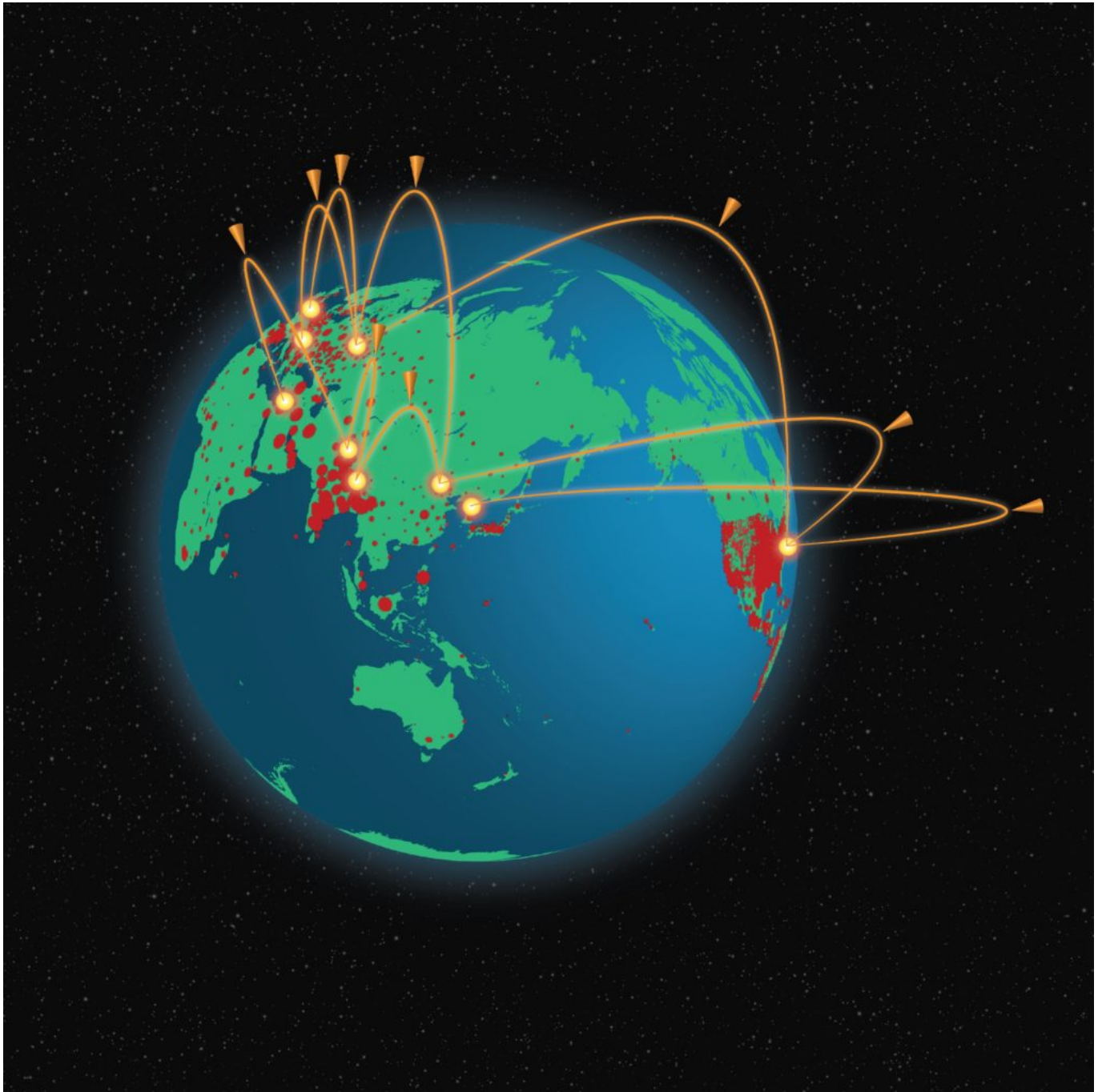


# LESSONS FROM THE PANDEMIC-NUCLEAR WEAPONS NEXUS FOR SURVIVAL IN 2021



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**PETER HAYES**

**DECEMBER 31 2020**

## I. INTRODUCTION

In this essay, Peter Hayes suggests nine nuclear risk reduction measures that are applicable in Northeast Asia to manage the increased risk of nuclear war due to the COVID-19 pandemic.

