to help restore societies to health at the conclusion of armed conflict. They have a unique and profound understanding of both the immediate and the long term consequences of war.
- In the 1960s, a group of concerned physicians studied and documented the blast, heat, and radiation effects of nuclear weapons, and came to the inescapable conclusion that a meaningful medical response to nuclear war is impossible.
- The atomic destruction of Hiroshima and Nagasaki and the lifelong suffering of the survivors-the result of only two, small, relatively primitive nuclear weapons-had put the medical profession on notice that it must prevent what it would be unable to cure.
- That doctors would advocate the abolition of nuclear weapons not only makes sense, it is also seen by many as a professional responsibility.



International Physicians  
for the Prevention of Nuclear War

Peace  
& Health  
Blog

News and opinion from the international medical movement to abolish nuclear weapons and to prevent war

[Home](#) [About IPPNW](#) [The humanitarian impact of nuclear weapons \(HINW\)](#)

## Medical journals issue urgent call for elimination of nuclear weapons

AUGUST 2, 2023

by IPPNW

tags: catastrophic humanitarian consequences, International Campaign to Abolish Nuclear Weapons (ICAN), International Physicians for the Prevention of Nuclear War, IPPNW, nuclear ban treaty, nuclear disarmament, nuclear war, nuclear weapons, United Nations

*[Editor's note: More than 100 medical journals, including the Lancet, the British Medical Journal, the New England Journal of Medicine, and JAMA have **issued a joint call** for urgent steps to decrease the growing danger of nuclear war and to move rapidly to the elimination of nuclear weapons. At a time of expanded fighting in Ukraine and increased tensions in Korea, leaders of the global health community underscore that any use of nuclear weapons would be catastrophic for humanity.*

*The unprecedented call to action comes in the form of an editorial co-authored by the editors of 11 of the leading medical and health journals, the World Association of Medical Editors, and leaders of the International Physicians for the Prevention of Nuclear War (IPPNW). The editorial is being released this week in conjunction with the start of the UN Nuclear Non-Proliferation Treaty (NPT) Preparatory Committee Meeting and the 78th anniversary of the bombing of Hiroshima.]*

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### WELCOME TO THE IPPNW PEACE AND HEALTH BLOG

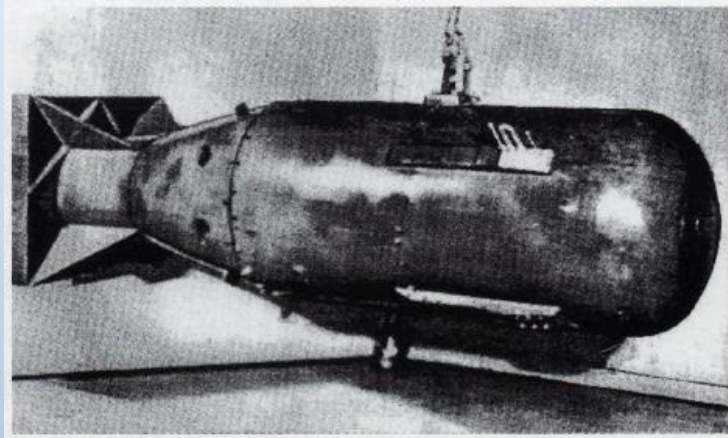
A community of international physicians, medical students, and policy experts writing about the medical consequences of nuclear war, the abolition of nuclear weapons, the human dimensions of armed violence, and global issues of peace, health, and security.

**Opinions expressed by individual writers are their own and do not necessarily reflect the organizational positions of IPPNW.**

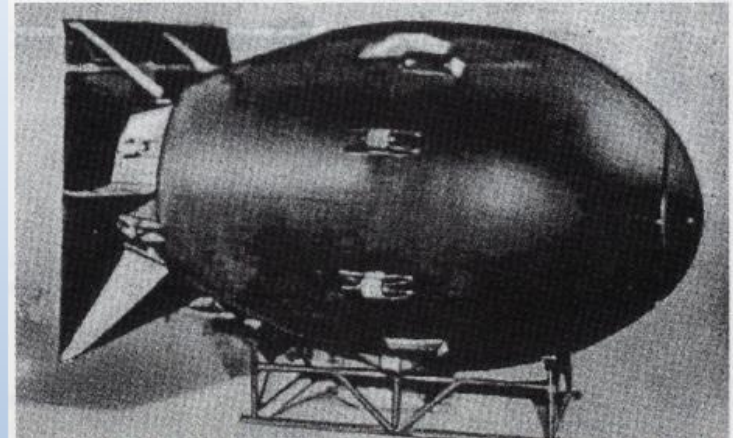
Use the menus below to find articles by particular authors, by

