Preparing for a Man-Made or Naturally-Occurring Infectious Disease Outbreak on the Korean Peninsula: An Analysis of U.S. Biosecurity Interests Abroad

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Background

In December of 2014, there were more than 130,000 U.S. citizens living in the Republic of Korea (ROK), up more than 30% from just a decade prior. Furthermore, there are close to 30,000 U.S. servicemembers stationed in the ROK at any given point in time. Given how important the ROK is as a regional power, global civil air transportation and shipping hub, and the strategic significance of the Korean Peninsula as a whole, understanding and preparing for biosecurity threats in this location is critical.

Threats

Biological threats on the Korean Peninsula are diverse and span man-made and naturally-occurring risks. In addition to risks of a naturally-occurring disease outbreak, the threat of a biological weapons attack from a hostile state actor or a bioterror attack is ever present. The DPRK (North Korea) likely has at least 13 times of biological weapons, including the causative agents of Anthrax, Botulism, Cholera, Plague, Smallpox, Typhoid Fever, and Yellow Fever.

Preparedness

The scope of this project focused on the preparedness of both the U.S. military in Korea (USFK) and South Korea as a whole. Some important elements of this assessment include:

- South Korea's innovations in digital public health, which immensely improves outbreak tracking, but does introduce serious privacy and cybersecurity concerns
- Reduction in the types of high-level conversations and exercises that helped the U.S. and ROK prepare more thoroughly for such events
- U.S. and ROK planning for such events, largely concentrated in pandemic flu planning

Complications and Other Factors

- Interconnectedness of major urban centers via railway
- Highrise apartment ventilation as a result of decades of relaxed, or non-existent, building codes
- Cultural interest in protecting population as a whole

Conclusion

This pre-COVID-19 research identified multiple areas that would likely be problematic in the event of an infectious disease outbreak. In many cases, these ideas were confirmed during the current pandemic. This points to the need for the U.S. to address its biosecurity concerns domestically and internationally, including via bilateral channels with key allies and not just via supranational and regional international organizations. There will be future epidemics and pandemics that challenge the U.S. and its security, so preparing for these situations now is critical.

Sources

korea/biological/.

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