

Figure 4: Detect and Respond to Priority Diseases Matrix

## DETECT AND RESPOND TO PRIORITY DISEASES

	<b>1.0 Identify</b> <i>Note: Laboratory steps apply to each level with access to laboratory services</i>	<b>2.0 Report</b>	<b>3.0 Analyze and Interpret</b>	<b>4.0 Investigate</b> <i>Note: These steps assume appropriate laboratory capacity</i>	<b>5.0 Respond</b>	<b>6.0 Provide Feedback</b>	<b>7.0 Evaluate and Improve the System</b>
<b>Community</b>	<ul style="list-style-type: none"> <li>Use simple case definitions to identify priority diseases or conditions in the community</li> </ul>	<ul style="list-style-type: none"> <li>Know which health events to report to the health facility and when to report them</li> </ul>	<ul style="list-style-type: none"> <li>Involve local leaders in observing and interpreting disease patterns and trends in the community</li> </ul>	<ul style="list-style-type: none"> <li>Support case investigation activities such as informing the community of the problem, case finding, collecting of specimens and other activities</li> </ul>	<ul style="list-style-type: none"> <li>Assist health authorities in selecting response activities</li> <li>Participate in response activities</li> <li>Mobilize community resources appropriate for response activity</li> <li>Carry out community health education</li> </ul>	<ul style="list-style-type: none"> <li>Give feedback to community members about reported cases and prevention activities</li> </ul>	<ul style="list-style-type: none"> <li>Decide if public health action took place as planned</li> <li>Evaluate the community response to the public health action</li> </ul>
<b>Health Facility</b>	<ul style="list-style-type: none"> <li>Use standard case definitions to identify priority diseases or conditions that present in:                             <ul style="list-style-type: none"> <li>-inpatient and outpatient services</li> <li>-community reports</li> <li>-private sector reports</li> </ul> </li> <li>Record information about suspected cases in clinic register and patient charts</li> <li>Use local laboratory capacity to diagnose suspected cases</li> <li>Use standard protocols to process laboratory specimens</li> <li>Collect and transport clinical specimens for laboratory evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Report case-based information for immediately notifiable diseases</li> <li>Report data gathered from inpatient and outpatient services and from community and private sector sources</li> <li>Report summary data to next level</li> <li>Report laboratory results from screening sentinel populations at target sites (for example, STI clinic, MCH service, blood bank)</li> </ul>	<ul style="list-style-type: none"> <li>Prepare and periodically update graphs, tables and charts to describe time, person, and place for reported diseases and conditions</li> <li>Identify and report immediately any disease or condition that:                             <ul style="list-style-type: none"> <li>- exceeds an action threshold</li> <li>- occurs in locations where it was previously absent</li> <li>- occurs more often in a population group than previously</li> <li>- presents unusual trends or patterns</li> </ul> </li> <li>Interpret results. Discuss possible public health action with district team</li> <li>Observe changes in trends during routine analysis of laboratory results</li> </ul>	<ul style="list-style-type: none"> <li>Take part in investigation of reported outbreaks</li> <li>Collect, package, store and transport specimens for laboratory testing</li> <li>Use investigation and laboratory results to confirm the outbreak</li> <li>Process and record laboratory results</li> <li>Provide the results to clinical staff and patients</li> </ul>	<ul style="list-style-type: none"> <li>Treat cases and contacts according to standard case management guidelines</li> <li>Use appropriate infection control measures</li> <li>Carry out public health response with the district level</li> <li>Mobilize community involvement in the response</li> <li>Advocate for resources</li> </ul>	<ul style="list-style-type: none"> <li>Give feedback to community members about outcome of reported cases and prevention activities</li> </ul>	<ul style="list-style-type: none"> <li>Monitor timeliness and completeness for reporting routine and case-based information to the district level</li> <li>Evaluate routine detection and reporting of priority diseases and conditions</li> <li>Evaluate preparedness for and timeliness of response activities</li> <li>Evaluate appropriateness of case management</li> <li>Take action to improve reporting practices</li> <li>Take action to improve readiness for timely response to outbreaks</li> <li>Maintain contact with community to maintain preparedness and prevention activities</li> <li>Monitor the interval between receipt of specimens and sending of results</li> <li>Monitor quality of laboratory results</li> </ul>
<b>District, State, Province</b>	<ul style="list-style-type: none"> <li>Maintain activities for collecting routine surveillance data in a timely way</li> <li>Review records of suspected outbreaks</li> <li>Collect and transport clinical specimens for laboratory evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Support health facilities in knowledge and use of standard case definitions for reporting priority diseases and conditions</li> <li>Make sure health facility staff know when and how to report priority diseases and conditions</li> <li>Promptly report immediately notifiable diseases to the next level</li> <li>Report laboratory results to national and local officials</li> </ul>	<ul style="list-style-type: none"> <li>Define denominators and obtain data for ensuring accurate denominators</li> <li>Aggregate data from health facility reports</li> <li>Analyze case-based data by person, place and time</li> <li>Calculate rates and thresholds</li> <li>Compare current data with previous periods</li> <li>Prepare and periodically update graphs, tables and charts to describe time, person and place for reported diseases and conditions</li> <li>Make conclusions about trends, thresholds, and analysis results</li> <li>Describe risk factors for priority disease or conditions</li> </ul>	<ul style="list-style-type: none"> <li>Arrange and lead investigation of reported cases or outbreaks</li> <li>Assist health facility in safe collection, packaging, storage and transport of laboratory specimens for confirmatory testing</li> <li>Receive and interpret laboratory results</li> <li>Decide if the reported outbreak is confirmed</li> <li>Report the confirmed outbreak to the next level</li> <li>Distribute specimen collection kits for special surveillance activities</li> </ul>	<ul style="list-style-type: none"> <li>Select and implement appropriate public health response (for example, depending on the disease, plan to strengthen case management, conduct immunization activity, improve control and prevention activities)</li> <li>Convene epidemic response committee and plan response</li> <li>Conduct training for emergency activities</li> <li>Plan timely community information and education activities</li> <li>Alert nearby areas and districts about the confirmed outbreak</li> </ul>	<ul style="list-style-type: none"> <li>Alert nearby areas and districts about outbreaks</li> <li>Give health facilities regular, periodic feedback about routine control and prevention activities</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and evaluate program targets and indicators for measuring quality of the surveillance system</li> <li>Monitor and evaluate timeliness and completeness of reporting from health facilities in the district</li> <li>Monitor and evaluate timeliness of response to outbreaks</li> <li>Monitor routine prevention activities and modify them as needed</li> </ul>
