Zambia

Overview
The overall goal of Zambia’s influenza program is to strengthen influenza surveillance and the surveillance of other communicable diseases by bolstering the public sector laboratory and surveillance capacity for influenza-like illness (ILI) and severe acute respiratory infection (SARI). The cooperative agreement was implemented by the University Teaching Hospital (UTH) and the Lusaka District Health Office on behalf of the Ministry of Health (MOH) and in close collaboration with CDC-Zambia, CDC-South Africa, and the National Institutes for Communicable Diseases (NICD, South Africa), and the World Health Organization (WHO). The cooperative agreement enables Zambia to strengthen its developing surveillance system and the surveillance of emerging pandemic viruses. Currently, Zambia has four influenza-like illness (ILI) sites and four severe acute respiratory infection (SARI) surveillance sites in Lusaka and Ndola.

Highlights
- Established additional surveillance and testing sites in the Copperbelt Province — two SARI sites and two ILL sites.
- Conducted refresher trainings for surveillance officers in the clinics and a refresher training for laboratory personnel.
- Started reporting influenza isolates on FluNet.
- Identified suspect H1N1 09 from Mumbwa and Serenje districts in the Central Province and sent samples to NICD who confirmed our results.

Surveillance
Zambia has a surveillance system which is supported by MOH. During the outbreak of H1N1 09 in the Serenje and Mumbwa districts, the local ministry of health team gave regular updates to the public on prevention and spread of influenza. During this period, experts from CDC and NICD visited Zambia to strengthen the influenza surveillance activities.

Local teams also made supervisory visits to the newly opened sites in Ndola. Currently, the Ndola site submits data to the reference laboratory at UTH which is shared on FluNet.

Surveillance Activities
- Conducted supervisory visits (experts from NICD) to Lusaka as well as the newly opened influenza sentinel sites in the Copperbelt Province.
- Provided regular updates and health tips to the public during the outbreak of H1N1 09 in Serenje and Mumbai districts.
- Conducted supervisory visits to other influenza sentinel sites in the Copperbelt Province.
Laboratory

The Zambia influenza surveillance program has for the first time managed to commission another influenza testing site. The scientists at the new laboratory were trained by experienced staff from NICD and then by the local influenza team on typing, subtyping and real-time PCR techniques. Notable progress in laboratory surveillance capacity has been achieved over the past four years. Our influenza surveillance network now includes eight sentinel sites which are comprised of four SARI and four ILI sites. In addition, Zambia now has two laboratories in Lusaka and Ndola. Notable progress is being made towards becoming a NIC. The program is now able to send data on influenza isolates to FluNet. Furthermore, training has been organized on virus isolation techniques to enhance the process of becoming a NIC.

Laboratory Activities

- Prepared and sent influenza isolates to WHO Collaborating Center in the United Kingdom.
- Tested a total of 1,030 influenza specimens (980 from sentinel hospitals; 50 from 2009 H1N1 outbreak sites).
- Conducted two supervisory visits and provided logistical support to laboratories within the network.
- Submitted a total of 35 samples to NICD as part of the Quality Assurance Program.
- Participated in the WHO EQAP and scored a 100%.
- Completed testing of influenza negative results for other respiratory viruses.

Preparedness Activities

- The Ministry of Health held four quarterly surveillance trainings that brought together surveillance officers from all 10 provinces.
- The Ministry of Health adapted the WHO Integrated Disease Surveillance and Response Manual as the national standard for disease surveillance, which includes influenza surveillance.
- The Ministry of Health held provincial surveillance trainings in IDSR that included outbreak investigations. These trainings were conducted in all 10 provinces and brought together surveillance officers from all districts in the each province.

Training

The Zambia influenza team continues to provide technical assistance and training to ensure the functioning of the sentinel surveillance system, quality of the surveillance data, prompt data analysis, and integration of the information into preparedness and response activities. The following trainings were organized in Zambia.

- Trained influenza sentinel surveillance officers on specimen collection, safety, packaging and handling.
- Conducted training for typing, subtyping and RT PCR techniques for four laboratory staff from Ndola.

The Zambian Influenza Surveillance Team: Hope Nkamba, Costa Malama, Paul Simusika (back) and Idah Ndumba, Mwaka Monze, Mazyanga Liwewe (front).