- **Any use of nuclear weapons would be catastrophic for humanity. Even a “limited” nuclear war involving only 250 of the 13 000 nuclear weapons in the world could kill 120 million people outright and cause global climate disruption leading to a nuclear famine, putting 2 billion people at risk.**
- **A large-scale nuclear war between the USA and Russia could kill 200 million people or more in the near term, and potentially cause a global “nuclear winter” that could kill 5–6 billion people, threatening the survival of humanity.**
- **Once a nuclear weapon is detonated, escalation to all-out nuclear war could occur rapidly.**
- **The prevention of any use of nuclear weapons is therefore an urgent public health priority and fundamental steps must also be taken to address the root cause of the problem—by abolishing nuclear weapons.**
- **The health community played a decisive part during the Cold War and more recently in the development of the Treaty on the Prohibition of Nuclear Weapons.**
- **We must take up this challenge again as an urgent priority, working with renewed energy to reduce the risks of nuclear war and to eliminate nuclear weapons.**

# Atomic bombs



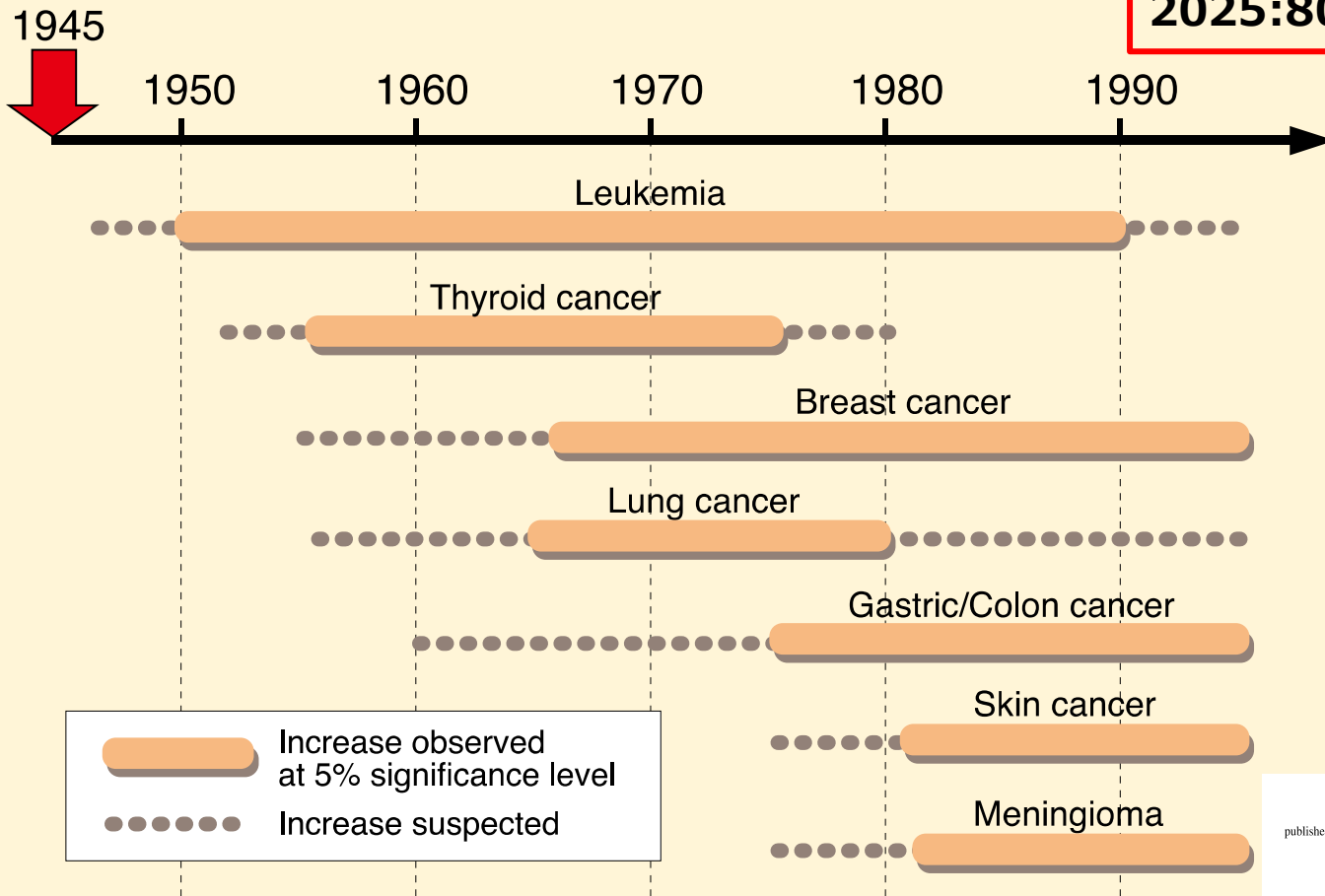
**"Little boy" (Hiroshima)**  
**Uranium 235, 15 kt**