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Banner image: Sophia Mauro for Nautilus Institute. This graphic shows the pandemic distribution from [COVID-19 Dashboard](#) by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU) on September 25, 2020; and the nuclear threat relationships between nuclear armed states.

## II. NAPSNET BLUE PETER REPORT BY PETER HAYES

### LESSONS FROM THE PANDEMIC-NUCLEAR WEAPONS NEXUS FOR SURVIVAL IN 2021

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As Earth hurtled around the Sun at over 100000 km per hour, humans were rudely reminded in 2020 by the COVID-19 pandemic that no-one is in charge—or rather, nature is in charge.

Humanity face many intertwined global problems in 2021. The short list includes climate change, habitat loss, biodiversity loss, biochemical pollution, overpopulation, demographic aging, food insecurity, water scarcity, disease and pandemics. These problems are both cause and effect of extreme poverty, inequality, forced migration, and social conflict that leads to war.

These problems are inextricably inter-twined and long-term. Due to their sheer scale and complexity, these interacting global problems will take decades, even centuries of concerted effort

to overcome.

Hovering above all these inter-twined global problems is the truly existential threat of nuclear war. Nuclear war is the most immediate and direct extinction trap into which the species could fall.

Even a “small” nuclear war—for example, between India and Pakistan, or the United States and the DPRK—could induce a long winter, global famine, and would put paid to any possibility of the global cooperation needed to solve all the other global problems afflicting humanity.

Yet unlike other global problems, nuclear weapons are uniquely and one hundred percent human-made. No other species constructs a tool that could result in its own extinction. Humans are entirely responsible for bringing this threat into being. The [RECNA Nuclear Warhead Data Monitoring Team at Nagasaki University](#) estimates that as of June 2020, nine nuclear armed states maintain 13410 nuclear warheads--enough for about one ton of TNT-equivalent explosive power for every human alive today.

Even as humans struggle to contain COVID-19 that is ravaging whole societies, nine nuclear armed states are spending hundreds of billions of dollars to modernize and expand their capacity to destroy massively rather than rebuild comprehensively.

By the same token, the threat of nuclear war is one global problem that can be solved, relatively quickly, and ultimately, forever. Northeast Asia, where the pandemic likely increases the risk of nuclear war, is a case in point. COVID-19 may destabilize nuclear commands and ravage nuclear and conventional forces, and destabilize nuclear-prone conflicts at a time when tension should be reduced, not increased. To reduce this risk, the [Nagasaki 75<sup>th</sup> Anniversary Pandemic-Nuclear Nexus Scenarios](#) project concluded that leaders in this region must, among many other urgent measures,

- Slow and reverse nuclear force developments and operations in the Northeast Asia region, including through nuclear-weapon-free zones and nonproliferation treaties
- Develop a secure, reliable nuclear hotline network for communicating in a nuclear crisis
- Launch public health security initiatives in the Northeast Asia region to respond to pandemics
- Engage younger generations in the nuclear disarmament movement and mobilize a broader base of potential stakeholders in nuclear issues
- Enlarge existing city networks such as Mayors for Peace and establish new city/regional cooperation networks to play a more direct role in reducing nuclear risk and pushing for nuclear disarmament
- Solve the DPRK puzzle and denuclearize the Korean peninsula
- Increase monitoring and controls for the storage and transportation of nuclear materials
- Reform existing global institutions and establish new programs and initiatives to improve collaboration among nation-states
- Take advantage of new apps and sensors for “on-the-ground” information in a nuclear crisis, while ensuring that authorities do not abuse these apps for social and political control
- Develop new platforms for sharing emergency response information and ways to ensure the integrity of this information

