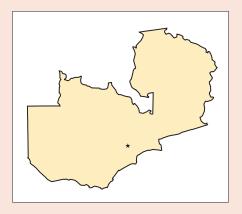
Zambia



- Capital: Lusaka
- **Area:** 752,618 sq km
- **Population:** 14,309,466 (July 2012 est.)
- **Age Structure:** 0-14 years: 46.7% (male 3,253,125/female 3,228,844); 15-64 years: 50.8% (male 3,544,640/female 3,508,344); 65 years and over: 2.5% (male 148,531/female 197,852) (2011 est.)
- **Life Expectancy at Birth:** Total population: 52.57 years; male: 51.35 years; female: 53.83 years (2012 est.)



- Infant Mortality Rate: Total: 64.61 deaths/1,000 live births; male: 69.26 deaths/1,000 live births; female: 59.82 deaths/1,000 live births (2012 est.)
- Literacy Rate: Total population: 80.6%; male: 86.8%; female: 74.8% (2003 est.)
- **GDP:** \$21.93 billion (2011 est.)
- **GDP** per Capita: \$1,600 (2011 est.)

Highlights

- The U.S. Centers for Disease Control and Prevention (CDC)-donated QIAcube extractor was commissioned at the virology laboratory.
- The Zambia Ministry of Health (MOH) is preparing to designate surveillance nurses to collect data on SARI, in order to keep influenza patients separate from other patients in the University Teaching Hospital (UTH) pediatric ward.

U.S. CDC Direct Country Support

CDC has a four-year (2009–2013) cooperative agreement with the MOH. This cooperative agreement is helping to strengthen influenza surveillance and the surveillance of other communicable diseases in Zambia 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 UTH and the Lusaka District Health office on behalf of the 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).

Surveillance

Before the cooperative agreement, Zambia had a developing influenza surveillance system. The cooperative agreement enabled Zambia to strengthen its developing surveillance system, and surveillance of emerging pandemic viruses. Currently, Zambia has two ILI sites and two SARI surveillance sites, all in Lusaka.

Surveillance Activities

- Three staff members presented posters at the International Conference on Emerging Infectious Diseases (ICEID) in Atlanta, Georgia.
- A nurse and clinical officer in Ndola received additional training on the use of a new data collection tool.

Laboratory

Since the induction of the cooperative agreement, the virology laboratory has been strengthened through training of laboratory scientists and the provision of reagent and consumables. It now functions as the country's reference laboratory and is on its way to becoming an accredited National Influenza Center (NIC).

Laboratory Activities

- A draft influenza manuscript was submitted to the *Journal of Infectious Diseases*.
- A WHO consultant visited the virology laboratory and surveillance sites and provided ways to strengthen epidemiological data management.
- The virology laboratory, with the support of CDC, has started screening influenza-negative specimens for other respiratory viruses.

Preparedness

The MOH conducts Integrated Disease Surveillance and Response (IDSR) for communicable diseases and is moving toward integrating influenza. This mechanism serves as an early warning system for the detection of outbreaks.

Preparedness Activities

• Developed a national action plan for preparedness and response to influenza threats.

Training

The MOH hosted the following training activities in 2011:

- Rapid response team trainings in high-risk provincial and district areas.
- Additional pandemic preparedness and response training, in conjunction with CDC.



 ${\it Training course for sentinel surveillance staff hosted by Zambia's Ministry of Health.}$

Contacts

Peter Mwaba, MBChB, PhD Principal Investigator Ministry of Health Lusaka, Zambia Email: pbmwaba2000@yahoo.com

Mwaka Monze, MBChB, PhD Principal Investigator & Unit Head, Virology University Teaching Hospital Lusaka, Zambia Email: mwakamo@coppernet.zm

Andros Theo, PhD University Teaching Hospital Nationalist Road Lusaka, Zambia Email: masoziuk@gmail.com