**"Fat man" (Nagasaki)**  
**Plutonium 239, 21 kt**

# Year of development of malignant tumors

2025:80<sup>th</sup> anniversary



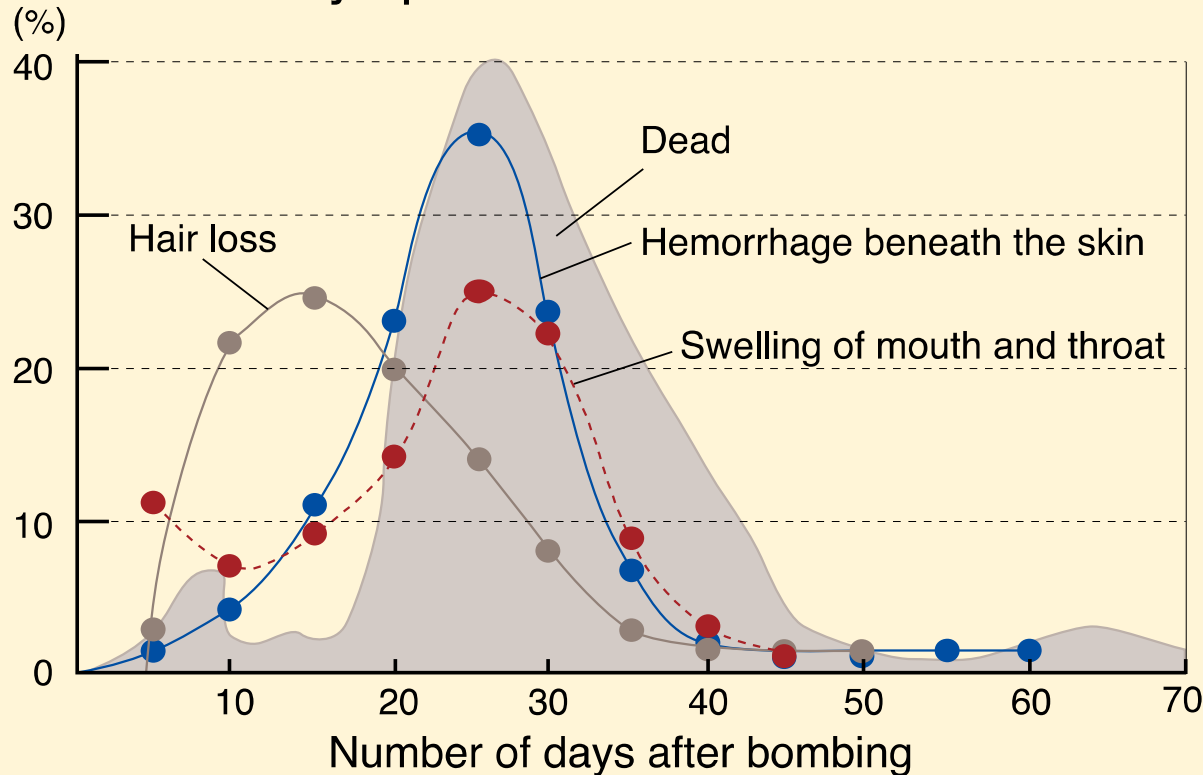
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One Day in Hiroshima – An Oral History  
published by Japanese affiliate of IPPNW (International Physicians for the Prevention of Nuclear War)

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# Acute Radiation Syndrome

## Symptoms and Death Rate



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# Research Institute for Radiation Biology and Medicine Hiroshima University