Important as they are, such risk reduction measures assume that a world afflicted by pandemics will be much the same as in pre-pandemic epoch and characterized by pre-existing but intensified great

power competition, beggar-thy neighbor nationalism, and failing multilateralism. At best, the Biden Administration might restore a global “air traffic control” system for Earth by renewing American leadership, muting great power competition, and restoring pre-COVID-19 international governance. In this view, the post-COVID-19 world will be fundamentally the same as the pre-COVID world, only on steroids.

There is another view, albeit not one shared widely by national leaders, which holds that the pandemic is forcing the “re-spatialization” of human affairs in all sectors and at every level, from the individual to nation-states. Rather than merely increasing the velocity of existing change and bringing underlying conflicts to the surface, the pandemic heralds an epochal, global, and systemic transformation that will lead to a new distribution of power capacities in geo-political, geo-economic, and geo-ecological dimensions.

This shift, they aver, is on a scale with the change wrought by the rise of European imperialism and the displacement of disconnected societies all over the world by colonialism, and the global bifurcation of the entire world into two competing blocs by the United States and the former Soviet Union after World War II.

Such pandemic-induced changes include spatial distancing at every unit level of human societies; border controls, mobility controls within and across borders, contracting supply chains and a reconfiguration of production and consumption location, changes in architectural and settlement density and design to reduce infection risk, slowing and reversal of human settlement intrusion into zoonotic-reservoir habitats, shifts in the forecast distribution of climatic impacts over coming decades due to changes in greenhouse gas emissions and carbon uptake in sinks such as forests, etc.

Although we sense this change and see indicators of this change, goes the argument, we do not yet comprehend its scale and magnitude, let alone its emergent properties as a new global system that redefines the local.

In this permanent-pandemic world, the effective governance of global problems in an era of permanent pandemics may rise bottom-up from “first responder” cities, provinces, corporations, and civil society organizations, driven by sheer necessity to create a global mosaic of networked responses and shared solutions. This is a world that might adopt the Treaty on the Prohibition of Nuclear Weapons as the foundation of nuclear governance, not the old legal order that approves of the existence and even the use of nuclear weapons.

Cutting across this hopeful image is a darker portrayal of how humans may respond to multiple existential threats in an epoch defined by pandemics. In this 21<sup>st</sup> century feudalism, great powers are weakened relative to each other, and small and medium powers acquire a-symmetric and ultra-modern means of military power projection designed to maintain control and keep the other outside borders during protracted pandemics. Thus, today’s Cold Peace struggling to manage COVID-19 may degenerate into a new Cold War with more states and even non-state actors armed with nuclear weapons.

Although humans can make nuclear weapons to destroy life on a massive scale, they can’t make even a simple life form, let alone a single ant or an ecosystem. Arguably, humanity’s best bet for survival is to reduce its global footprint, anticipate the impacts of global change, and adapt rapidly while nature restores itself.

That task begins with making all humans safe from pandemic infections because no human can be safe while other humans are infected. This is the equivalent of delivering one ton of TNT-equivalent of destructive power in the form of a vial of vaccine—surely achievable even if revolutionary in

principle. From this simple proposition flows a revolution in global governance in all affairs, without which humans will likely face a dire, dark, and bleak future.

As we enter 2021, therefore, states and people must ask themselves whether there are better ways to prepare for the uncertain futures created by the COVID-19 pandemic than to rely on primitive nuclear weapons, and which of these is most robust.

### **III. NAUTILUS INVITES YOUR RESPONSE**

The Nautilus Asia Peace and Security Network invites your responses to this report. Please send responses to: [nautilus@nautilus.org](mailto:nautilus@nautilus.org). Responses will be considered for redistribution to the network only if they include the author's name, affiliation, and explicit consent.

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