# **CDC in Jordan**





Staff

CDC office (physical presence) **No** U.S. Assignees **No** Locally Employed

### At a Glance

Population: 6,318,400 Per capita income: \$5,730 Life expectancy at birth women/men: 74/72 yrs Infant mortality rate: 23/1000 live births

Source: Population Reference Bureau Fact Sheet, 2011

## Top 10 Causes of Death

- 1. Ischemic Heart Disease 18%
- 2. Cancer 15%
- 3. Stroke 12%
- 4. Diabetes 7%
- 5. Congenital Abnormalities
- 6. Chronic Kidney Disease
- 7. Road Injuries 4%
- 8. Lower-Respiratory Infection 3%
- Pre-Term Birth Complications 2%
- 10. Chronic Obstructive Pulmonary Disease 2%

Source: GBD Compare (http://v iz.healthmetricsandev aluation.org/gbd-compare/), 2010

The Center for Global Health and Prevention (CDC) has been working in Jordan since November 1998. CDC works with the Jordan Ministry of Health (MoH) to build human workforce capacity and to improve the use of data at all levels of the MoH. CDC also provides ongoing technical assistance for systems strengthening and for development of surveillance for a variety of health risk areas, including infectious diseases, mortality, and risk factors for chronic diseases, particularly those related to cardiovascular diseases, diabetes, and stroke.

#### **Health Systems Strengthening**

Jordan's Field Epidemiology Training Program (FETP) prepares field epidemiology residents for leadership positions in various levels of the Jordan MoH to help prevent and control disease. Since its beginning in 2001, 42 individuals have graduated from this 2-year competency-based program in applied epidemiology which involves 25% classroom instruction and 75% field assignments. FETP Jordan plays a major role in providing training and support to neighboring countries. Residents have included medical epidemiologists from the Palestinian territories, Iraq, Yemen, and Syria. Several of those graduates now lead FETPs in their countries. CDC works closely with the East Mediterranean Public Health Network, based in Jordan and established in 2010 to link FETPs in the region and to strengthen collaboration though scientific exchange and joint projects. The Jordan FETP was initiated with financial support from USAID; currently the MoH fully sustains the program.

#### **Mortality Reporting System**

The early work of FETP residents analyzing mortality data and collaboration with many partners led to the design and implementation of a new mortality reporting system. The MoH, with CDC support, worked with Jordan's parliament to change the death reporting law, designed new mortality forms in compliance with international standards, and trained relevant staff on the forms and appropriate coding techniques. The new system began collecting and analyzing data in 2003 and determined the three leading causes of death to be is chemic health disease, malignant neoplasms, and cerebrovascular diseases. The reporting system is fully sustained by the MoH and is led by an FETP graduate.





#### **Noncommunicable Diseases**

CDC's FETP program paved the way toward establishing a Behavioral Risk Factor Surveillance System (BRFSS) in Jordan, the first Middle Eastern country to implement this system, which focuses on noncommunicable diseases (NCDs). Three BRFSS surveys, conducted in 2002, 2004, and 2007, covered topics on hypertension, diabetes, cholesterol, obesity, smoking, physical activity, oral health, injuries, nutrition, and women's health. FETP residents led the BRFSS teams, analyzed the data, and provided recommendations to the MoH. Major results of the surveys were published in peer-reviewed literature. In November 2011, a subnational BRFSS was conducted in two governorates of Jordan to establish a base line for a MoH physical activities project. This pilot project in the Aljoun Directorate will test the feasibility and effectiveness of linking community physical activity and nutrition programs with primary care providers offering standardized lifestyle counseling for the prevention of NCDs. CDC is working with the Jordan FETP to implement an NCD track, in which two current residents are participating. The objectives of the program are to advance CDC's global public health agenda to respond to the high burden of death and sickness in Jordan due to NCDs.

# **Impact in Jordan**

- Mortality reporting system is established and ongoing.
- Behavioral Risk Factor
   Surveillance System focusing
   on noncommunicable
   diseases is established and
   supported by the MoH.
- FETP is an established regional training program which produces graduates that assume public health leadership positions throughout the region.

#### **Emerging Infections**

CDC's Global Disease Detection International Emerging Infections Program (GDD/IEIP) based in Egypt has provided technical support and financial assistance to the Jordan MoH since 2008 to help establish a coordinated and connected system to detect and respond to emerging, and re-emerging, infectious diseases. The program supported surveillance for severe acute respiratory illness (SARI). The MoH is integrating the SARI surveillance protocol into its national surveillance program and was one of the first countries to join the Naval Medical Research Unit No. 3 (NAMRU-3) SARI Regional Network based in Egypt. GDD/IEIP also collaborates with the MoH on hospital acquired infections and surgical site infections, investigating factors that contribute to patient sickness and death and depletion of healthcare resources.

#### **Micronutrient Fortification**

CDC assists Jordan's MoH to eliminate vitamin and mineral deficiencies (micronutrient malnutrition) among vulnerable populations through two national micronutrient fortification programs: a National Salt Iodization Program initiated in 1995 and a Wheat Flour Fortification Program in 2002. A micronutrient status survey was conducted in 2002. Jordan received assistance from Global Alliance for Improved Nutrition to conduct a follow-up survey to measure the impact of the Wheat Flour Fortification Program in 2008. CDC assisted the partners in the development of the survey protocol, training, and quality control of data collection. In spring 2010 data collection was completed and a report was released in 2011.

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

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