# Mission of RIRBM

Research on the science of treatment and prevention of disorders caused by atomic bombs and other radiation, and its applications

- 放射線生物学
- 放射線医科学の基礎研究



Basic research for radiation biology and medicine



- 被爆資料
- データベースの蒐集・保存・管理



Preservation of medical records and biomedical materials of A-bomb victims and survivors



- 原爆被爆者の医療
- 白血病やがんの治療
- 高線量被ばく者の治療



Medical treatment for A-bomb survivors and heavily irradiated casualties



広島大学病院での診療活動 University Hospital



広島大学緊急被ばく医療推進センターの活動  
Emergency preparedness for nuclear disaster

# Assume the use of nuclear weapons (1)

Hiroshima, 16 kilotons, 600 m altitude

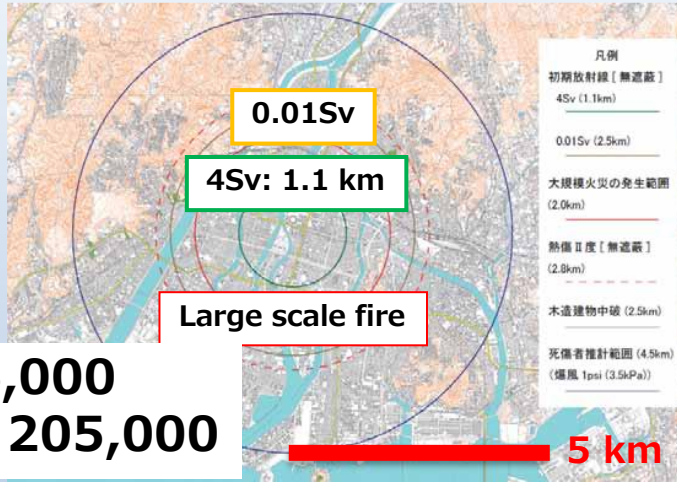


図4-3 16キロトンの核兵器が高度600mで爆発した場合の各種影響範囲

Hiroshima, 1 megaton, altitude 2,400 m

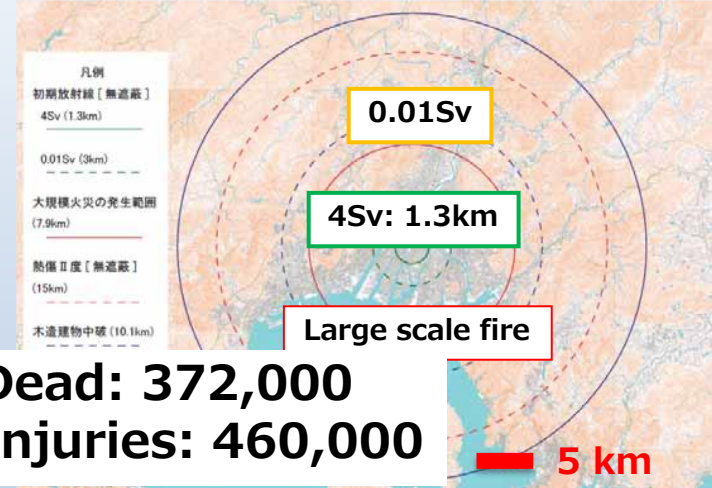


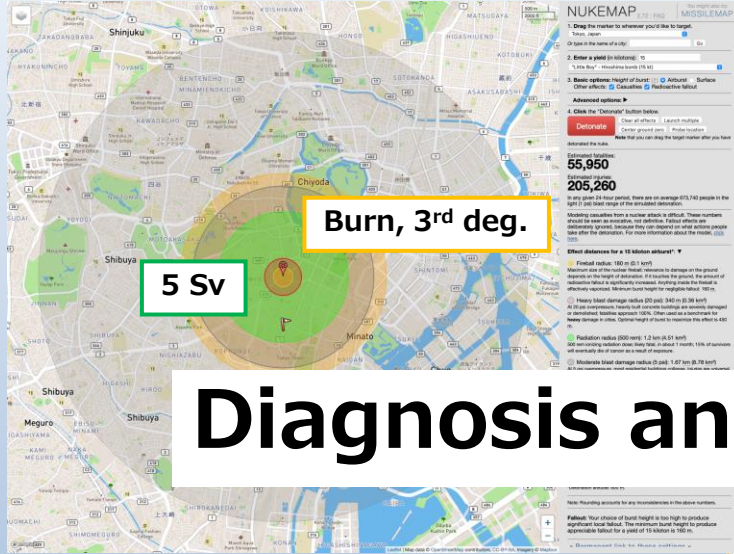
図4-4 1メガトンの核兵器が高度2,400mで爆発した場合の各種影響範囲

- If an atomic bomb of the same size as the previous one were dropped on the city of Hiroshima, hundreds of thousands of people would be injured by radiation exposure.
- Of these, the number of exposed injured people who need to be triaged for radiation exposure would be about 100,000-200,000.
- The results of radiation exposure dose estimation are needed within 1-2 weeks to determine the treatment plan.

