

February Update from the Field

Hi everyone! February is here which means just another month until spring. The recent coronavirus outbreak has brought infectious disease to the forefront of our minds so our theme for the month is One Health and the benefits for zoonotic disease control. If you are interested in learning more about the coronavirus specifically, I recommend you check out this link from the CDC [here](#). It is a great resource with up-to-date recommendations and resources. As always, one of the best ways to combat infectious disease is by practicing good handwashing. If you have any questions or would like the full article of any of the abstracts, let me know and I'd be happy to get it to you.

Best,

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Zoonoses under our noses (2019).

Cross AR, Baldwin VM, Roy S, Essex-Lopresti AE, Prior JL, Harmer NJ. *Microbes Infect.* Jan - Feb;21(1):10-19. doi: 10.1016/j.micinf.2018.06.001

One Health is an effective approach for the management of zoonotic disease in humans, animals and environments. Examples of the management of bacterial [zoonoses](#) in Europe and across the globe demonstrate that One Health approaches of international surveillance, information-sharing and appropriate intervention methods are required to successfully prevent and control disease outbreaks in both endemic and non-endemic regions. Additionally, a One Health approach enables effective preparation and response to bioterrorism threats.

Implementing One Health Approaches to to confront emerging and re-emerging zoonotic disease threats: lessons from PREDICT (2020)

Kelly, T et. al. *One Health Outlook* 2:1 <https://doi.org/10.1186/s42522-019-0007-9>

Recurring outbreaks of emerging and re-emerging zoonoses, such as Ebola virus disease, avian influenza, and Nipah virus, serve as a reminder that the health of humans, animals, and the environment are interconnected and that early response to emerging zoonotic pathogens requires a coordinated, interdisciplinary, cross-sectoral

approach. As our world becomes increasingly connected, emerging diseases pose a greater threat, requiring coordination at local, regional, and global levels. One Health is a multisectoral, transdisciplinary, and collaborative approach promoted to more effectively address these complex health threats. Despite strong advocacy for One Health, challenges for practical implementation remain. Here we discuss the value of the One Health approach for addressing global health challenges. We also share strategies applied to achieve successful outcomes through the USAID Emerging Pandemic Threats Program PREDICT project, which serve as useful case studies for implementing One Health approaches. Lastly, we explore methods for promoting more formal One Health implementation to capitalize on the added value of shared knowledge and leveraged resources.

Transboundary animal diseases as re-emerging threats—Impact on one Health (2019).

Torres-Velez, F., Havas, KA., Spiegel, K., Brown, C., May;36(3):193-196. doi: 10.1053/j.semdp.2019.04.013.

Transboundary animal diseases are those that can move through a population of animals and cause considerable economic and societal harm. Many have high mortality, and in low-income areas, can quickly destroy herds and flocks of agricultural animals. Although much of One Health, which sits at the intersection of human, animal, and environmental health, focuses on the zoonotic diseases, in fact transboundary animal diseases can harm both humans and the environment through robbing communities of livelihoods and nutrition, and creating environmental contamination through extensive carcass disposal requirements. Transboundary animal diseases continue to circulate in the world, predominantly in low-income regions or in areas with less than optimal biosecurity. This paper will review three prominent emerging and re-emerging transboundary animal diseases, describing their pathology and diagnostics, as well as economic and food security impacts, which are substantial. Attention to these devastating diseases should be a One Health priority.