



PREDICT

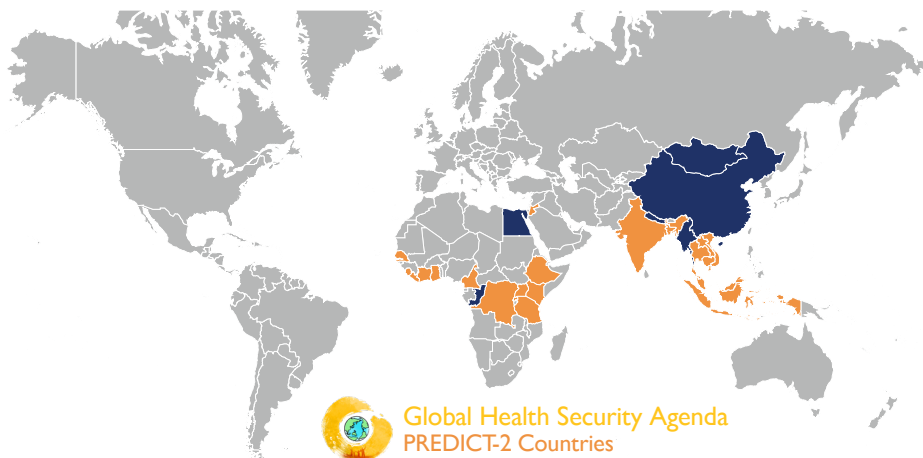
PANDEMIC PREPAREDNESS FOR GLOBAL HEALTH SECURITY

PREDICT was initiated in 2009 to strengthen global capacity for detection and discovery of viruses with pandemic potential that can move between animals and people, including filoviruses, such as ebolaviruses; influenza viruses; paramyxoviruses, such as Nipah virus; and coronaviruses, the family to which SARS CoV-2 belongs, the virus responsible for the COVID-19 pandemic.

PREDICT activities supported emerging pandemic threats preparedness and the global health security agenda, primarily in Africa and Asia. A decade later, more than 30 countries around the world have stronger systems to detect, identify, prevent and respond to viral threats, both known and novel. The PREDICT-trained workforce, including field, data and technicians at more than 60 national, university and partner laboratories, is one of the best response resources to assist with detection and response to COVID-19 and other emerging viruses.



WHERE WE WORK



HIGHLIGHTS

6.8K

people trained for the
One Health Workforce
in over 30 countries

164K

animals and people
sampled to minimize
spillover of zoonotic
disease threats

>60

laboratory systems
enhanced with zoonotic
disease detection
capabilities

949

novel viruses detected,
including Bombali
ebolavirus, Zaire
ebolavirus, Marburg
virus, and MERS- and
SARS-like coronaviruses

217

known viruses
detected

PREDICT COVID OUTBREAK RESPONSE ACTIVITIES

PREDICT has been actively supporting partners in the US and around the world by providing technical assistance and outbreak response support for the latest emergence of Disease X, COVID-19.

EARLY DETECTION

Helped raise the flag that coronaviruses have pandemic potential by providing critical data on the group of coronaviruses to which SARS-CoV-2 belongs, through collaborations with the PREDICT/China team and with National Institutes of Health (NIH).