(Report of the Expert Group on Assumptions of Damage from Nuclear Weapons Attacks, 2007)

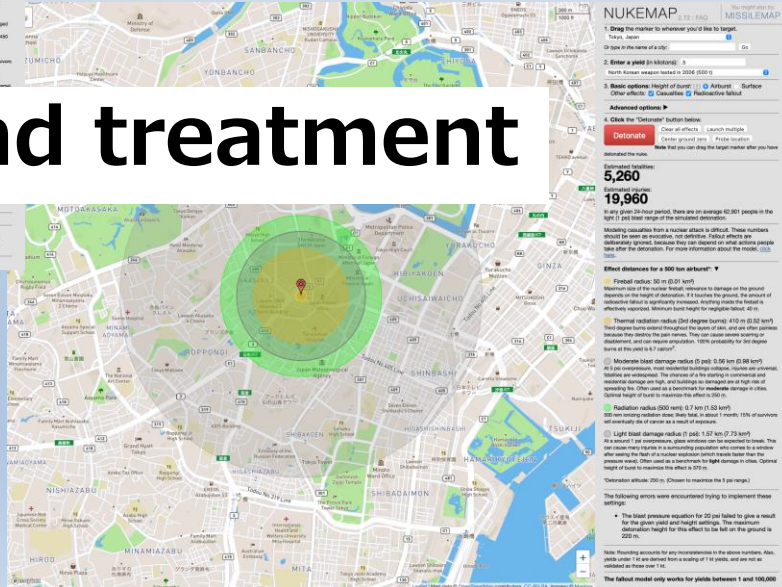
# Assume the use of nuclear weapons (2)

Tokyo, 16 kilotons, airborne explosion



**Dead: 55,900**  
**Injuries: 205,260**

Tokyo Station, 500 tons (North Korea, 2006)  
Explosion in the air



## Diagnosis and treatment

**Dead: 5,260**  
**Injuries: 19,960**

(Nukemap)

# Hiroshima Diary



- **Memories of Dr. Michihiko Hachiya, Director of Hiroshima Post Hospital**
- **English translation published in 1955 as "Hiroshima Diary"**
- **Dr. Michihiko Hachiya was exposed to the atomic bombing, but was involved in the treatment and management of the hospital.**
- **Importance of securing medical facilities (Triage Center)**
- **Lack of supplies (logistics)**
- **Difficulty in diagnosis and treatment of unknown A-bomb diseases**

# Preparing for Radiation Disaster

## Ensuring social safety

- Securing water, food, transportation, and distribution
- Detection of radioactive materials

