



UNITED STATES INTERNATIONAL ENGAGEMENT ON AVIAN AND PANDEMIC INFLUENZA

The United States Government remains concerned about ongoing outbreaks of highly pathogenic avian influenza H5N1 in birds, and the potential for a global influenza pandemic in humans that could have major health, economic and social consequences. To date, the United States Government has allocated over \$6.9 billion in funding to address these threats domestically and internationally.

The United States is working with countries and international organizations to respond to this challenge. President Bush announced the International Partnership on Avian and Pandemic Influenza (IPAPI) during the United Nations General Assembly in September 2005. The goals of the International Partnership include:

- Elevating avian and pandemic influenza issues on national agendas;
- Coordinating efforts among donor and affected nations;
- Mobilizing and leveraging resources;
- Increasing transparency in disease reporting and improving surveillance;
- Building local capacity to identify, contain and respond to an influenza pandemic.

The International Partnership first met in Washington, D.C., in October 2005. Subsequent international conferences have taken place in Beijing, China (January 2006); Vienna, Austria (June 2006); Bamako, Mali (December 2006); and New Delhi, India (December 2007). The next major international conference will take place in Egypt in October 2008.

As of December 2007, the United States had pledged \$629 million to support international efforts in more than 100 nations, focused on three areas: preparedness and communication; surveillance and detection; and response and containment.

PREPAREDNESS AND COMMUNICATION

The United States is supporting preparedness efforts in more than 75 countries in collaboration with the United Nations' World Health Organization (WHO), the Food and Agriculture Organization (FAO), the World Organization for Animal Health (OIE), and other partners.

The U. S. Departments of State (DOS), Agriculture (USDA), Health and Human Services (HHS)—including the Centers for Disease Control and Prevention (HHS/CDC) and

the National Institutes of Health (HHS/NIH)—Homeland Security, the Interior (DOI), and Defense (DOD), the U.S. Agency for International Development, and the Food and Drug Administration contribute to U.S. international engagement. The U.S. has deployed scientists, veterinarians, public health experts, physicians and emergency rapid response teams.

Through the Security and Prosperity Partnership of North America, the United States, Canada and Mexico have developed and begun implementing a comprehensive North American Plan for Avian and Pandemic Influenza. The United States also works through the Global Health Security Initiative (GHSI) and international organizations such as the World Bank and regional forums, like the Asia Pacific Economic Cooperation (APEC).

The U.S is supporting activities in more than 50 countries to generate public awareness about avian influenza, and to promote behaviors that reduce the risk of disease transmission in birds and humans.

SURVEILLANCE AND DETECTION

United States support for the expansion of disease surveillance systems includes strengthening early warning networks in some 75 countries in order to improve laboratories and the procedures for handling samples and ensure faster confirmation of influenza viruses. HHS/CDC is also initiating efforts to enhance collaboration and strengthen human-animal interface activities for zoonotic diseases (for example, by placing veterinarians at OIE, FAO, and in key countries). The United States plays a major role in the WHO Global Influenza Surveillance Network.

Through the HHS/NIAID Influenza Genome Sequencing Project (IGSP), the U.S. contributes to the genome knowledge base used for vaccine development. Since 2004, HHS/NIH has made genome sequences of almost 3000 influenza isolates publicly available.

HHS and USAID have provided funds to strengthen WHO's Global Outbreak Alert and Response Network (GOARN), and have established a fund to ship specimens promptly to reference laboratories. HHS has supported Global Disease Detection (GDD) efforts in China, Egypt, Guatemala, Kenya and Thailand, and has provided one million dollars to

expand the Institut Pasteur's influenza work. These efforts are complemented by USDA's technical workshops on influenza surveillance in birds.

In coordination with USDA and the DOI U.S. Geological Survey, USAID and HHS/CDC launched the Global Avian Influenza Network for Surveillance for wild birds (GAINS) in 2006 to make information available for detection and containment and to track genetic changes in virus isolates. DOD has expanded its Global Emerging Infections Surveillance and Response System network to at least 60 countries, while expanding laboratory testing and training capabilities in South Asia, the Middle East, and Africa. Through its support of the U.S. Naval Medical Research Unit Number 3 (NAMRU-3) in Cairo, DOD-GEIS has provided epidemiologic and laboratory diagnostic training for ministries of health and agriculture of 27 countries. Capacity building and surveillance are underway in twenty countries in Africa, Central, Asia, Eastern Europe, and the Middle East. The United States, Canada and Mexico are coordinating wild bird surveillance in North America.

