VIET NAM UPDATE NO. 6
April - September, 2018

Photo 1: FAO international laboratory expert demonstrates sample collection procedure with Cao Bang Sub-Department of Animal Health veterinary officer at Ngoc Xuan market, Cao Bang, April 2017. *Photo credit: Pawin Padungtod/FAO Viet Nam*

Photo 2: PREDICT-2/Viet Nam staff collect bat feces and urine samples below artificial bat roosts erected on private land to attract insectivorous bats for bat guano production in Dong Thap Province, Viet Nam, June 2018. *Photo credit: WCS Viet Nam*

Photo 3: PREDICT-2/Viet Nam partners collect biological samples from humans with occupational risk for zoonotic disease transmission. *Photo credit: Tran Vu Phong/NIHE*

COORDINATED SURVEILLANCE FOR INFLUENZA AND OTHER VIRUSES WITH PANDEMIC POTENTIAL

PREDICT-2/Viet Nam has worked in close collaboration with the Secretariat Office of the One Health Partnership for Zoonoses, GDPM of MOH, DAH of MARD, FAO, and WHO, to improve coordination of surveillance efforts across the wildlife, livestock, and human health sectors for influenza and other viruses with pandemic potential in populations in Viet Nam. PREDICT-2/Viet Nam 's One Health approach to zoonotic disease surveillance was linked with national surveillance systems for Severe Acute Respiratory Illness (SARI) in people, and influenza surveillance in livestock, so that data can be analyzed jointly to inform disease risk assessments and support disease prevention strategies designed to disrupt the amplification and spread of important respiratory pathogens. This coordination of surveillance activities in Viet Nam is also known as Longitudinal Influenza Surveillance Network (LISN).

PROGRAMMATIC HIGHLIGHTS

PREDICT-2/Viet Nam has successfully completed biological sample collection activities in Viet Nam, meeting targets set for implementing concurrent One Health surveillance for priority zoonotic diseases and emerging viruses of pandemic potential in human and animal populations at high risk interfaces for zoonotic disease transmission. This work was carried out in partnership with key government agencies on the front lines of pandemic disease prevention and response including Departments of Animal Health (DAH) and Forestry Protection Departments of the Ministry of Agriculture and Rural Development (MARD), and the National Institute of Hygiene and Epidemiology and affiliated Preventive Medicine Centers of the General Department of Preventive Medicine (GDPM) of the Ministry of Health (MOH).

Data generated from the over 15,000 specimens collected by PREDICT-2/Viet Nam will inform strategies to prevent infectious disease emergence and respond to pandemic threats. More than 140 project partners were engaged in building capacity for novel virus detection and concurrent surveillance for zoonotic disease in human and animal populations in Viet Nam through PREDICT-2/Viet Nam. Specifically the skills training in wildlife disease surveillance has built core capacity within Viet Nam's human and animal health sector to investigate and characterize the disease risks associated with the unregulated and illegal trade in wildlife. By conducting training for novel virus detection in both national public health and animal health laboratories, PREDICT-2/Viet Nam has ensured that laboratory capacity is in place for joint investigations and a coordinated One Health response to emerging pathogens.

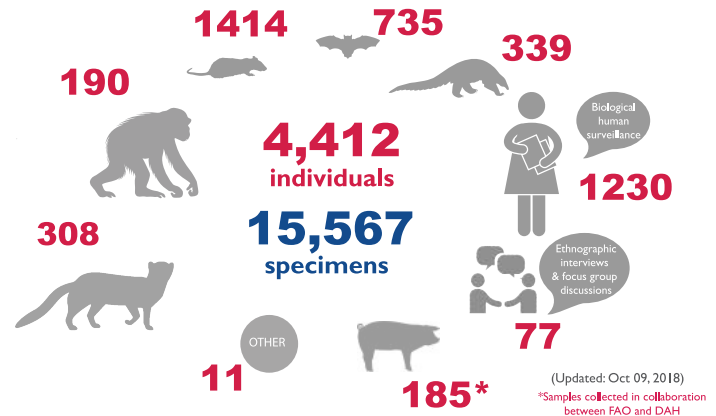**Figure 1. COORDINATED ONE HEALTH SURVEILLANCE "LISN"**

Human
Hospital SARI
PREDICT-2/Viet Nam
Hospital and Community Surveillance

Wildlife
PREDICT-2/Viet Nam
Wildlife Surveillance

Livestock
DAH/FAO
Influenza Surveillance

Photo 4: PREDICT-2/Viet Nam staff collect feces from porcupines on a wildlife farm in Dong Nai Province. *Photo credit: WCS Viet Nam*

