

October 8, 2021

RE: APHIS-2021-0061 Proposed Framework for Advancing Surveillance for SARS-CoV-2 and Other Emerging Zoonotic Diseases through the American Rescue Plan

Introduction

The undersigned members of Keep Antibiotics Working (KAW)¹ and colleague organizations appreciate this opportunity to comment on [APHIS' American Rescue Plan \(ARP\) Surveillance Program: Strategic Framework](#). We have long felt that inadequate resources have been allocated to addressing zoonotic disease so appreciate the increased funding. SARS-CoV-2 is the latest zoonotic pathogen to have caused a devastating pandemic but surely will not be the last.

Increased transmission of diseases from animals to people is causing an increased frequency of global pandemics. In terms of global biomass, farmed animals far surpass wild warm-blooded animals.² Farm animals are in close contact with people, and farm animals can transmit pathogens to people through multiple pathways including food, direct contact by workers, and through contamination of water and air by their manure. Because of this any effort to control future pandemics must have a strong on-farm component that includes both disease surveillance and disease prevention. The failure to clearly include an on-farm component is the greatest weakness of the Strategic Framework.

Antibiotic resistance is a slower moving pandemic that is occurring at the same time as the pandemic caused by SARS-CoV-2. The pandemic of antibiotic resistance has been made worse by the COVID-19 pandemic and resistance has complicated treatment of COVID-19 patients.³

¹ Keep Antibiotics Working, a coalition of health, consumer, agricultural, environmental, humane, and other advocacy groups, is dedicated to eliminating the inappropriate use of antibiotics in farm animals, a significant contributor to the rise in antibiotic resistant disease.

² Bar-On, Yinon et al. "The Biomass Distribution on Earth". *Proc Natl Acad Sci* 115, no. 25 (June 2018):6506-6511 <https://doi.org/10.1073/pnas.1711842115>.

³ CDC. "COVID-19 & Antibiotic Resistance." Accessed October 8, 2021. <https://www.cdc.gov/drugresistance/covid19.html>

Antibiotic resistance is similar to the COVID-19 pandemic in that it is caused or exacerbated by spillover from animals, with food animals being a source of millions of resistant human infections. We recommend that the two contemporary pandemics not be treated in isolation but instead be addressed as part of a broader program of pandemic preparedness.

While everyone has been affected by SARS-CoV-2, vulnerable communities have been more greatly impacted, experiencing higher levels of illness and death. The burden of antibiotic resistance is also not equally shared. Farm workers and other vulnerable populations are at greater risk for and have worse outcomes from resistant infections when compared to the general population.⁴ In terms of zoonotic illness, farm workers and food system workers are at the highest risk due to exposure to animals, animal products, and animal waste.⁵ APHIS should work with the Centers for Disease Control and Prevention (CDC) to ensure that food system workers are included in efforts to address pandemic disease.

APHIS and USDA cannot do this work alone. There needs to be greater coordination and collaboration with other federal agencies. Similarly, given the zoonotic nature of pandemic disease, any attempt to address pandemics must take a One Health approach that aims to identify and stop pandemic potential pathogens before they spill over into people. While the new resources provided to APHIS through the ARP are much needed this cannot be a one-time increase in resources.

Recommendations:

- **APHIS must include a specific on-farm component in the Strategic Framework that includes both monitoring and surveillance but also authority to address pandemic potential pathogens when detected.**

⁴ NRDC. "Workers Suffer When Meat Producers Overuse Antibiotics | Fact Sheet," July 2019; <https://www.nrdc.org/resources/workers-suffer-when-meat-producers-overuse-antibiotics>; Nadimpalli, Maya L., Courtney W. Chan, and Shira Doron. "Antibiotic Resistance: A Call to Action to Prevent the next Epidemic of Inequality." *Nature Medicine* 27, no. 2 (February 2021): 187–88. <https://doi.org/10.1038/s41591-020-01201-9>.

⁵ LeJeune, Jeff et al. "Zoonoses: an occupational hazard for livestock workers and a public health concern for rural communities." *J Agric Saf Health* 16(3) (July 2010):161-79. doi: 10.13031/2013.32041

There is a disconnect between the urgency of addressing zoonotic pandemics that have collectively led to millions of U.S. deaths over the last century and the level of pandemic preparedness in the U.S. Given the role of farms as a source of pandemic pathogens including antibiotic resistant pathogens, there is a need for much greater on-farm monitoring and surveillance of potential pathogens. APHIS should create a monitoring system that allows it to widely monitor livestock production facilities for dangerous organisms. In addition, APHIS should clarify existing authorities and seek, as needed, strengthened authority to act when dangerous pathogens are detected on farms that raise animals. We have had very clear examples of both the failure of federal authorities to access farms when such access has been needed for outbreak investigations⁶ and examples of clear failures to act when certain facilities are repeated sources of human illness⁷. These examples are of endemic pathogens affecting relatively small numbers of people compared to a pandemic. Given the inevitability of the next pandemic - and the possibility that it may be caused by a bacterial pathogen - and the current COVID-19 pandemic, there is a clear need for an active surveillance system designed to quickly identify new pathogens before they are transmitted to people.

