# Nuclear Weapons and Public Health

June 20th 2024

King County Board of Health

Boardmember Dr. Robin Narruhn, Sean Arent, and Dr. Ira Helfand





# WASHINGTON PHYSICIANS FOR SOCIAL RESPONSIBILITY

- Washington Physicians for Social Responsibility (WPSR) is a 40-year-old, health professional-led advocacy organization working to create a healthy, just, peaceful and sustainable world. We take on the gravest current threats to human health and survival - nuclear weapons, economic inequity, and a climate crisis driven by dependence on fossil fuels. WPSR leverages the credible and trusted voice of healthcare professionals to educate the public, influence decision-makers, and promote public policies that support our mission.
- Chapter of Physicians for Social Responsibility (PSR), initially founded to confront the threat of nuclear war and atmospheric nuclear testing.

# Washington and Nuclear Weapons

- Washington taxpayers give \$2.6 billion a year towards nuclear weapons. Seattle taxpayers alone give \$397 million in federal taxes.
- Our Nuclear Past and Present
  - WA State Trident Bangor Base
  - Hanford
  - Midnite Mine





#### NAVAL BASE KITSAP-BANGOR



- Eight Ohio-class nuclear attack submarines
- Home to >1000 nuclear warheads the largest concentration of deployed nuclear warheads in the world (Federation of American Scientists)
- If Kitsap County were a country, we'd have the third largest nuclear arsenal in the world
- Protected by Navy-trained dolphins and sea-lions since 2010



- Length: 560 ft. Height: 75 ft. Each sub holds up to 20 Trident missiles
- Each missile holds up to eight warheads
- Max = 8 subs x 20 missiles x 8 warheads = 1,280
- Each W88 Trident warhead has 455 kilotons of explosive (The bomb dropped on Hiroshima had 14 kilotons)
- Each sub carries roughly 90 W-76 and W-88 warheads

# Kitsap Bangor-Trident Nuclear Sub Base

Delta Pier



SWFPAC -Strategic Weapons Facility - Pacific



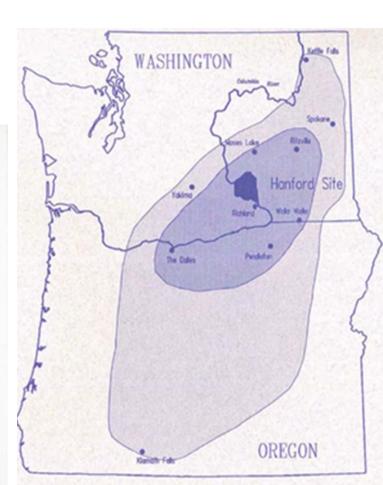
## Hanford



# Effects of Nuclear Weapons Production



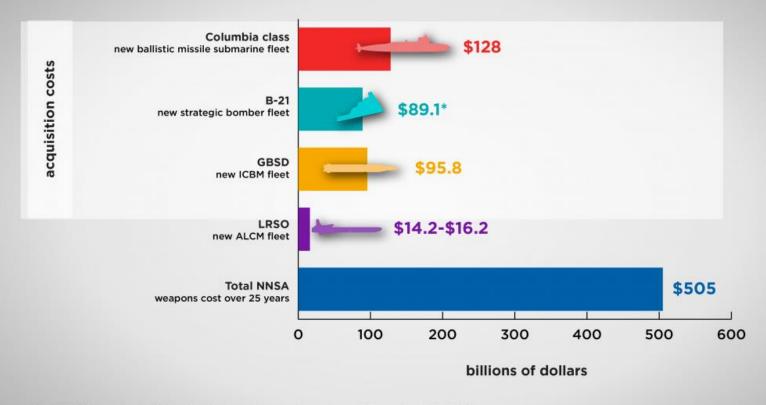




### **Future Plans**

#### Pentagon's Nuclear **Modernization Budget** F-35 Modifications to Allow for Nuclear Weapon Drop New Stealth Updates to **Cruise Missiles** Updates to the existing Cold War nuclear command-and-control **New Strategic Submarines** New ICBMs Updates to Existing **Gravity Bombs**

