

# U.S. CDC and WHO Collaborations— Influenza

The HHS/CDC Influenza Division has maintained cooperative agreements with WHO Headquarters and the WHO Pan American Health Organization (PAHO) and Western Pacific Regional Offices (WPRO) for many years to address seasonal and pandemic influenza. In 2006, new cooperative agreements were put in place with the WHO South-East Asia Regional Office (SEARO), the Africa Regional Office (AFRO), the Eastern Mediterranean Regional Office (EMRO) and the European Regional Office (EURO). The main purpose of the cooperative agreements is to address global and regional preparedness for influenza—both seasonal and avian—through support to enhance the WHO Global Influenza Surveillance and Response System (GISRS), and technical support to countries' influenza prevention and control programs. This effectively increases the number of countries participating in the global system and more importantly enhances the early warning capacity and communications so there is a greater chance for early identification of a pandemic.

Recently, we have expanded our focus to also support efforts to increase influenza prevention through vaccination globally. Greater use of influenza vaccines will reduce the burden of influenza every year, but also provide a greatly expanded base of timely vaccine manufacturing to be used during pandemic influenza. Towards this goal, we have supported activities that will develop the evidence for use of vaccines globally and in partner countries. Activities include supporting partners to develop estimates of influenza-associated disease and cost burden, projects to understand the effectiveness of influenza vaccines in special populations relevant to policy expansion, and supporting countries' policy making bodies. Information about the project activities for the regional offices is integrated under the specific regions. CDC's Influenza Division provided funding and technical support to WHO Headquarters in 2011 for multiple projects related to influenza, outlined below.

## Activities supported through WHO

### ***Influenza Laboratory Surveillance***

- Strengthening of global influenza laboratory surveillance through improved diagnostic capacity and enhanced shipping capacity of influenza viruses/specimens to WHO Collaborating Centers (WHO CC).
- Strengthening global coordination and communication of GISRS by conducting a third National Influenza Center (NIC) survey and feeding results of the analysis into a NIC meeting with all regions.
- Supporting NICs to attend the WHO vaccine composition consultations in September and February to support this goal.

### ***Influenza Epidemiology and Surveillance***

- Strengthening influenza monitoring at the global level including development of automated analysis and visual presentation tools.
- Developing a pandemic assessment tool.
- Supporting developing countries in risk assessment and response.
- Supporting countries in the development of influenza surveillance systems and assessment of disease burden to inform vaccine and antiviral use decisions.

- Developing estimates of influenza deaths during seasonal epidemics and pandemics.
- Developing a tool for community-level risk assessment for H5N1 infection in collaboration with OIE (World Organisation for Animal Health) and FAO (Food and Agriculture Organization of the United Nations).

### ***Strengthening Influenza Pandemic Preparedness and Response Planning***

- Review of national pandemic assessment and development of lessons learned to revise pandemic preparedness guidelines.
- Review of:
  - measures and indicators of severity during a pandemic.
  - the concept of pandemic phases for decision-making.
- Assessment of effectiveness of school closure in different settings.
- Maintenance and improvements to the digital library.

### ***Public Health Leadership and Global Coordination***

- Provision of technical guidance and support to member states for—
  - development of coordinated pandemic preparedness initiatives.
  - developing future strategies aligned with WHO Headquarters and regional office guidance for global pandemic preparedness with a view toward long-term public health capacity for vulnerable populations.
- Dissemination of guidance:
  - to minimize social and economic disruption.
  - to other United Nations agencies and programs.

### ***Seasonal Influenza Vaccine Introduction***

- Collection and dissemination of information on influenza vaccine availability and utilization.
- Assurance of quality and safety of influenza vaccines by visiting manufacturing sites and technical reviews of production procedures.
- Support for influenza vaccination policy through the development of mathematical models to estimate potential public health impact of various vaccine introduction strategies and potential impact of vaccine introduction on mortality among children younger than 5 years old.
- Capacity development and facilitation of influenza vaccine policy in WHO regions.
- Support of WHO's Strategic Advisory Group of Experts to update global vaccine recommendations.
- Support of WHO's Global Action Plan for Influenza Vaccines to expand the availability of influenza vaccines globally.