South and Central Asia's first outbreak of the highly pathogenic avian influenza (HPAI) H5N1 virus occurred in wild fowl and poultry in Kazakhstan in July 2005. Other outbreaks of HPAI H5N1 in poultry began in early 2006 in Afghanistan, India and Pakistan. Tens of thousands of birds have died or become infected, causing social and economic disruption with implications for the food supply as well as the incomes of many individuals in the region. After initial precipitous drops, poultry consumption and poultry prices returned to previous levels. In February 2007, Pakistan and Afghanistan reported new outbreaks of HPAI H5N1 in poultry, and in spring 2007, reports of several outbreaks among poultry came from Bangladesh. The region has reported no cases of the disease in humans.

The United States combats HPAI H5N1 in South and Central Asian 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 South and Central Asia and donors around the world.

To assist South and Central Asia in responding to avian influenza outbreaks and preparing for possible human pandemic influenza, the United States is supporting bilateral and regional programs. In 2006, the United States contributed:

- $9.4 million to 11 regional nations; and
- $1.1 million for regional assistance programs.

The United States has provided funds for avian influenza assistance in Afghanistan, Bangladesh, India, Kazakhstan, the Kyrgyz Republic, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.

The activities of 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) – the U.S. Department of State (DOS) and the Broadcasting Board of Governors (BBG) have focused on strengthening preparedness and response planning, building South and Central Asian capacity in human and animal health, strengthening laboratory diagnostics, providing training to experts, increasing the level of public awareness and information, and enhancing disease surveillance and detection. The U.S. Department of Defense (DOD) also provides medical technical assistance and has purchased personal protective equipment (PPE) for combatant command use in military-to-military and international humanitarian assistance globally.

**PREPAREDNESS AND COMMUNICATION**

U.S. assistance efforts to South and Central Asia for preparedness and communication include:

- Supporting the development of preparedness plans for responding to avian and pandemic influenza in Afghanistan, Bangladesh, India, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan (USAID);
- Offering support for research and outbreak control efforts to India under a bilateral agreement on emerging and re-emerging infectious diseases, including avian influenza, with India's Health Ministry (HHS/CDC);
- Concluding a cooperative agreement with the Indian Council of Medical Research in New Delhi to enhance influenza surveillance and capacity building (HHS/CDC);
- Working with WHO's South-East Asia Regional Office (SEARO), under a cooperative agreement to build regional capacity for avian influenza detection and control (HHS/CDC);
- Distributing avian influenza materials to countries and non-governmental organizations in South and Central Asia to build awareness of basic information about avian influenza and prevention methods (USAID);
- Conducting a workshop on avian influenza in India and providing avian influenza training materials (HHS/CDC);
- Including participants from India in an educational project on infectious diseases (DOS);
- Carrying information on avian and pandemic influenza in Persian on www.usinfo.state.gov (DOS); and
- Providing information through broadcasting and web pages in Dari, Hindi, Pashto and Urdu (BBG/USAID), Persian and Uzbek (BBG) and other languages at www.voanews.com.

**SURVEILLANCE AND DETECTION**

To assist South and Central Asia in building capacity for surveillance and detection, the United States is:

- Providing real-time polymerase chain reaction (RT-PCR) testing equipment and technical assistance to Afghanistan's Ministry of Agriculture Veterinary Diagnostic Laboratory in Kabul (DOD/U.S. Naval Medical Research Unit 3 in Cairo);
Providing funding to FAO for tabletop simulations promoting regional pandemic preparedness in Central Asia (USAID);

Supporting regional coordination, technical exchange and strategy development for avian and pandemic influenza through WHO and FAO (USAID);

Developing and conducting training programs and workshops for rapid response and laboratory testing in India, Kazakhstan, the Kyrgyz Republic, Tajikistan and Uzbekistan (USAID);

Providing state-of-the-art diagnostic reagents to the Ministry of Health and Family Welfare for detection of HPAI H5N1 in India. These reagents were provided within weeks of final development of these tests at CDC (HHS/CDC);

Assisting India’s efforts to strengthen and develop laboratory capacity, including the use of RT-PCR techniques, at five regional centers (HHS/CDC);

Developing and enhancing surveillance for seasonal and avian influenza in India through establishment of a network (HHS/CDC);

Conducting workshops on animal surveillance, use of genetic databases and laboratory training (HHS/CDC);

Conducting technical assistance training in Kazakhstan for regional officials on developing surveillance systems for influenza and influenza-like illnesses (HHS/CDC);

Providing Pakistan, Tajikistan and Uzbekistan with laboratory equipment for quick diagnosis of avian influenza (USAID);

Providing training in the United States for experts from Afghanistan, Bangladesh, India, Nepal and Pakistan in avian influenza epidemiology, diagnostics and live bird markets (USDA);

Responding to follow-up requests from Sri Lanka and Bangladesh to hold USDA's National Veterinary Services Laboratories (NVSL) laboratory diagnostics training in those countries, subsequent to requests from participants who attended USDA-sponsored NVSL laboratory training courses held in Ames, Iowa, during 2006 (USDA); and

Training epidemiologists and laboratory scientists in Pakistan (27 in a short course and eight in the Field Epidemiology and Laboratory Training Program) in surveillance and outbreak detection and response, including for influenza and avian influenza (HHS/CDC).

RESPONSE AND CONTAINMENT

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

Strengthening human response capacity for avian and pandemic influenza in Afghanistan, India, Kazakhstan, Tajikistan and Uzbekistan (USAID);

Sending 14,500 PPE kits and nine lab kits to five countries (Afghanistan, Bangladesh, India, Nepal and Pakistan) for detecting and responding to avian influenza outbreaks, and supporting avian influenza community training in Afghanistan, Bangladesh, Nepal and Pakistan (USAID);

Educating trainers in Afghanistan, Bangladesh and Pakistan on proper use of PPE and lab kits (USAID);

Supporting training of Indian trainers for rapid response teams (RRTs) and pandemic influenza preparedness, including training of outbreak investigation professionals in 30 states (HHS/CDC);

Providing an RRT and response training to experts from Bangladesh, India and Nepal (HHS/CDC);

Providing technical assistance to India for avian influenza containment efforts (HHS/CDC); and

Providing technical experts to assist Bangladesh with its 2007 outbreaks (USDA, USAID)

The U.S. Government's official website on avian and pandemic influenza is www.pandemicflu.gov.

This region encompasses: Afghanistan, Bangladesh, Bhutan, India, Kazakhstan, Kyrgyz Republic, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.