- **APHIS must include antibiotic resistance as part of the Strategic Framework.** Antibiotic resistance is a parallel pandemic that results in more than 700,000 deaths globally and is projected to cause 10 million deaths annually by 2050, unless urgent action is taken.⁸ This pandemic is largely driven by the overuse of antibiotics in human medicine and in animal agriculture. Antibiotic resistance can make viral infections difficult to treat especially if sick patients succumb to secondary bacterial infections and, as illustrated by the COVID-19 pandemic, viral pandemics can set back efforts to implement antibiotic stewardship efforts. APHIS should focus its efforts on creating combined systems for monitoring and surveillance of both viral and bacterial pathogens

⁶ Richtel, Matt. "Tainted Pork, Ill Consumers and an Investigation Thwarted." The New York Times, August 4, 2019, sec. Health. <https://www.nytimes.com/2019/08/04/health/pork-antibiotic-resistance-salmonella.html>.

⁷ Robertson, Scott A, et al. "Onsite Investigation at a Mail-Order Hatchery Following a Multistate Salmonella Illness Outbreak Linked to Live Poultry—United States, 2018." Poultry Science 98, no. 12 (December 2019): 6964–72. <https://doi.org/10.3382/ps/pez529>.

⁸ Interagency Coordination Group (IACG) on Antimicrobial Resistance. "No Time To Wait: Securing The Future From Drug-Resistant Infections". April 2019. <https://www.who.int/publications/i/item/no-time-to-wait-securing-the-future-from-drug-resistant-infections>

on farms and in the environment. Efforts should not stop at monitoring but APHIS should also seek authority to respond to antibiotic resistant bacterial threats found on farms.

- **APHIS should work with CDC to integrate farm and food system worker health into the Strategic Framework.**

Because of their direct contact with animals and animal products farm and food system workers are at increased risk of being impacted by emerging zoonotic pathogens. The work-related risks add to other potential vulnerabilities of food system workers such as poor wages, lack of access to healthcare, and other impacts of systemic racism. APHIS should explicitly build into its work on addressing pandemics, steps designed to address the heightened risk to vulnerable workers. In building this in from the beginning, APHIS should seek input from health authorities and from worker led organizations.

- **APHIS should increase coordination with other federal agencies.**

APHIS and the USDA need to address pandemic response through a One Health Approach that acknowledges the connections between human, animal, and environmental health. Much more work needs to be accomplished to break down barriers that limit the effectiveness of the U.S. pandemic response. These barriers are clearly illustrated by the recently released [American Pandemic Preparedness](#) Plan, which acknowledged the zoonotic nature of pandemic illness, but then failed to include any actions related to agriculture and did not include USDA. APHIS needs to clarify the roles of CDC, U.S. Food and Drug Administration (FDA), Environmental Protection Agency (EPA) and other federal agencies as it develops the Strategic Framework. For example, there is a need to coordinate with CDC on the connection between zoonotic disease and farm system workers and APHIS should coordinate with FDA around issues related to animal feed and animal antibiotics.

- **APHIS must address the need for ongoing resources to address zoonoses with pandemic potential.** Congress has provided one-time funding of \$300 million to support surveillance for SARS-CoV-2. While this is greatly needed, this follows annual budgets for Zoonotic Disease Management at APHIS that are 10 times smaller. APHIS should build into the Strategic Framework a plan for ongoing sustainable funding moving

forward. One of the failures of past efforts of pandemic preparedness is the failure to maintain systems once a crisis has passed.

Conclusion

The ARP funding provides a much-needed resource boost to APHIS for work to address zoonosis, but the Strategic Framework needs to be strengthened to clearly include an on-farm component, address antibiotic resistance, address the threat to vulnerable workers, better coordinate with other agencies, and create a plan for sustainable funding.

Sincerely,

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Center for Food Safety

Consumer Reports

Food Animal Concerns Trust

The Pew Charitable Trusts

U.S. PIRG