

Infectious Disease Surveillance and Management Information Systems Strengthening Projects

Background: Ukraine as the model

PATH's Health Information Systems (HIS) reform efforts began first in Ukraine, based, in part, on the lessons learned from the United States Agency for International Development's (USAID) humanitarian assistance program managed by PATH to combat the diphtheria epidemic in Ukraine. In working with the Government of Ukraine during that effort (1994-1997), concern arose regarding the effectiveness of Ukraine's public health surveillance and management information systems. USAID funds supported PATH and its partners to provide the government with an assistance package that concentrated on developing public health management information tools and technical training to monitor, evaluate, and adapt the health information system to strengthen local and regional management and meet the changing needs of the Ministry of Health (MOH). The program started in several pilot oblasts, guided by a national working group. This group, with the endorsement of the MOH, paved the way for national introduction of the reformed system, which was formally adopted nationwide in January 2000 and is now operating in every oblast in the country.

The key objectives that have guided this work include the following:

- Focus on data collection, analysis, and utilization needs at each level of the public health surveillance system,

reforming the system from the initial point of data collection upward.

- Limit the collection and processing of data to relevant information at each level and only send directly relevant information to successive management levels.
- Promote the "democratization" of public health management data.
- Recognize that public health and administrative data are not separate, but interconnected, and must be addressed simultaneously to have any impact.
- Concentrate on the quality and management use of HIS *content* rather than the more common HIS emphasis on information technology and computer-based data processing and automated report generation.
- Design and introduce reforms according to public health priorities and management needs as defined by the local oblast and rayon authorities.

Expansion to neighboring countries

Since 2000, with support from USAID through Abt Associates' Partners for Health Reform*plus* project (PHR*plus*) and the World Health Organization (WHO), PATH has expanded its HIS work to other countries in the region.

In **Belarus and Moldova**, PATH, PHR*plus*, and WHO are collaborating with national immunization programs to strengthen immunization management information systems by introducing new

tools and methods for the timely collection, analysis, and use of appropriate management data at each level of their national systems. In Belarus, these reforms have been introduced nationwide and have led to systematic and significant reductions in vaccine wastage and increases in immunization coverage.

In **Ukraine and Bulgaria**, PATH and WHO have been working with national ministries of health to strengthen and standardize surveillance for key vaccine-preventable diseases such as measles and rubella. The Bulgaria assistance also includes strengthening immunization systems through improved management information.

In **Georgia**, through *PHRplus*, PATH has worked with local partners and the MOH to introduce similar HIS and surveillance reforms that have standardized management information and surveillance case definitions and policies in that country. The reforms in immunization management and infectious disease surveillance introduced by the *PHRplus* program are some of the most significant in that country since its independence in 1991, and will play a major role in current efforts to restructure the national public health system in that country.

Impact

Through introducing management information reforms for immunization programs and infectious disease surveillance and response, PATH and its partners have significantly improved immunization service delivery in the region, brought to light and helped solve previously hidden public health problems, and contributed to measurable improvements in program effectiveness and efficiency. Under PATH and WHO's leadership, the management information systems for immunization

programs in countries where the project has operated are among the best in the world and serve as models for the rest of the NIS. PATH has played an essential role in strengthening and standardizing infectious disease surveillance systems in the region and is a key partner in WHO's efforts to integrate this NIS region into the global infectious disease surveillance network.

For more information, please contact:

Amie Bishop, MSW, MPH
Senior Program Officer
Ukraine Country Program Director
PATH
1455 NW Leary Way
Seattle, WA 98107 USA
abishop@path.org

Or

David Mercer, PhD, MPH
Senior Program Officer
PATH
1455 NW Leary Way
Seattle, WA 98107 USA
d Mercer@path.org

About PATH

PATH creates sustainable, culturally relevant solutions that enable communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, we help provide appropriate health technologies and vital strategies that change the way people think and act. Our work improves global health and well-being. For more information, please visit www.path.org.