

17. Surveillance for Acute Public Health Problems												
Basic			Developing			Advanced			Leading Edge			
1	2	3	4	5	6	7	8	9	10	11	12	
Strategic Direction	The NPHI usually establishes surveillance systems based on recommendations from WHO and priorities of funders. Planning for use of the data typically starts when data are already arriving.			Some of the NPHI's surveillance is strategic (e.g., to determine the impact of introducing new vaccines). However, the utility of some systems is not clear, either because of their design or because the data are not used.			The NPHI establishes surveillance (e.g., at sentinel sites) to address new and emerging problems. Some legacy systems persist, even though data from them is not as useful as it could be.			The NPHI is proactive in identifying areas in which surveillance data could be useful in influencing policy and programs. The NPHI periodically assesses its ongoing surveillance for usefulness and eliminates or modifies systems that are no longer useful.		
Systems	Case definitions and written processes for surveillance have been created but are not widely shared. Different NPHI staff take on key roles at different times; those outside the NPHI do not know who to contact with questions or problems.			Dissemination and use of written guidelines for data collection, analysis, and reporting is variable, depending on the system.			The NPHI has well-established systems for conducting routine surveillance and can enhance surveillance efforts when problems are identified (e.g., related to flu-like illnesses or vector-borne diseases).			The NPHI uses automated data collection and analysis systems to increase efficiency, including analysis of big data. It regularly updates its systems to incorporate new technologies.		
Resources	Reporting sites (e.g., subnational levels) rely on staff who have other jobs and little time to work on surveillance. NPHI and subnational staff have little training in data collection and analysis. Most of the reporting system is paper-based, requiring significant staff time to consolidate and analyze data.			The NPHI supports staff in a few reporting sites (e.g., subnational levels, sentinel sites) to collect and analyze data. NPHI staff assigned to analyze and report on surveillance are frequently diverted to other priorities, and some staff lack skills needed to analyze data.			The NPHI has sufficient trained staff and infrastructure to conduct high-quality routine surveillance. Subnational staff are generally trained and have time to support the national system. Resources are available for regular supervisory visits by NPHI staff to subnational sites. Most surveillance is automated.			Staff skills, infrastructure, and technology at national and subnational levels are consistently updated to meet current and expected future demands for surveillance. It has the capacity to use big data and data with unusual formats or characteristics to identify events.		
Quality	Surveillance data are reported infrequently, incompletely, and in inconsistent formats, and they are rarely synthesized or used to identify problems or trends.			The quality, completeness, timeliness, and accuracy of surveillance reports varies from one reporting entity to another. Data compilation and reports are often completed long after the data are collected.			Data collected by reporting groups are of high quality, complete, and timely. The NPHI synthesizes reported data and produces high-quality, timely reports.			The NPHI routinely assesses how well its surveillance is functioning and uses these assessments to improve the system. It works with reporting entities to increase their capacity to analyze and interpret their own data. The NPHI's systems and reports serve as models for other organizations.		
Engagement	Groups that are expected to report surveillance data to the NPHI (e.g., subnational government entities) do not understand their roles or the importance of reporting their data. They are not given feedback on data they submit.			The NPHI is making efforts to build relationships with stakeholders and reporting entities to help improve data collection for surveillance purposes. The NPHI sometimes provides feedback to groups that report.			The NPHI reinforces relationships through regular communication with stakeholders and timely feedback, tailored to the needs of reporting entities. Reporting entities understand the value of their contributions.			The NPHI works with those contributing data and end-users to ensure that data collection, analysis, and reporting systems are as good as possible and that reports are maximally useful. Reporting entities see themselves as partners in developing quality surveillance.		
Impact	The NPHI rarely develops summary reports on surveillance. Surveillance rarely results in identification of outbreaks and other problems.			Surveillance reports are developed regularly, but distribution is limited. Without timely, in-depth analysis, outbreaks and important trends are sometimes missed and interventions are delayed.			Reports and recommendations based on surveillance results are disseminated to those who contribute data and who can use the information for policies and programs. In-depth and timely data analysis and reporting help identify trends and detect outbreaks and other problems at an early stage.			The NPHI uses multiple approaches to disseminate information, tailored to the needs of end-users and urgency of the information. The NPHI can quantify the impact of its surveillance efforts, such as faster outbreak detection and use of its data to inform policies and programs.		