

## U.S. GOVERNMENT SUPPORT TO COMBAT AVIAN AND PANDEMIC INFLUENZA

The Middle East's first outbreak of the highly pathogenic avian influenza (HPAI) H5N1 avian influenza virus in birds occurred in January 2006 in northern Iraq. The disease has since appeared in Egypt, Iran, Israel, Jordan, Kuwait, Saudi Arabia and West Bank/Gaza. As of November 2007, 38 cases of the disease in humans, fifteen of them fatal, had been reported in Egypt, and three in Iraq, with two fatalities. Millions of birds have died or have been culled, causing social and economic disruption for business, farmers, and consumers in the region.

The United States combats HPAI H5N1 in Middle Eastern nations by working with governments and regional entities, and with international organizations such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO) and the World Organization for Animal Health (OIE). Through the International Partnership on Avian and Pandemic Influenza, the United States works to elevate the issue on national agendas – and to coordinate efforts between affected nations in the Middle East and donors around the world.

To assist the Middle East in responding to avian influenza outbreaks and preparing for a possible human pandemic, the United States is supporting Middle Eastern efforts through bilateral and regional programs. The United States provides assistance to Egypt, Iraq, Jordan, Libya, Morocco, West Bank/Gaza, Saudi Arabia, Tunisia, and Yemen.

The U.S. Agency for International Development (USAID), the U.S. Department of Agriculture (USDA), the U.S. Department of Health and Human Services (HHS) – including the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) – and the U.S. Department of State (DOS) focus on strengthening preparedness and response planning, building Middle Eastern capacity in human and animal health, strengthening laboratory diagnostics, increasing public awareness and information, and enhancing disease surveillance and detection. The U.S. Department of Defense (DOD) provides medical technical assistance and has purchased personal protective equipment (PPE) for combatant command use in military-to-military and international humanitarian assistance globally; and USAID has deployed non-pharmaceutical commodities, including PPE, laboratory investigation kits, and decontamination kits throughout the region for use in outbreak surveillance and response efforts.

As of June 2007, the United States allocated \$3.95 million (including \$1 million for Libya) to bilateral and regional efforts. In that year:

- Nearly 53 percent of the \$13.5 million science budget of the U.S. Naval Medical Research Unit laboratory (NAMRU-3)

in Cairo was for seasonal and avian and pandemic influenza related activities. Approximately \$350,000 has been expended for Egypt directly. Funding for NAMRU-3 is provided by HHS/CDC and DOD/GEIS. NAMRU-3 also serves as a World Health Organization (WHO) reference laboratory.

- HHS/CDC committed \$2.5 million to the Eastern Mediterranean Regional Office (EMRO) of the WHO for regional influenza efforts. In addition, HHS/CDC has assigned a physician epidemiologist to the EMRO office in Cairo who works on immunizations and infectious diseases in the EMRO region.
- HHS/CDC committed \$4.3 million in avian and pandemic influenza funding towards the development of a Global Disease Detection Center in Cairo, in collaboration with the Egyptian Ministry of Health and Population and NAMRU-3. A major focus of this center is improving detection and response capacity for pandemic influenza and other emerging infectious disease threats.

### PREPAREDNESS AND COMMUNICATION

U.S. assistance efforts to the Middle East for preparedness and communication include:

- Assigning experts to and providing technical assistance to the Middle East bilaterally and through FAO and other international partners, and providing critical technical and financial support to strengthen national pandemic preparedness and response plans in Egypt (HHS, USAID);
- Holding an epidemiology workshop in Cairo for 30 participants from 22 countries in the region (USDA);
- Supporting regional coordination, technical exchange and strategy development through an HHS/CDC-sponsored workshop for new HHS avian influenza grantees in the region held January 21-24, 2007, in Nairobi (HHS);
- Carrying out risk communications activities in Egypt, West Bank/Gaza, and Jordan (USAID, HHS/CDC);
- Conducting risk communications training for epidemiologists, communications specialists and laboratory personnel (HHS/CDC);
- Providing a technical expert in epidemiology and infectious diseases and funding to WHO (HHS);
- Creating and distributing avian influenza posters and pamphlets, producing three TV spots, and conducting a survey of risk behaviors in Egypt, as well as producing one TV spot in Jordan to build awareness of basic information about avian influenza and prevention methods (USAID);

- Producing an Arabic version of the Public Broadcasting System’s documentary “Killer Flu” and purchasing rights for broadcast to 21 NEA countries (DOS);
- Briefing Egyptian journalists and a Ministry of Health official in the United States (DOS);
- Carrying an avian influenza page in Arabic with news articles and other materials on the website [www.usinfo.state.gov](http://www.usinfo.state.gov) (DOS); and
- Briefing public health specialists from Egypt, Iraq and Oman in the United States on infectious diseases, including pandemic influenza (DOS).

## **SURVEILLANCE AND DETECTION**

To assist the Middle East in building capacity for surveillance and detection, the United States is:

- Expanding regional health and medical surveillance and response capacity through pandemic preparedness grants to Libya and Iraq, and through training (HHS/CDC, DOD/NAMRU-3);
- Training joint laboratory and epidemiology teams from WHO/EMRO countries in laboratory and surveillance methods (HHS/CDC, DOD/NAMRU-3);
- Training and supporting training for officials, veterinarians, epidemiologists and laboratory diagnosticians from seven countries in the region (Algeria, Egypt, Iraq, Jordan, Lebanon, Morocco and Oman) (USDA, HHS/CDC, DOD/NAMRU-3);
- Assessing avian influenza animal surveillance/response in Egypt and providing training to veterinarians (USAID);
- Delivering rapid diagnostic testing kits (USDA, DOD/NAMRU-3);
- Strengthening avian influenza surveillance capacity at the central, governorate, and local levels in Egypt, including assistance to the Egyptian Ministries of Agriculture and Health to strengthen

early-warning systems for disease outbreaks, and enhancing disease surveillance efforts in Iraq and West Bank/Gaza;

- Providing both commodities for HPAI H5N1 diagnosis and lab kits to Jordan.

## **RESPONSE AND CONTAINMENT**

To help Middle Eastern nations respond to and contain avian and pandemic influenza outbreaks, the United States is taking the following actions:

- Expanding infection control capacity in the Middle East (HHS/CDC, DOD/NAMRU-3);
- Conducting integrated rapid response team training for epidemiologists, veterinarians, laboratory personnel, communications specialists and infection control specialists (HHS/CDC, DOD/NAMRU-3);
- Establishing and training rapid response teams at the central and governorate level in Egypt (USAID);
- Sending over 10,000 sets of personal protective equipment (PPE), such as suits, hoods, masks and gloves, as well as laboratory kits, to Egypt, Iraq, Jordan, Morocco, and West Bank/Gaza for investigating outbreaks, collecting and shipping samples, responding to outbreaks and providing training in PPE use and providing targeted technical logistical assistance to ensure availability and efficient access to these commodities (USAID);
- Supporting avian influenza community training in Egypt and Jordan (USAID); and
- Providing technical assistance as needed to strengthen avian influenza response containment efforts (HHS/CDC, USAID).

The U.S. Government’s official website on avian and pandemic influenza is [www.pandemicflu.gov](http://www.pandemicflu.gov).

**This region encompasses:** Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank/Gaza and Yemen.