

Neglected infection control is better investment than nuclear weaponry

For a tiny fraction of the cost of maintaining a nuclear arsenal, the 11 nuclear power states (United States, Russia, United Kingdom, France, China, India, Pakistan, North Korea, Israel, Iran, and possibly Syria) could eliminate neglected infections within their borders—which account for up to 50% of the global disease burden—and beyond, says a new editorial published April 27 in the open-access journal *PLoS Neglected Tropical Diseases*.

In his analysis, "Nuclear Weapons and Neglected Diseases: The 'Ten-Thousand-to-One Gap,'" Dr. Peter Hotez, President of the Sabin Vaccine Institute and Distinguished Research Professor at The George Washington University Medical Center, estimates that "the 11 nuclear weapons states together have invested at least \$10 trillion on weapons production and maintenance" while "the costs for both neglected disease control and R&D come close to \$1 billion, or roughly less than 1/10,000th of the estimated \$10 trillion committed for nuclear weapons."

With the possible exception of the United Kingdom, each of the nuclear weapons states has a high neglected disease burden. India accounts for roughly one-quarter of the world's 120 million cases of lymphatic filariasis, a disfiguring and stigmatizing vector-borne infection associated with elephantiasis. Almost one-half of the world's 60 million trachoma cases occur in nuclear weapons states, with China having the highest number of cases of any nation. Approximately one-third of the estimated 800 million ascariasis infection cases occur in nuclear weapons states, including India (140 million), China (86 million), North Korea (8 million), Pakistan (7 million), and Iran (5 million). Investments in nuclear weaponry are carried out under the auspice of deterring war and thus promoting peace, says Hotez, but these and additional benefits can be achieved through neglected disease funding. Increased investments in neglected disease research could control or eliminate neglected infections, support achievement of the Millennium Development Goals, stabilize and build nations, and reduce civil strife and international tensions.

"Great efforts are needed to engage leaders of the nuclear weapons states in a frank dialogue about reallocation of resources toward public health and scientific pursuits for neglected tropical disease R&D and control," says Hotez.

"In the coming decade, engaging the nuclear powers on neglected disease R&D and global implementation efforts [would] represent a significant diplomatic victory for the world," he concludes in the editorial.

More information: Hotez PJ (2010) Nuclear Weapons and Neglected Diseases: The "Ten-Thousand-to-One Gap". *PLoS Negl Trop Dis* 4(4): e680. [doi:10.1371/journal.pntd.0000680](https://doi.org/10.1371/journal.pntd.0000680)

Provided by Public Library of Science

This document is subject to copyright. Apart from any fair dealing for the purpose of private study, research, no part may be reproduced without the written permission. The content is provided for information purposes only.