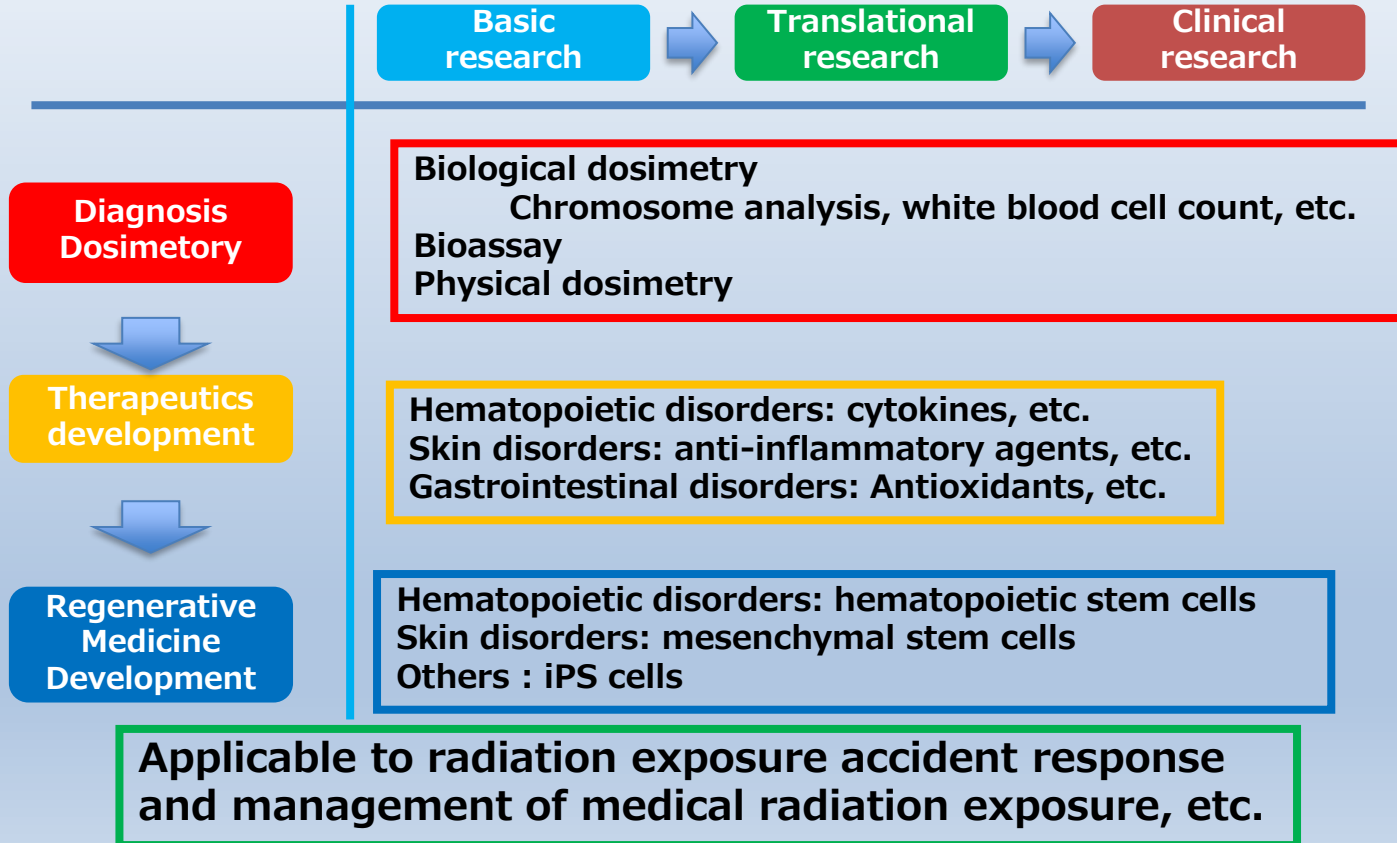
## Establishment of medical system

- Disaster medical system for radiation exposure injuries/illnesses
- Cooperation with disaster medical team (DMAT)

## Medical development

- Development of diagnostic and therapeutic methods

# Medical Development in Response to Nuclear Threats







## Resource Commitment and Management

- Substantial initial cost
  - Purchase of pharmaceuticals, supplies, equipment
  - Other cost
- Sustainable finance and human resources
  - Replenishment after use and stockpile rotation
  - Maintenance of facilities and expertise
- Reliable and sustainable sources of supplies
  - Purchase agreement, assistance during an emergency, contingency plans