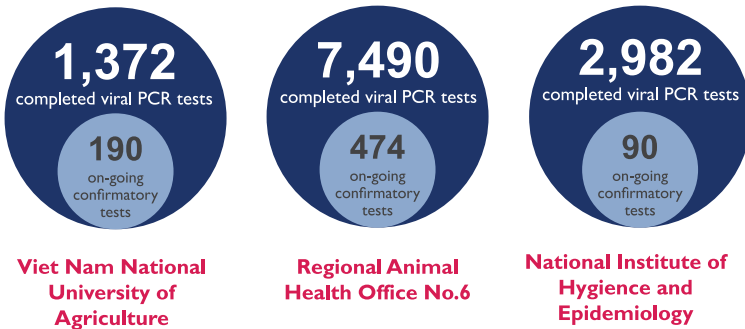# SURVEILLANCE AND FIELD ACTIVITES

One Health Surveillance collected samples:

1414   735

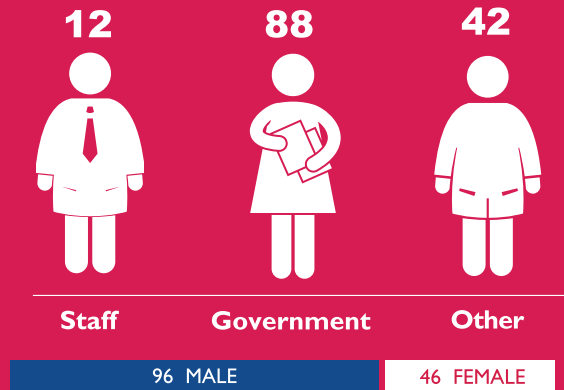190   339

4,412 **individuals**

Biological human surveillance

1230

308

15,567 **specimens**

Ethnographic interviews & focus group discussions

OTHER

11   185*   77

(Updated: Oct 09, 2018)
*Samples collected in collaboration between FAO and DAH

LAB DEVELOPMENT/TESTING

PREDICT-2/Viet Nam conducted tests at its key partner laboratories

1,372
completed viral PCR tests
190
on-going confirmatory tests

Viet Nam National University of Agriculture

7,490
completed viral PCR tests
474
on-going confirmatory tests

Regional Animal Health Office No.6

2,982
completed viral PCR tests
90
on-going confirmatory tests

National Institute of Hygiene and Epidemiology

Testing all target viral families: Paramyxovirus, Coronavirus, Influenza, Flavivirus and Filovirus

CAPACITY BUILDING

PREDICT-2/Viet Nam continued strengthening capacity with project partners and stakeholders

12   **88**   **42**

Staff   **Government**   **Other**

96 MALE   46 FEMALE

STAKEHOLDER ENGAGEMENT AND PARTNER COORDINATION

• May 4-18, 2018: PREDICT-2/Viet Nam participated and contributed to two One Health-focused technical workshops in May including the Viet Nam One Health Strategic Plan (OHSP)-M&E Technical Meeting II, and the 2nd One Health Research to Policy Workshop.

• May 30, 2018: PREDICT-2/Viet Nam participated in the Annual One Health Forum in Hanoi. The meeting was attended by representatives from government agencies and international organizations, including MARD, MOH, Agricultural Research for Development (CIRAD), Oxford University Clinical Research Unit (OUCRU), FAO, WHO, US CDC and WCS/PREDICT. During the event PREDICT contributed comments and ideas and shared relevant experience in support of One Health collaborative partnerships.

Photo 5: Participants at the Annual One Health Forum in Ha Noi, May 30, 2018.
Photo credit: Viet Nam One Health Partnership for Zoonoses

PREDICT PARTNERS IN VIET NAM

• Department of Animal Health (DAH), Ministry of Agriculture and Rural Development (MARD)
• National Institute of Hygiene and Epidemiology (NIHE), Ministry of Health (MoH)
• Viet Nam National University of Agriculture (VNUA)
• Regional Animal Health Office No. 6 (RAHO6)
• Ha Noi School of Public Health (HSPH)
• Viet Nam One Health University Network (VOHUN)

CONTACT INFORMATION

Amanda E. Fine, VMD, PhD
Wildlife Conservation Society (WCS)
Room 106, D Building, No.3, Thanh Cong Street
Ba Dinh District, Ha Noi, Viet Nam
Tel: +84 24 35149750
Email: afine@wcs.org