DEMOCRATIC REPUBLIC OF CONGO (DRC)

HIGHLIGHTS
• Rehabilitated the National Influenza Laboratory which has become one of the best laboratories of the National Institute of Biomedical Research (INRB).
• Extended influenza sentinel surveillance to the northeastern part of the country.
• Began investigation on the estimation of the influenza burden of disease—the pilot survey is underway.
• Developed a database that includes virological and epidemiological data of all suspected cases of influenza as reported by sentinel site staff.

OVERVIEW
The U.S. Centers for Disease Control and Prevention (CDC) provides financial and technical assistance to the Ministry of Health (MOH) through the Kinshasa School of Public Health. An enhanced routine surveillance system currently collects information used to estimate the national influenza burden. At the beginning of 2014, the surveillance system expanded to two additional provinces in DRC.

SURVEILLANCE
In DRC, the Fourth Directorate of the MOH is the institution in charge of disease control. For influenza sentinel surveillance, this Directorate produces and disseminates standard weekly reports that include virological and epidemiological data, and organizes monthly meetings of the DRC Influenza National Technical Committee.

In 2006, DRC started influenza surveillance and it is currently carried out in 11 health facilities located in five out of 11 provinces in the country. Sentinel site staff report suspected influenza cases and when the criteria are met, take samples. The samples taken are sent to the National Institute of Biomedical Research (INRB) within 48 hours. Sentinel site staff are regularly trained and supervised. Supervisory visits are conducted monthly at sentinel sites in Kinshasa and quarterly for those sites located in the provinces.

SURVEILLANCE ACTIVITIES
• Reported 10,495 suspect cases of influenza. Among them, 3,039 (29%) were hospitalized for severe acute respiratory infection (SARI).
• Produced and disseminated 78 weekly reports on influenza surveillance by the Fourth Directorate of the MOH. Reports were also posted to FluNet.
• Conducted 18 supervisory visits at sentinel sites in Kinshasa and six in the provinces.
• Retrained 33 sentinel site staff on completing the notification form, sampling techniques, packaging, conservation and shipping, and reporting.

LABORATORY
The influenza national laboratory is part of the Virology Unit within INRB which is the National Public Health Laboratory. The capacities of this Level II laboratory have been strengthened especially in terms of laboratory equipment and laboratory staff training on RT-PCR technique and virus isolation. INRB analyzes specimens from suspect influenza cases using RT-PCR for typing and subtyping influenza viruses A and B.
Weekly reports on virological findings are produced and disseminated to all stakeholders including sentinel site staff, RDC/MOH, CDC, and WHO. Positive specimens are shared with the WHO Collaborating Center (WHO CC) in Atlanta and thus contribute to the selection of new influenza vaccine strains.

**LABORATORY ACTIVITIES**

- Identified 340 samples positive for influenza viruses (8.7% positivity rate): 12 (3.5%) were influenza A (H1N1)pdm09 virus, 169 (49.7%) were influenza A (H3N2), 35 (10.3%) were not able to be subtyped and 124 (36.5%) were influenza B.
- Provided 32 influenza A viruses that were not able to be subtyped to the WHO CC in Atlanta.
- Participated in WHO’s External Quality Assessment Project (EQAP) for detection of influenza viruses by RT-PCR and in CDC’s Influenza Molecular Diagnostic Performance Evaluation.

**PREPAREDNESS**

Support received through this cooperative agreement helped improve DRC’s capacity to rapidly detect and respond to influenza outbreak threats and outbreaks from other causes. Influenza surveillance project staff participated in the management of various epidemics that have occurred throughout the country. Furthermore, they are members of an alliance of health professionals, at all levels of the health pyramid, on disease surveillance and response.

**PREPAREDNESS ACTIVITIES**

- Participated in the management of the Ebola virus outbreak in Boende (northwestern part of DRC) in December 2014 and in Conakry, Guinea in March 2015.
- Trained staff in the health zones/health districts of Haut-Uélé and Bas-Uélé in disease surveillance and response, November 2013.
- Conducted a train-the-trainer session on Ebola virus disease surveillance in Kinshasa, October 2014.
- Participated in an international meeting to exchange experiences on the fight against Ebola in Côte d’Ivoire, March 2015.

**TRAINING**

- Attended the ANISE Meetings in Cape Town, South Africa in 2013 and 2014.
- Participated in the Influenza Disease Burden Workshop on 4 December 2014 in Cape Town, South Africa.
- Participated in the CDC/APHL International Advanced Influenza Real-time RT-PCR Workshop 26–30 January 2015 in Antananarivo, Madagascar.

**INFLuenza VACCINE ACTIVITIES**

DRC has not yet implemented influenza vaccine activities. However, activities are being planned for the future.