

May 25, 2021

CAPT Christopher L. Perdue
Executive Director
National Advisory Committees
NBSB Designated Federal Officer
Washington, DC, Office

Re: National Biodefense Science Board Public Teleconference

"All countries need to have the laboratory, trained workforce, surveillance, and emergency operations capabilities to prevent, detect, and respond to disease threats. Until then, the goal of [pandemic preparedness and] global health security remains an unfinished journey." [Michael Osterholm, December 2017](#)

AMR as a slow moving pandemic

The purpose of the National Biodefense Science Board (NBSB) is to “provide expert advice and guidance on scientific, technical, and other matters of special interest to the Department regarding current and future chemical, biological, nuclear, and radiological agents, whether naturally occurring, accidental, or deliberate.” Deadly viral and bacterial organisms are constantly emerging throughout the world, posing an exorbitant risk to human and animal health. As illustrated by COVID-19’s arrival, we are in many ways unprepared to handle a pandemic and its associated health and economic ramifications. Like COVID-19, Ebola, H1N1 swine influenza, and SARS, many disease threats often spread in animal populations before causing illness in people. Because of this, a One Health approach to biodefense is necessary.

One of these disease threats that requires a One Health approach is antibiotic resistance (ABR) - a slower moving, but just as deadly pandemic that is rendering life saving drugs ineffective. Antibiotic resistance can complicate the response to other public health threats by leaving patients vulnerable to untreatable secondary bacterial infections. As illustrated by COVID-19, these health threats can worsen antibiotic resistance by increasing the overall use of antibiotics or weakening stewardship efforts in healthcare facilities.

We urge NBSB to make sure that federal agencies address the public health emergency that is antibiotic resistance when addressing biodefense. Conservation, surveillance, and infection control need to be the focus of efforts to control this threat. Recent history has shown that new drug development is both costly and uncertain, and therefore should not be the central component of an ABR biodefense strategy.

More must be done to ensure antibiotics are not overused or used inappropriately on farms, in hospitals, or in doctor's offices. In the United States, systems must be developed to monitor for resistant pathogens and resistance determinants on farms, in the environment, and in healthcare settings. Finally we need to do a much better job of reducing the risk of illness both in humans and animals.

The NBSB should recommend the following:

- 1. Recommend HHS build systems to quickly identify new and emerging infections:**
HHS must sufficiently invest in staff, infrastructure and resources to rapidly identify and track new human infections, especially the 75% of which originate or "emerge" from animals, either wildlife or farmed animals. HHS should seek strengthened authority to access farms for disease monitoring and investigation. These crucial data on infections must then be analyzed and reported in a transparent manner that utilizes a One Health approach. Since 2004, the GAO has repeatedly urged the USDA and FDA to work together in building a system to collect mandatory antibiotic use and resistance data at the farm-level, and integrate them with equivalent human data, as Europe has been doing since 2011. This should be done in tandem with the creation of a system to monitor for viral diseases with pandemic potential such as influenza and corona viruses. This must be prioritized.
- 2. HHS should set targets for reducing antibiotic overuse in humans and animals. HHS should also restrict antibiotic use in food animals to the treatment of disease and the control of diagnosed outbreaks, and limit the duration of antibiotic use in animals to no more than 21 days.**

Thank you for your consideration.

Please see our attached letter to HHS Secretary Becerra on additional actions HHS should consider when specifically addressing antibiotic resistance and the overuse of antibiotics in the food production sector.

Sincerely,

Keep Antibiotics Working