Are you Ready for a One-Health App?

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Everyone has heard of the “killer app,” that most desirable computer program or model that everyone must have. But the matured understanding and increased availability of transdisciplinary data on climate and health, linking human, animal and environmental health, indicates the viability of a new set of “one health” services. As a goal of becoming a Weather Ready Nation, the attribution of weather and climate to health impacts and good adaptation decisions based on actionable information with analytics, including warnings and forecasts for healthy communities and ecosystems, are feasible. This requires observations, data, and model output to be integrated, analyzed, interpreted, and communicated. In response to growing security risks, new partnerships are forming to address the relevance, clarity, and certainty in earth system modeling and the translation of climate, health and environmental research into one-health applications. There is an urgency to identify, assemble and make available foundational data and leverage infrastructure by promoting data exchange and system interoperability, establishing a one-health modeling and prediction testbed, encourage nontraditional training and education, and the piloting of integrated environmental services. The results will provide greater local, regional and global awareness and forecast guidance to reduce disaster risks associated with the progression of pathogens and infectious disease, the quality of food, water and air, and the impacts of inclement and extreme weather patterns, just to name a few concerns sensitive to environmental stressors. This presentation will discuss emerging climate-health science applications for operational delivery of actionable one-health decision support services.