OVERVIEW

The overall goal of the influenza program in Indonesia is to establish a sustainable, comprehensive surveillance system that can identify and respond to seasonal, avian and pandemic influenza. The Centers for Disease Control and Prevention (CDC) funding has supported routine influenza surveillance, the National Influenza Center laboratory, and pandemic preparedness. In 2011, the Indonesia Ministry of Health (MoH), in collaboration with CDC and USAID, began piloting an enhanced surveillance project to better understand the burden of seasonal and avian influenza in the East Jakarta District. In addition to the ongoing influenza-like illness (ILI) surveillance, a national severe acute respiratory infection (SARI) surveillance system was established with CDC and Government of Indonesia (GOI) funding in 2013. Together these systems help identify circulating influenza viruses, and monitor severity and trends in several provinces in the country.

SURVEILLANCE

SIBI (Surveillance ISPA Berat Indonesia) surveillance was established in 2013, in six sentinel sites in six provinces. The system collects epidemiological data on SARI cases, including the proportion of cases with severe illness, pneumonia and death. Nasal and throat swabs are collected and tested for influenza viruses at the National Influenza Center (NIC) at the National Institute of Health Research and Development (NIHRD). In addition, the East Jakarta Project has provided information about the epidemiology and virology of influenza viruses circulating in an urban area of DKI Jakarta province.

SURVEILLANCE ACTIVITIES

SIBI Surveillance

- Conducted mid-year and annual meetings to review site performance, present surveillance findings, and develop a work plan.
- Conducted a two-day logistics management workshop for laboratory staff from the six sentinel sites in June 2014.
- Conducted two monitoring missions per year to each of the sentinel sites for technical supervision, troubleshooting, and coordination.

ILI Surveillance

- Reported ILI surveillance data routinely to the Global Influenza Surveillance Response System (GISRS) and uploaded it to the NIHRD website.
- Conducted two annual meetings to review surveillance performance, present surveillance findings, and develop a work plan.
- Updated the ILI surveillance guideline with the new WHO case definition and directions for collecting denominator data.

LABORATORY

CDC provides support for the NIC in several ways including providing the NIC with an External Quality Assessment (EQA) panel for real-time RT-PCR testing and technical assistance in the form of trainings and troubleshooting to improve provincial and regional laboratory capacity. Since 2008, approximately one year after the first avian influenza (AI) human case was detected, an AI laboratory network with 44 laboratories was established. Recently, the MOH decided to broaden the Network to encompass additional infectious diseases. This new Emerging Infectious Diseases (EID) laboratory network has 23 laboratories. An assessment of the laboratories is taking place to better understand the capacity of each.
LABORATORY ACTIVITIES

SIBI Surveillance
- Identified and tested 1,147 SARI cases, of which 13% were positive for an influenza virus.

East Jakarta Project
- Detected and tested 6,346 ILI cases, of which 30% were positive for an influenza virus.
- Detected and tested 3,989 SARI cases, of which 14% were positive for an influenza virus.

ILI Surveillance
- Detected 2,485 ILI cases, of which 489 (20%) were positive for an influenza virus. Of the influenza-positives, 305 (12.3%) were influenza A and 184 (7.4%) were influenza B (October 2013-September 2014).
- Commenced testing of SARI specimens at the regional laboratory in October 2013 and continued to participate in quality control and assurance activities.
- Certified biosafety cabinets at seven ILI regional laboratories.
- Developed an EID laboratory network.

PREPAREDNESS

CDC support has considerably advanced pandemic influenza preparedness and planning in Indonesia. The pandemic plan that was initially developed by MoH was adopted by the National Committee on Zoonotic Diseases and has become intersectoral.

PREPAREDNESS ACTIVITIES
- Conducted trainings and exercises on the pandemic influenza contingency plan in certain provinces and districts.
- Developed an adaptation of the influenza pandemic response plan for MERS-CoV and Ebola virus.
- Conducted pandemic influenza planning exercises with the port health authorities, intersectoral entities, the army, and commercial companies.

TRAINING

SIBI Surveillance
- Conducted refresher training on case detection for all sentinel sites during monitoring activities in April 2015.
- Conducted data management training.
- Conducted specimens collection training.
- Conducted logistics management training.

East Jakarta Project
- Conducted refresher training for regional laboratory staff on diagnostic protocols in October 2013.
- CDC facilitated a biosafety and biosecurity workshop conducted in the Balai Teknik Kesehatan Lingkungan (BTKL) by the US Biosecurity Engagement Program.
- Conducted refresher trainings for national ILI surveillance sentinel site staff (clinicians, nurses, regional laboratory staff, and medical records) to improve surveillance data quality.

ILI Surveillance
- Conducted refresher training for all sentinel sites in April 2015.

INFLUENZA VACCINE ACTIVITIES

CDC provided technical support for a study conducted by a private medical school in Jakarta on knowledge, attitudes, and practices of influenza vaccination among medical students.