ONGOING SUPPORT

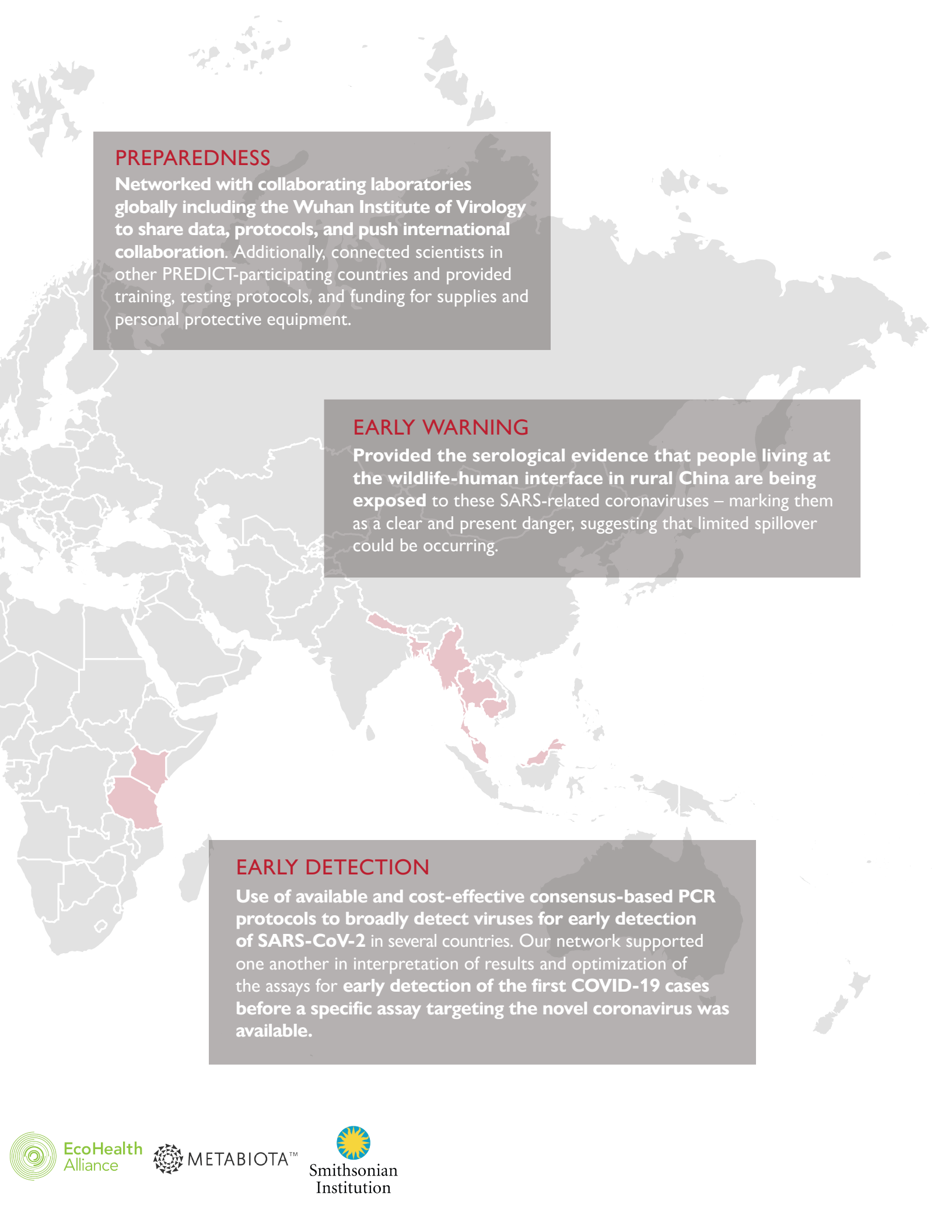
Global preparedness and response: providing technical assistance and testing support for early identification of cases as well as readiness for other emerging viruses.

Assisting in coronavirus detection and **supporting government evaluations of potential cases** throughout Asia, the Middle East and Africa.



USAID
FROM THE AMERICAN PEOPLE





PREPAREDNESS

Networked with collaborating laboratories globally including the Wuhan Institute of Virology to share data, protocols, and push international collaboration. Additionally, connected scientists in other PREDICT-participating countries and provided training, testing protocols, and funding for supplies and personal protective equipment.

EARLY WARNING

Provided the serological evidence that people living at the wildlife-human interface in rural China are being exposed to these SARS-related coronaviruses – marking them as a clear and present danger, suggesting that limited spillover could be occurring.

EARLY DETECTION

Use of available and cost-effective consensus-based PCR protocols to broadly detect viruses for early detection of SARS-CoV-2 in several countries. Our network supported one another in interpretation of results and optimization of the assays for early detection of the first COVID-19 cases before a specific assay targeting the novel coronavirus was available.

PREDICT HIGHLIGHTS

The following highlights are available online alongside other digital stories and findings at p2.predict.global. For quick access to the digital stories, scan the QR code with your cell phone camera.



PREDICT scientists were the first to discover a new ebolavirus species in a host prior to detection in an infected human or sick animal.

The discovery of the Bombali virus in bats in Sierra Leone and the sequencing of the complete genome was officially published in the journal *Nature Microbiology* in August 2018. The PREDICT team sampled more than 6,000 animals in Sierra Leone and performed laboratory tests to look for both known and unknown ebolaviruses.



In the Southeast Asia region, the wildlife value chain has been identified as the source of multiple zoonotic disease outbreaks, including Severe Acute Respiratory Syndrome (SARS) in 2002 and more recently Coronavirus Disease 2019 (COVID-19), which is suspected to have emerged from a mixed animal market in Wuhan, China.

Recognizing the threat these markets pose to both conservation and health, PREDICT has been conducting surveillance and investigating risks of virus emergence in markets since 2009.



Collaborative studies by the Centers for Disease Control and Prevention, Njala University, USAID PREDICT, and the University of Makeni detected Marburg virus in fruit bats in Sierra Leone in 2018, marking the first time the deadly virus had been found in West Africa.

PREDICT scientists worked with Sierra Leone government colleagues to inform people across the country as fast as possible of the new health risk and remind people not to harm or come in contact with bats.

