# **CDC** in Belize





The Centers for Disease Control and Prevention (CDC) has been

collaborating with public health institutions in Central America since the 1960s. Through these alliances, CDC has been able to address priority public health burdens in Belize and throughout the Central American region, CDC programs working in Belize include the Global HIV/AIDS Program, International Influenza Program, International Emerging Infectious Program and the Field Epidemiology Training.

CDC office (physical presence) **0** U.S. Assignees O Locally Employed

### At a Glance

Population: 317,900 Per capita income: \$5,990 Life expectancy at birth women/men: 76/72 yrs Infant mortality rate: 17/1000 live births

Source: Population Reference Bureau Fact Sheet, 2011

## Top 10 Causes of Death

- 1. Cancer 15%
- 2. Ischemic Heart Disease 12%
- 3. HIV 11%
- 4. Stroke 7%
- 5. Diabetes 7%
- 6. Lower Respiratory Infections 5%
- 7. Road Injuries 4%
- 8. Interpersonal Violence 3%
- 9. Chronic Kidney Disease 3% 10. Cirrhosis 2%

Source: GBD Compare (http://viz.healthmetricsandevaluation.org/gbd -compare/), 2010

### **Global HIV/AIDS Program**

CDC supported Belize in 2013 to conduct an HIV National Survey and is presently assisting the National AIDS Program to finalizing the report (HIV Behavioral Surveillance Survey). In FY14, CDC will conduct a national HIV surveillance system evaluation to identify gaps and recommend actions to facilitate strategic planning using accurate and timely surveillance data. CDC will also provide capacity building workshops for data analysis using STATA software and use of assay-based incidence estimation tools to estimate HIV incidence.

#### Influenza Preparedness, Detection and Response

CDC International Influenza Program supports the process of the implementation of the International Health Regulations and the national laboratories surveillance networks for influenza. The Influenza Program is also enhancing the capabilities for diagnosis of influenza based on immunofluorescence in the National Reference Laboratory, and the implementation of PAHO's Operational Guidelines for National Intensified Surveillance of Severe Acute Respiratory Infection. The Crisis Leadership Workshop led to the formation of the Commission to support the Preparedness Response Capacity of the Ministry of Health in collaboration with the Department of Epidemiology of the University of Miami.

#### Field Epidemiology Training Program

The FETP of Belize is the newest in the region. It is coordinated at the Department of Epidemiology of the Ministry of Health, and is being implemented at a basic level of a three-tiered, pyramidal training model. Two cohorts of nine students each have graduated from the basic level training. They have conducted surveillance analyses on diverse topics including Domestic Violence, Childhood Mortality, Diabetes, Dengue, Road Traffic Accidents, Food Borne Diseases, Teen Pregnancy, and Acute Respiratory Infections.



#### **International Emerging Infectious Program (IEIP)**

The IEIP is assisting the Ministry of Health and the Karl Heusner Memorial Hospital to address Hospital Acquired Infections through strengthening of hospital epidemiology and laboratory capacity.

#### **The Laboratory Systems Program**

PulseNet is a laboratory network that connects foodborne illness cases together to detect and define outbreaks using DNA "fingerprinting" of the bacteria making people sick. Belize is currently an observer within the PulseNet Latin America & Caribbean Regional Network.

CDC is supporting Belize to develop the necessary training and partnerships within the network for such investigations. The Laboratory Systems Program is collaborating with PAHO and PulseNet in this process. The Laboratory Systems Program of the Global Disease Detection Center (GDD) at CDC/CAR is also working with CDC's Dengue subject matter experts to establish the capacity to detect and identify dengue outbreaks and strengthen the overall detection capacity.

# Improving Preparedness and response in Central America (IEPT)

The Central American region is struck with countless natural disasters, and civil unrest emergencies. Due to the annual occurrence of disasters, the International Emergency Preparedness Program (IEPT) of CDC, in collaboration with CDC/CAR and the Central American Ministers of Health Committee (COMISCA) has developed an emergency preparedness and response assessment tool aligned with the International Health Regulations (IHR) to identify Central American Region Emergency Preparedness and Response capabilities and be able to enhance such efforts through focused technical assistance and support.

# **Impact in Belize**

- 8 senior health professionals have been trained to tutor on the fundamentals of epidemiology, public health and biostatistics through the Influenza Preparedness Detection and Response program.
- As of 2011, a total of 18 students received basic-level training in field epidemiology through the Field Epidemiology Training Program (FETP) in the country.
- The first HIV Behavioral Surveillance Survey among men who have sex with men (MSM), female sex workers (FSW) and people living with HIV was conducted in the districts of Belize, Cayo, Orange Walk, and Stann Creek in 2012. A total of 219 FSW and 130 MSM were tested for HIV. Preliminary results highlight an HIV prevalence of 0.91% among FSW and 13.85% among MSM.
- 3 MOH staff trained in the use of HIV behavioral surveillance and population size estimation data to inform programs and develop policy at the national and local level.

#### Result of the Belize Assessment

Public Health Emergency Plan	58%	Logistics and operations processes	57%
Command and Control	78%	Medical coordination	50%
Communications Infrastructure	0%	Training, exercises and evaluation	0%
Public information and risk communications	63%	Surveillance System	89%

Less than 49%

from 50% to 74%

from 75% to 100%

For more information please contact Centers for Disease Control and Prevention:

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