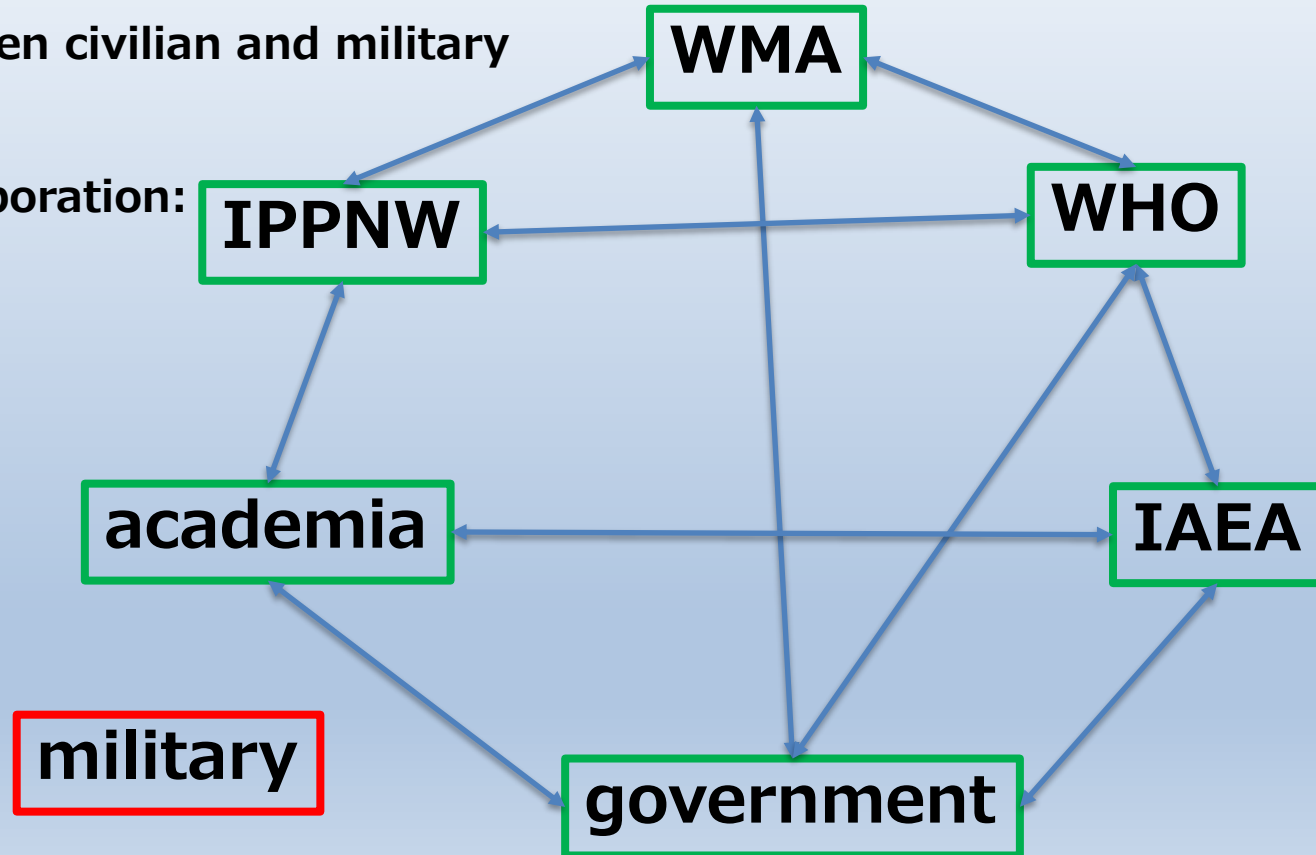
# The challenges in medical development for radiation injuries

- **Rareness of the condition:**

Radiation injuries are rare, making it difficult to recruit a large patient population for clinical trials. This rarity limits the ability to conduct the extensive research and trials needed to develop effective treatments.
- **Rapid Response Requirement:**
  - In the event of a radiation disaster, there is a need for immediate and effective treatment strategies to handle the large number of potential victims, which is a significant challenge given the current state of research and preparedness.
- **Late effects:**
  - The late effects of radiation exposure can take years to manifest, making it difficult to evaluate potential treatments and understand the progression of the injury.
- **Lack of public awareness:**
  - General public awareness about radiation injuries might be low, which can impact funding and support for research in this area.
  - Addressing these challenges requires a multi-disciplinary approach, combining research, ethical considerations, and practical application in emergency situations.

# Some more challenges in medical development for radiation injuries

- Relationship between civilian and military medical systems:
- International collaboration:



# Ethical concerns

- **Research on Radiation Effects and Treatment:**
  - To improve guidelines for the conduct of research into the health effects of radiation exposure and the development of treatments for radiation sickness. This includes establishing ethical standards for such research, particularly in emergency or high-risk scenarios.
- **Disaster Preparedness and Response Research:**
  - Expand the scope of the Declaration to include ethical considerations for medical research in disaster response, particularly in the context of large scale nuclear incidents. This would include the development of guidelines for rapid and ethical decision-making in crisis situations.
- **International Collaboration and Data Sharing:**
  - Strengthen clauses related to international collaboration in medical research, emphasizing the need for global cooperation in the context of nuclear threats. This would include sharing data and research findings to rapidly advance understanding and treatment options.

ご静聴、ありがとうございました。  
Thank you!

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**To protect people from nuclear weapon**



