

Implementing the 7-1-7 target in Brazil

Three years into the adoption and use of a performance improvement approach for early outbreak detection and response

Brazil is one of the largest countries in the world by geographic area and by population. Its predominantly urban population of over 200 million people has experienced recurrent disease outbreaks including influenza, measles, mpox, Zika, COVID-19, hepatitis and RSV, resulting in significant morbidity and mortality. Since 2022, Resolve to Save Lives and Vital Strategies have worked with health authorities in Brazil to ensure that all suspected outbreaks are detected in less than 7 days from emergence, responsible public health authorities are notified in less than one day from detection, and early response actions are implemented within 7 days of public health authorities being notified – the 7-1-7 target.

7-1-7 is a global target that has been adopted by WHO in guidance to countries on conducting *early action reviews*. It is now increasingly used by countries, regional and global actors to improve outbreak detection and control. This brief summarizes the experience implementing 7-1-7 in Brazil, the first federated country to implement the target at both local and state levels.



Surveillance teams from Vitória and Espírito Santo at a 7-1-7 retrospective review workshop in October 2024.

National retrospective review

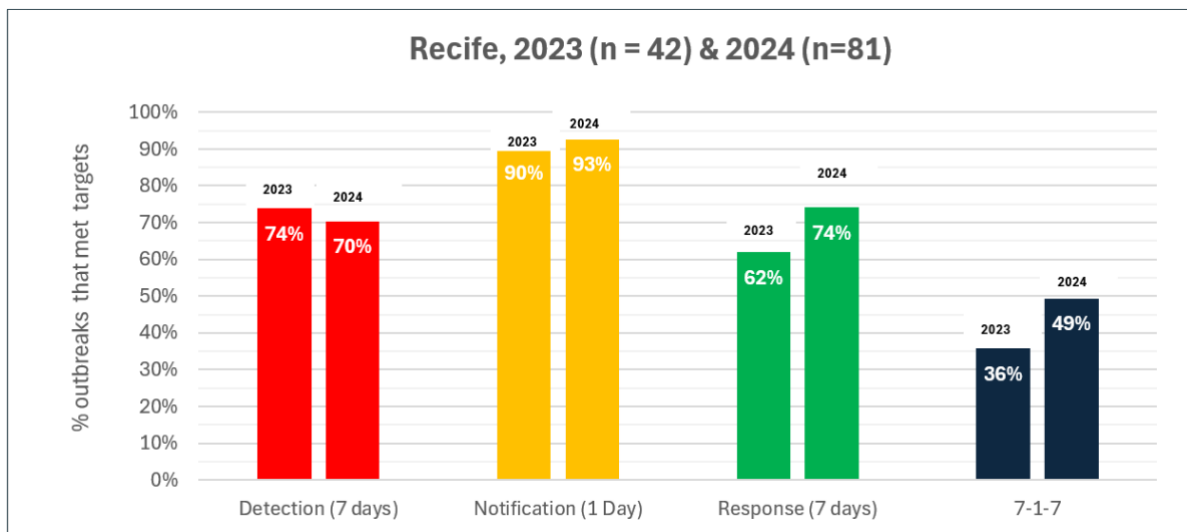
In February 2022, working with government teams in four states, four municipalities, and the Federal District, Vital Strategies reviewed [timeliness data from 10 past outbreaks against the 7-1-7 target](#) and only two (20%) of the outbreak events were found to have been detected, notified and responded to within the 7-1-7 target. These findings were subsequently presented at the annual meeting of the National Council of Municipal Health Secretaries (CONASEMS) to raise awareness of the 7-1-7 target amongst state and municipal health authorities and discuss bottlenecks to early detection and response. These consultations improved understanding of the target and its improvement potential in Brazil's context by identifying bottlenecks and generating demand for implementation evidence from different levels of the public health system.

Implementation in the Municipality of Recife

Recife, the state capital of Pernambuco located in the Northeast Region of Brazil, was one of the municipalities that participated in the national 7-1-7 pilot. In August 2022, the Municipal Health Surveillance Department of Recife [initiated adoption of the 7-1-7 target](#). A retrospective review of nine past outbreaks was conducted, and a workshop was held to collaboratively analyze bottlenecks and enablers to timely action and develop an action plan to address the bottlenecks. Thereafter, the municipality applied the target to active outbreaks by integrating emergence, detection, notification and response data fields and a screening algorithm for high consequence pathogens into their REDCap digital surveillance tool.

In February 2023, during Recife's Carnaval, a gathering of over 2.7 million people, the digital tool was applied to manage data on infectious disease outbreaks. Throughout 2023, with digital tools in place, Recife began producing outbreak reports, including timeliness and common bottlenecks, for 42 outbreaks, 36% of which were detected, notified and responded to within the 7-1-7 target. In 2024, 81 outbreaks were analyzed, 49% of which were within target. Common bottlenecks encountered in Recife included laboratory reporting delay, failure to follow event notification procedures, and refusal of suspected cases or institutions to share information or clinical samples.

[Watch Recife's health officials, the Ministry of Health and partners explain how Recife's 7-1-7 pilot opened the way to scale up the target nationally.](#)



Comparison of 7-1-7 performance for outbreaks in Recife in 2023 and 2024.

Implementation in the State of Espirito Santo

Following successful adoption and use of the 7-1-7 target in Recife, Brazil's Ministry of Health, the Pan American Health Organization (PAHO), and Vital Strategies worked together to implement the target in the State of Espirito Santo and its capital city, Vitória. Between February and October 2024, the health surveillance teams from Espirito Santo and Vitoria conducted their own retrospective review, analyzing 10 outbreaks, with one outbreak meeting the 7-1-7 target, highlighting the need for focused attention to performance improvement also at the state level. Work is ongoing to institutionalize the target in Espirito Santo and next steps include the integration of 7-1-7 into digital tools, and action planning around the identified bottlenecks.

Scaling 7-1-7 nationally

The Ministry of Health is now working to scale up and institutionalize the 7-1-7 target nationwide in collaboration with global, federal, state, and local partners. Key lessons learned during the adoption process in Brazil's federated context include:

- Working directly with individuals and teams responsible for outbreak detection, notification, and response at the local level is critical for subnational implementation of 7-1-7.
- Initiating 7-1-7 adoption through a retrospective review process with multiple workshops is an effective way to engage stakeholders, train implementers, and plan for workflow integration.
- Integrating 7-1-7 and bottleneck analysis into data systems, protocols, workflows, and routine meetings promotes a culture of performance improvement in surveillance and response programs.
- Developing strong partnerships with public institutions that connect local and state health departments facilitates information sharing, collective problem-solving, and innovation.

Next steps include training and capacity building with the Ministry of Health's surveillance network (CIEVS), strengthening the collaboration of the Councils for Municipal and State Health Secretaries (CONASEMS and CONASS), and deeper collaboration with regional partners including PAHO and the South American Training Programs in Epidemiology and Public Health (REDSUR).

For more information on the 7-1-7 target, visit 717alliance.org.