Surveillance for the Detection of SARS-CoV-2 at the Human-Animal-Environment Interface in Southeast Asia

Background: Health Security Partners (HSP), a non-profit organization dedicated to strengthening global capacity for health security, is implementing a U.S. Centers for Disease Control and Prevention (CDC) project to bolster One Health collaboration and surveillance infrastructure for SARS-CoV-2 in animals. Specifically, this effort is focused on enhancing surveillance systems for detecting, notifying, and reporting zoonotic transmission of SARS-CoV-2 between people and animals, including companion animals (dogs and cats), livestock, and wildlife.

To date, SARS-CoV-2 has been detected in multiple animal species around the world, including mink, cats, dogs, gorillas, ferrets, and big cats, such as lions and tigers. Most of these animals became infected after close and prolonged contact with people with COVID-19. Additional studies are needed to understand SARS-CoV-2 infection at the human-animal-environment interface and the potential risks for spillover. HSP and CDC are looking to support grants for SARS-CoV-2 surveillance at the human-animal-environment interface in Indonesia, Thailand, and Vietnam.

"Brainstorming" Meetings with Key Stakeholders: HSP and CDC are planning a series of "brainstorming" meetings with key stakeholders across human, animal, and environmental health sectors in Indonesia, Thailand and Vietnam. These meetings will inform the development and dissemination of an open call for proposals for SARS-CoV-2 surveillance at the human-animal-environment interface. HSP and CDC are particularly interested in building on existing capacities, including ongoing studies or planned projects by groups/networks within each country.

HSP and CDC plan to convene a series of two-hour virtual "brainstorming" meetings in August 2021 with invited stakeholders from each country. The meetings will bring together stakeholders from the government, academic and NGO sectors. A pre-meeting survey will be sent out to invited stakeholders to help inform the discussion during the "brainstorming" meeting.

Objectives of the virtual "brainstorming" meetings:

- (a) Outline the landscape of SARS-CoV-2 surveillance efforts at the human-animalenvironment interface, including recently concluded, ongoing, and potential studies.
- (b) Liaise with relevant groups and networks in each country to gain awareness of current capacities to perform these studies.
- (c) Discuss human-animal-environment interfaces of interest for SARS-CoV-2 detection, including but not limited to live markets, sanctuaries, zoos, wildlife rehabilitation centers, and households.
- (d) Explore and identify local and/or regional gaps in the SARS-CoV-2 surveillance landscape at the human-animal-environment interface that may be of interest.
- (e) Confirm the existence and possibility of using archived samples or repurposing samples from other surveillance efforts for the detection of SARS-CoV-2.
- (f) Understand what kinds of surveillance efforts are feasible in the near term (6-9 months), given national and local restrictions imposed by the pandemic.

<u>Output:</u> The information shared during the meetings will be used by HSP to develop a targeted call for proposals for SARS-CoV-2 surveillance at the human-animal-environment interface that addresses mutually shared interests with in-country stakeholders.

Call for Proposals, Selection and Funding Support: At the end of August 2021, HSP plans to disseminate an open call for proposals from groups/networks in Indonesia, Thailand and Vietnam for funding and technical support to implement local surveillance for SARS-CoV-2 infections at the human-animal-environment interface. Preference will be given to projects that are scalable to the national and/or regional level over time. Joint proposals from multiple partners are encouraged. Participants will have three weeks to respond. Proposals will be selected based on the review criteria outlined in the call for proposals and awards will be made in October 2021.