#### Estimated Costs for Nuclear Triad Modernization

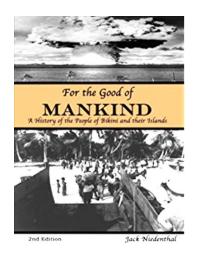


\* In FY2019 constant dollars; includes only a small portion of the cost of the B-21 Note: All figures in then-year dollars unless otherwise noted Sources: U.S. Navy, U.S. Air Force, Center for Strategic and International Studies, NNSA, DoD Cost Assessment and Program Evaluation (CAPE) office Updated January 10, 2022.



## Health Effects

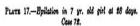
Between 1946 to 1958, the United States conducted 67 large-scale nuclear tests in the Marshall Islands. That is the equivalent of 1.6 Hiroshima shots, every day, for 12 years.













LATE 18.—Same case as in Plate 17, six months after exposure showing complete regrowth of normal hair.

## Research: Effects of Radiation 70 Years Later

#### healthcare access and equity

- 1) ongoing effects of radiation,
- 2) repeated denial of services,
- 3) lack of healthcare and insurance,
- 4) lack of interpretation, and
- 5) poverty

#### historical trauma and embodiment.

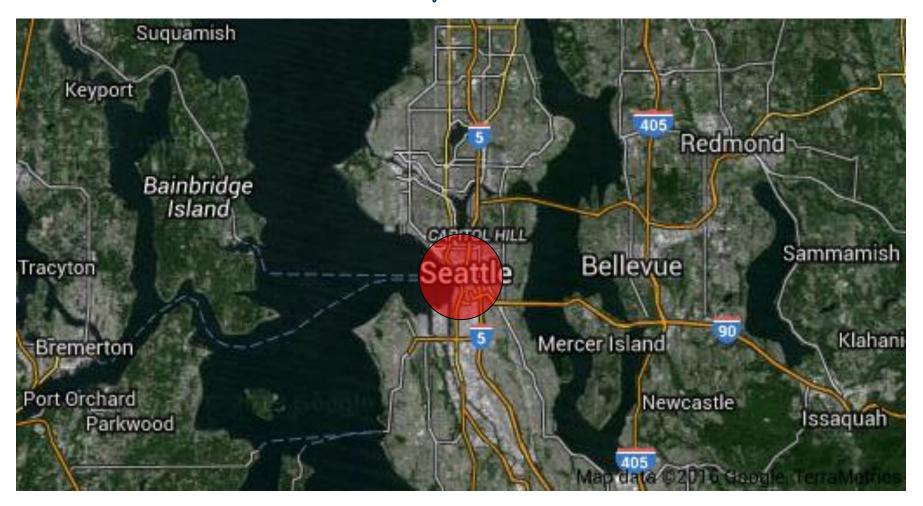
- 1) illness and early mortality,
- 2) lack of knowledge and understanding of the Ri Majel,
- 3) structural discrimination,
- 4) feelings of sadness and despair
- 5) shyness and humility
- 6) a sense of "cannot/will not" and fatalism.

