

# MOZAMBIQUE



A group photo of health facility staff during the Influenza Workshop, September 2014.

## OVERVIEW

In 2009, the National Institute of Health (INS) began working toward the establishment of the sentinel surveillance system for influenza and other acute respiratory illnesses (ARI) in order to build up the national capacity for early detection and rapid response to threats posed by these pathogens. The U.S. Centers for Disease Control and Prevention (CDC) cooperative agreement awarded in 2013 supports the INS objectives and has accelerated the implementation and strengthening of influenza surveillance in Mozambique, it has also supported capacity building, enhancing the level of preparedness and response of the country.

## SURVEILLANCE

Between 2009 and 2010, the World Health Organization (WHO) and CDC supported the creation of national capacity for influenza surveillance and laboratory diagnosis. In 2013, the system identified an influenza virus in an outbreak in Maputo City. In 2013, influenza surveillance in sentinel sites was initiated. Three sentinel hospitals in Maputo City were selected for influenza-like illness (ILI) and severe acute respiratory infection (SARI) surveillance, with a focus on diagnosing influenza. In 2014, the system was reviewed and the INS was advised to strengthen the system in these sentinel sites before expanding to other sites and to focus on activities related to SARI surveillance. Currently, the recruitment of dedicated

## HIGHLIGHTS

- Enhanced the quality of epidemiological and virological data collection and continuous data sharing with both local and global influenza surveillance networks.
- Strengthened the national response to influenza outbreaks.
- Established and strengthened the routine surveillance system based on sentinel sites.
- Generated consistent data related to influenza seasonality and epidemiology.

staff has improved the data and sample collection, laboratory testing, and weekly reporting to WHO from these sites.

## SURVEILLANCE ACTIVITIES

- Conducted two assessments and supervisory visits to the INS laboratory and influenza sentinel sites in collaboration with CDC and the Association of Public Health Laboratories (APHL).
- Updated the influenza sentinel surveillance strategies and tools following WHO requirements and CDC recommendations, significantly increasing data quality and sample collection.
- Developed an Access database incorporating currently defined data elements.
- Discussed and shared yearly and monthly data analysis outputs with national doctors and other interested persons.

## LABORATORY

The INS Laboratory works closely with CDC, WHO, and the National Institute for Communicable Diseases (NICD) in South Africa to strengthen laboratory analysis activities.

INS laboratorians have trained extensively with WHO and NICD scientists on influenza virus typing, subtyping, single and multiplex real-time RT-PCR, virus isolation, cell culture and specimen shipment. There has been notable progress in laboratory capacity to respond to the current demand. The quality of the data reported to GISRS has also improved.

## LABORATORY ACTIVITIES

- Tested 725 specimens; 60 (8.3%) were positive for an influenza virus (about 55 were from sentinel hospitals).
- Standardized cell culture and virus isolation techniques.
- Trained three laboratory staff on laboratory techniques (real time multiplex RT-PCR for respiratory viruses, MDCK cell culture and influenza diagnosis by real-time singleplex RT-PCR) in South Africa and Madagascar.
- Trained a laboratory staff member on IATA Shipping Guidelines for Infectious Substances in Congo-Brazzaville.
- Achieved a high score on WHO's EQAP panel in 2013.

## PREPAREDNESS

CDC support through WHO has advanced pandemic influenza preparedness and planning considerably in Mozambique. The National Committee for Disaster Management (INGC), together with partnering ministries, has continued to work on a national pandemic plan while the Ministry of Health (MOH) and WHO have led the development of a health sector response plan. Annually, refresher trainings are organized for public health staff (medical directors, focal points, and surveillance and laboratory technicians from sentinel sites) in the provincial sentinel sites. Every month the INS organizes a surveillance technical meeting to monitor data and trends in sentinel surveillance-based activities.

### PREPAREDNESS ACTIVITIES

- Conducted regional pandemic trainings in the Southern, Central, and Northern provinces to adapt and update local and national preparedness plans for influenza and other acute respiratory illness outbreaks.
- Established focal points at all national and provincial levels in accordance with the MOH national plan for disease surveillance.
- Provided epidemiological data tools and sample collection kits in all provinces.



Mr. Almiro Tivane providing lectures during the Influenza Workshop in September 2014.

## TRAINING

INS continues to provide technical assistance and re-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.

- Identified two INS staff (Project Coordinator and Financial Project Coordinator) to attend the Grants Management Training in Madagascar.
- Identified six INS laboratory staff to attend training on laboratory techniques in cell culture, RT-PCR, virus isolation for influenza and other respiratory viruses and specimen shipment in South Africa, Madagascar, Japan and Congo-Brazzaville.
- Conducted seven trainings and/or workshops for 67 health staff involved in sentinel surveillance work in all sites.
- Conducted two trainings for 60 provincial health staff on influenza outbreak preparedness.
- Participated in WHO influenza surveillance and influenza burden of disease meetings in South Africa.
- Participated in timely outbreak reporting in the U.S.

## INFLUENZA VACCINE ACTIVITIES

No vaccine activity occurred. Influenza vaccine is not part of the Immunization Program.