HHS/CDC is rapidly increasing the number of National Influenza Centers (NICs) in Africa, Central and South Asia, and the Caucasus. USDA has trained more than 490 veterinarians and diagnosticians from 96 affected and high-risk countries, and has deployed specialists and testing equipment and materials to strengthen diagnostic laboratory capacities. USAID has trained thousands of veterinary and human healthcare workers in surveillance and outbreak containment and has trained over 100,000 village health volunteers. Experienced CDC epidemiologists are permanently stationed in countries with human and animal cases to assist in developing surveillance systems, training local epidemiologists and public health responders, and creating or testing pandemic response plans.

RESPONSE AND CONTAINMENT

In cooperation with FAO and OIE, the U.S. is providing substantial assistance to respond to avian influenza in 39 of 61 affected countries. The U.S. Government has positioned antiviral medications in Asia for use at the beginning of a pandemic. U.S. experts have assisted WHO and ministries of health in investigating suspected human cases of H5N1, and are planning for a humanitarian response in the event of a pandemic.

With WHO and FAO, the United States is training thousands of policy and technical experts to contain animal outbreaks. USDA and USAID have helped strengthen and test national response plans. The U.S. has supported the training of more than 129,000 animal healthcare workers and 17,000 human healthcare workers in surveillance and response.

Since January 2006, USAID has deployed personal protective (PPE) and decontamination equipment to 78 countries for surveillance and response. This year, USAID launched a regional

commodities distribution site to support emergency requests throughout Southeast Asia. Since April 2007, DOD has shipped over 120,000 PPE kits to 23 countries.

USAID and USDA have provided expertise and funding for the Crisis Management Center-Animal Health (CMC-AH), an FAO-led collaboration with OIE and WHO to coordinate response to animal outbreaks worldwide. HHS/CDC has supported regional public health response training and rapid response teams. Through the CMC, USDA has deployed specialists on rapid response missions in Africa, South Asia, and the Arab world. USDA has trained volunteers from more than fifteen countries in epidemiology, biosecurity, surveillance and detection for CMC deployment, and has deployed experts to Africa and Southeast Asia to assist in biosecurity, laboratory diagnostics, and epidemiology. DOD is conducting military-to-military training and exercises, and is assisting other countries' militaries and ministries of health to develop military preparedness and response plans. DOD has provided rapid response training in the Middle East/North Africa, Southeast Asia, and Latin America, in coordination with the Combatant Commands and its laboratories in Cairo, Bangkok, Jakarta, and Lima. Additionally, DOD Overseas Humanitarian Assistance and Disaster and Civic Aid Funds have been requested in FY 2008 to support eight countries' militaries. Combatant Command plans include rapid response training for eight Asian nations and cooperation with experts from six Asian countries. Since 2005, NAMRU-3, a WHO H5N1 reference laboratory, has provided support for outbreaks in thirteen countries.

UNITED STATES PLEDGES

As of December 2007, international pledges of avian and pandemic influenza assistance totaled \$2.7 billion. The U.S. cumulative pledge of \$629 million was the largest of all 36 international donors. Of the U.S. pledge,

- \$223 million is allocated to bilateral activities;
- Over \$137 million supports regional programs, including disease-detection sites;
- \$95.5 million supports international organizations, including \$10 million for building production capacity to manufacture human influenza vaccines;
- Over \$66.5 million is devoted to stockpiles of non-pharmaceutical supplies;
- Almost \$73 million is allocated for international technical and humanitarian assistance and international coordination;
- Almost \$18.5 million is designated for surveillance of wild birds and international research (including vaccines and modeling of influenza outbreaks);
- More than \$15.5 million is dedicated to global communications and outreach.

Further information is available at www.pandemicflu.gov, www.state.gov/g/avianflu, www.usda.gov/birdflu, www.hhs.gov, www.cdc.gov and www.usaid.gov.