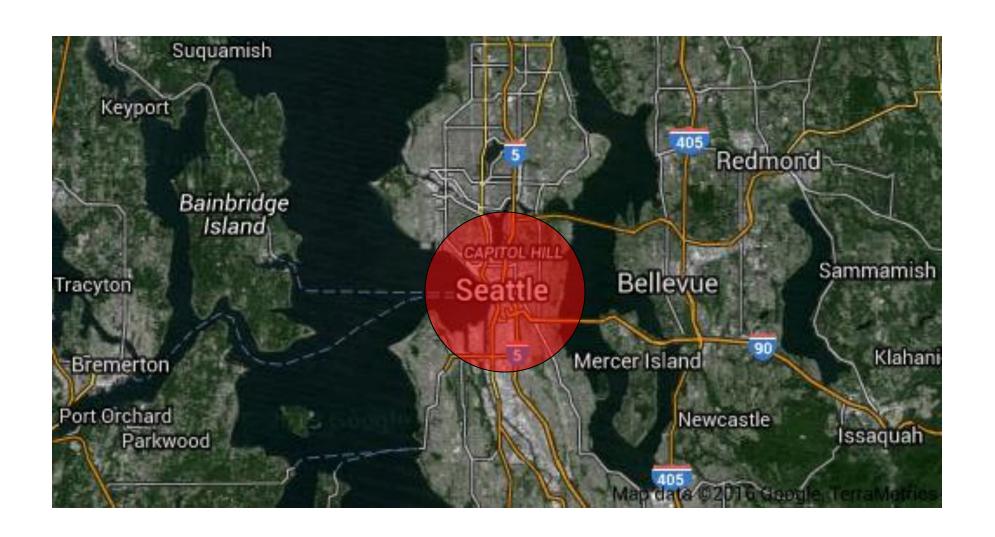
(Narruhn & Espina 2022)

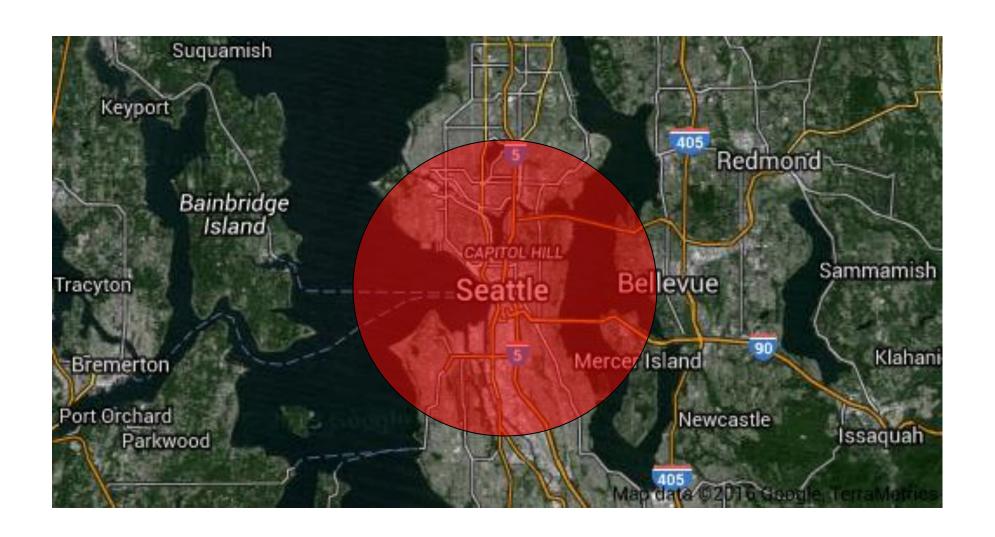
### Dr. Ira Helfand

- Ira Helfand, MD, is a member of the International Steering Group of the International Campaign to Abolish Nuclear Weapons (ICAN), the recipient of the 2017 Nobel Peace Prize.
- He is also immediate past president of the International Physicians for the Prevention of Nuclear War (IPPNW), the founding partner of ICAN and itself the recipient of the 1985 Nobel Peace Prize.
- He is also co-founder and past president of Physicians for Social Responsibility, IPPNW's US affiliate.











## What Can We Do?



- Severe gridlock in Congress
- Back From the Brink is a campaign to pass resolutions calling on Congress to support 5 policies to take us back from the brink of nuclear war. Over 70 cities have done this as have countless boards and organizations.
- These policies are: Cancel Enhanced Weapons, Pursue Global Elimination, Renounce First Use, End Hair-Trigger Alert, and End Presidential Sole Authority to launch a nuclear weapon.