<b>National</b>	<ul style="list-style-type: none"> <li>Establish steps for surveillance of sentinel populations</li> <li>Conduct special surveys to gather information about reported cases, outbreaks or unusual events</li> <li>Define and update surveillance needs and implement training for and other support to each level</li> <li>Advocate for adequate resources to support the identification and reporting of cases</li> <li>Set policies and procedures with national reference laboratory</li> <li>Use national reference laboratory for maintaining quality control and standards</li> </ul>	<ul style="list-style-type: none"> <li>Set policies and procedures for reporting priority diseases and conditions at each level</li> <li>Include private sector laboratories in the reporting network</li> <li>Support reporting activities throughout the system</li> </ul>	<ul style="list-style-type: none"> <li>Set policies and procedures for analyzing and interpreting data</li> <li>Aggregate data received from district reports</li> <li>Make sure each level uses appropriate denominators for analysis</li> <li>Interpret trends from national perspective</li> <li>Adapt or define action thresholds</li> <li>Provide training resources for analyzing and interpreting data</li> <li>Analyze data for time, person and place</li> <li>Analyze map and stratify by district and other factors</li> <li>Make conclusions based on analysis results</li> <li>Provide reports and share data with national authorities and WHO as required</li> <li>Define public health analysis skills appropriate to each level of personnel in the system</li> </ul>	<ul style="list-style-type: none"> <li>Alert laboratory and support its confirmation activities: supplies, transport media, logistics, transport of specimens</li> <li>Support activities for investigating reported outbreaks: supplies, logistics, equipment, budget</li> <li>Collaborate with international authorities as needed during investigations</li> <li>Notify regional, international networks about confirmed outbreak</li> <li>Process specimens from investigation and send timely results as required to each level</li> <li>Request additional specimens as needed</li> <li>Take part in epidemic response team</li> </ul>	<ul style="list-style-type: none"> <li>Set policies and procedures for responding to cases and outbreaks of priority diseases and conditions</li> <li>Support epidemic response and preparedness activities</li> <li>Report and disseminate results of outbreak response in bulletins, media, press releases and briefings</li> </ul>	<ul style="list-style-type: none"> <li>Give feedback about response activities to each level</li> <li>Give districts regular, periodic feedback about routine control and prevention activities</li> <li>Develop and periodically distribute regional bulletin for epidemiology and public health</li> </ul>	<ul style="list-style-type: none"> <li>Establish and disseminate policies and procedures for monitoring surveillance and outbreak response activities</li> <li>Establish policies and practices for supervising surveillance and outbreak response activities</li> <li>Evaluate detection and reporting activities, and make improvements as needed:                             <ul style="list-style-type: none"> <li>- Monitor and evaluate program targets and indicators for measuring quality of the surveillance system</li> <li>- Monitor and evaluate timeliness and completeness of reporting from intermediate levels</li> <li>- Monitor and evaluate timeliness of national support for outbreak response</li> <li>- Monitor and evaluate effectiveness of district-level outbreak response activities</li> </ul> </li> <li>Monitor routine prevention activities and modify as needed</li> <li>Monitor quality assurance for laboratories at lower levels</li> </ul>
<b>National WHO Representative, WHO Regional Office</b>	<ul style="list-style-type: none"> <li>Support policy setting at national and regional level for detecting priority diseases</li> <li>Mobilize resources for training, logistics and supervision</li> <li>Develop and distribute standard guidelines for surveillance "best practices"</li> <li>Inform countries about problems that may cross borders or have impact on regional areas</li> </ul>	<ul style="list-style-type: none"> <li>Receive reports of outbreaks and international notifiable diseases</li> </ul>	<ul style="list-style-type: none"> <li>Establish and disseminate standard guidelines for analysis of data for each priority disease</li> </ul>	<ul style="list-style-type: none"> <li>Communicate recommendations for case investigation and laboratory confirmation</li> <li>Mobilize resources for improving laboratory capacity and skills</li> <li>Mobilize resources for investigation and confirmation as required, based on national level need and request</li> <li>Provide laboratory training and equipment</li> <li>Establish guidelines for preparedness and outbreak investigations</li> <li>Participate in investigations as requested</li> </ul>	<ul style="list-style-type: none"> <li>Support response activities (technical experts, guidelines)</li> <li>Report to and inform international authorities about outbreak response</li> <li>Calculate response indicators and report status to next level</li> <li>Assist national level with epidemiological response and development of public health action</li> </ul>	<ul style="list-style-type: none"> <li>Provide feedback for collaboration with national and regional levels</li> <li>Inform countries about problems that may cross borders or have impact on regional levels</li> <li>Report analysis results in regional and international bulletins for disease trends and patterns</li> <li>Develop and distribute regional bulletin for epidemiology and public health</li> </ul>	<ul style="list-style-type: none"> <li>Use reports from countries to measure their systems and advocate for improvements</li> </ul>