

# Influenza Reagent Resource (IRR)

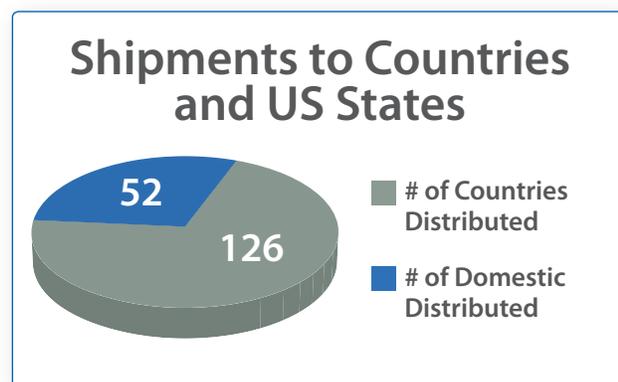
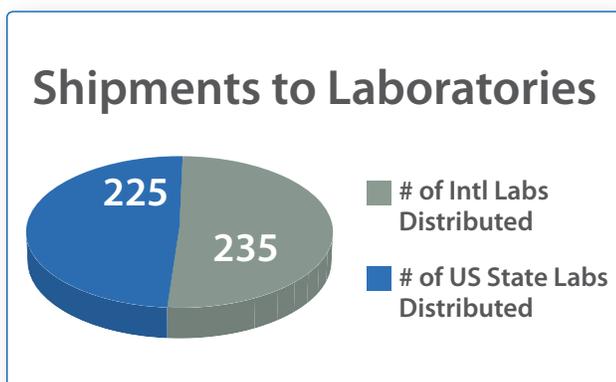
The Influenza Reagent Resource (IRR) was established by the U.S. CDC to provide registered users with reagents, tools and information for studying and detection of influenza virus. The IRR acquires, authenticates, and produces reagents that scientists need to carry out basic research and develop improved diagnostic tests, vaccines, and detection methods. Public health labs also use the reagents across the globe for the surveillance of newly emerging strains of influenza, such as H1N1 and H5N1. By centralizing these functions within the IRR, access to and use of these materials in the scientific and public health community is monitored and quality control of the reagents is assured.

The roles of IRR in pandemic preparedness and influenza research are:

- To manufacture and distribute influenza diagnostic kits, viruses, and reagents to public health, commercial, domestic, and international research laboratories.
- To improve pandemic preparedness, enhance detection and control of seasonal influenza, and provide better access to reagents via a secure, web-based system.
- To augment CDC’s international pandemic preparedness plan to provide a surge option (~\$10+ million per year) which can be exercised to distribute reagents and diagnostic kits to domestic and international public health laboratories.

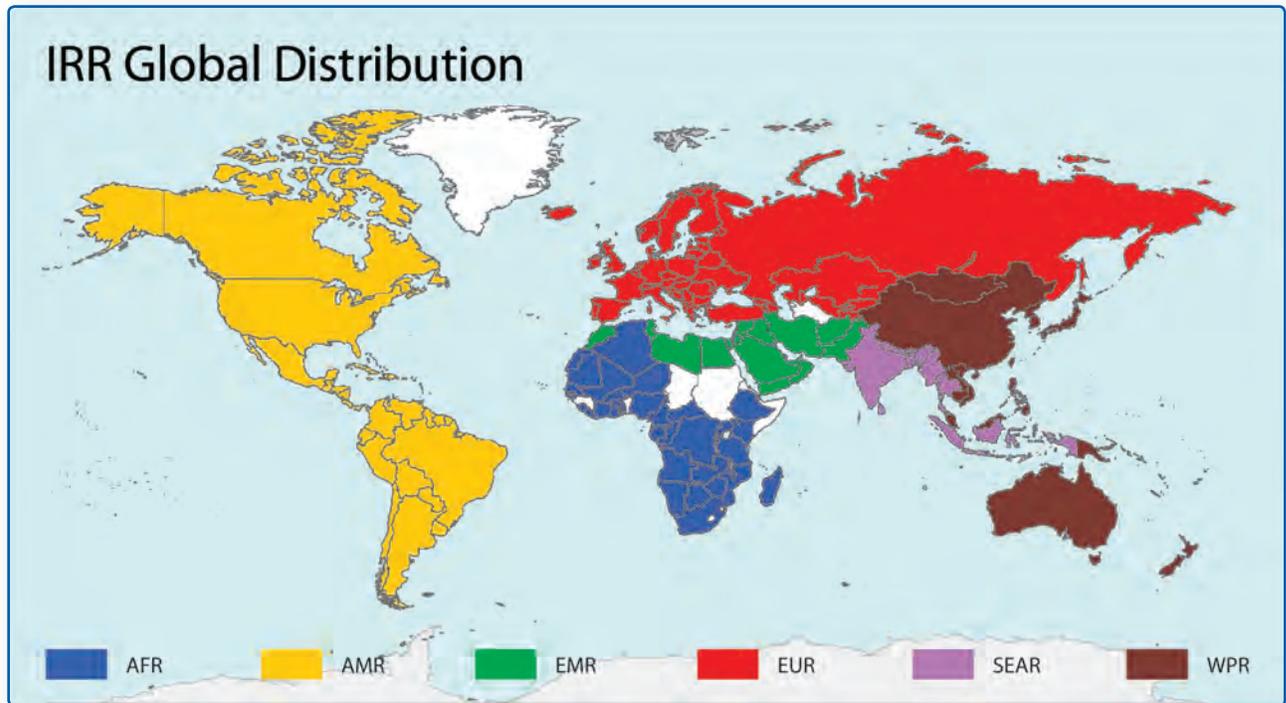
CDC and IRR responded quickly to the recent H7N9 activity and continued to provide reverse transcriptase polymerase chain reaction (RT-PCR) seasonal influenza diagnostic kits, ancillary reagents, reference viruses and other materials. In FY12–13 alone, IRR distributed to 126 countries supporting more than 230 international laboratories. These kits and reagents were also provided to more than 220 public health laboratories domestically in 50 states and territories.

## Worldwide Distribution of Reagents:



### Example Product Shipment Levels:

Example Products	Total Kits International	Total Kits in U.S.	Total Kits
H7N9 RT-PCR Kit	103	76	179
Seasonal RT-PCR Kits (type, sub, H5)	546	436	982
WHO Reference Kit	225	76	301



A map of IRR's distribution of diagnostic kits and reagents to countries/regions.

The IRR website is live and displays over 700 different reagents and kits available to the public health labs globally. [Fluorder@cdc.gov](mailto:Fluorder@cdc.gov) remains active for labs experiencing technical difficulties or special circumstances. A major registration campaign was undertaken over the past year and has led to the vast majority of orders being placed electronically on the website. Enhancements were also made to allow dual login for those researchers collaborating on special projects, making ordering and tracking reagents for the projects versus the normal surveillance activity orders easier to view and approve.

The IRR is providing better access to quality influenza-related reagents by manufacturing and distributing influenza viruses a la carte and as panels, recombinant proteins, antisera, monoclonal antibodies, ribonucleic acid (RNA) standards, non-influenza respiratory pathogens and more. Institutions that have access to these reagents are qualified domestic and international WHO NICs and public health laboratories, commercial test developers, vaccine manufacturers, and research institutions.