Introduction to 7-1-7

The 7-1-7 Target for Outbreak Detection and Control

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Every public health event is an opportunity to learn and improve.
7-1-7: timeliness metrics and milestones
African health ministers adopt new regional strategy to transform health security

25 August 2022

Lomé – Spurred by the devastating impact of the COVID-19 pandemic on fragile health systems, African health ministers this week adopted a new eight-year strategy to transform health security and emergency response in the region.

The Regional Strategy for Health Security and Emergencies 2022–2030, endorsed during the Seventy-second session of the World Health Organization (WHO) Regional Committee for Africa in Lomé, Togo, aims to reduce the health and socioeconomic impacts of public health emergencies.

Globally, the African region reports the heaviest burden of public health emergencies, with more than 100 such events occurring annually. Prior to the emergence of COVID-19, the top causes of epidemics in the region were cholera, measles, yellow fever, meningococcal disease, and typhoid fever. The strategy includes an ambitious 7-1-7 target: identify the outbreak within seven days of emergence, report to public health officials within one day, and effectively respond within seven days.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2024</th>
<th>2025</th>
<th>2028</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of countries that have identified the outbreak within 7 days of emergence, report to public health officials within 1 day of detection, and effectively respond within 7 days</td>
<td>0</td>
<td>47</td>
<td>47</td>
<td>47</td>
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</tbody>
</table>
Implementing 7-1-7
## How can the 7-1-7 approach improve outbreak response?

<table>
<thead>
<tr>
<th>Performance improvement</th>
<th>Bottlenecks are easily identified and quantified, and short- and long-term actions are taken to drive rapid improvement</th>
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</thead>
<tbody>
<tr>
<td>Prioritization for financing and systems strengthening</td>
<td>Data on real-world system performance informs prioritization of available and needed resources (complementing the JEE and SPAR)</td>
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<tr>
<td>Communication and advocacy</td>
<td>When presented with simple metrics, political leaders and donors can clearly visualize resource needs and necessary policy interventions, substantiated by clear data</td>
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<tr>
<td>Accountability and reporting</td>
<td>Reporting against simple metrics can monitor performance, evaluate interventions and improve transparency</td>
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</table>
Emergence
Detection
Notification
Response
End
Post-event

Capture and assess 7-1-7 performance

Use 7-1-7 performance to identify bottlenecks and enablers

Identify and implement actions

Real-time implementation
to support an ongoing response immediately after an event is detected

Retrospective review
immediately after response concludes or in AAR for larger events

Bottlenecks
Hindered timeliness

Enablers
Facilitated timeliness

Immediate actions
Necessary resources already available

Implement as soon as possible

Medium to longer-term actions
Necessary resources not currently available

Consider for planning and funding opportunities

Use to support advocacy objectives (best practices, improvements, etc.)

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Use to support advocacy objectives (best practices, improvements, etc.)
2. Identify bottlenecks and enablers

Identify bottlenecks that prevented timely actions and enablers that facilitated timely action for each phase: Detection, Notification, Response

<table>
<thead>
<tr>
<th>Interval</th>
<th>Bottlenecks</th>
<th>Enablers</th>
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<tbody>
<tr>
<td>Detection</td>
<td>Factors that prevented timely action. Identify max 3, if applicable. Propose remedial actions in Step 4.</td>
<td>Factors that enabled timely action. Identify max 3, if applicable. Document for advocacy and to demonstrate impact.</td>
</tr>
</tbody>
</table>
1. Use 7-1-7 to evaluate timeliness
   For each event, document key dates and assess if targets were met

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Date DD/MM/YY</th>
<th>Narrative</th>
</tr>
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<tbody>
<tr>
<td>Date of emergence</td>
<td></td>
<td>For <strong>endemic diseases:</strong> date on which a predetermined increase in case incidence over baseline rates occurred.</td>
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<tr>
<td></td>
<td></td>
<td>For <strong>non-endemic diseases:</strong> date on which the index case or first epidemiologically linked case first experienced symptoms.</td>
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<td></td>
<td>For <strong>other public health events:</strong> date the threat first met criteria as a reportable event based on country reporting standards.</td>
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<tr>
<td>Date of detection</td>
<td></td>
<td>Date the event is first recorded by any source or in any system.</td>
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<td>Date of notification</td>
<td></td>
<td>Date the event is first reported to a public health authority responsible for action.</td>
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<tr>
<td>Date of early response initiation</td>
<td></td>
<td>Date on which the first of the seven early response actions occurred (see below).</td>
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<tr>
<td>Date of early response completion</td>
<td></td>
<td>Date on which all applicable early response actions were completed (see below).</td>
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<table>
<thead>
<tr>
<th>Interval</th>
<th>Calculation</th>
<th>Timeliness</th>
<th>Target</th>
<th>Met target?</th>
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<tbody>
<tr>
<td>Detection</td>
<td>Difference between dates of emergence and detection</td>
<td></td>
<td>7</td>
<td></td>
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<tr>
<td>Notification</td>
<td>Difference between dates of detection and notification</td>
<td></td>
<td>1</td>
<td></td>
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<tr>
<td>Response</td>
<td>Difference between dates of notification and completion of the last early response action</td>
<td></td>
<td>7</td>
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3. Propose actions to address bottlenecks

Some actions can be done immediately, others may require long-term planning and investment

<table>
<thead>
<tr>
<th>Proposed action</th>
<th>Bottleneck addressed</th>
<th>Responsible authority</th>
<th>Target start date</th>
<th>Target end date</th>
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4. Engage stakeholders for rapid performance improvement

- Discuss bottlenecks and enablers of timely performance during a meeting with key stakeholders
- Agree on remedial actions to improve preparedness for future events
- Assign responsibility for completing those actions
- Monitor completion of remedial actions at future stakeholder meetings
5. Use 7-1-7 performance to prioritize long-term planning and accountability

- Before each operational planning cycle, synthesize learnings from 7-1-7 and review performance against targets
- Use recommendations from 7-1-7 to prioritize activities for financing (NAPHS along with other evaluations: SPAR, JEE, AAR, etc.)
6. Use 7-1-7 for advocacy and accountability

- Translate findings from 7-1-7 implementation into advocacy asks for resources to resolve bottlenecks
- Evaluate interventions and demonstrate progress by routinely synthesizing 7-1-7 data
7-1-7 in action
Sudan Virus Disease Outbreak Response
Mubende, Uganda
Date of emergence: 5 August 2022
Date of detection: 17 September 2022
Date of notification: 17 September 2022
Date of early response: 26 September 2022

**TARGET**
- DETECT: Target: 7 days
- NOTIFY: Target: 1 day
- RESPOND: Target: 7 days

**TIMELINE**
- 46 DAYS (Date of emergence: 5 August 2022)
- <1 DAY (Date of notification: 17 September 2022)
- 9 DAYS (Date of early response: 26 September 2022)

**BOTTLENECKS**
- Lack of knowledge on IDSR suspected case definitions at private facilities
- From COVID, community-based surveillance was fatigued and failed to identify the unusual cluster of deaths
- Lack of clear roles on notification if a suspected case is detected at the regional referral
- Isolation unit was partially functional with no sanitation facilities
- Under-utilization of prepaid SMS for notification for new staff
- Delays in accessing funds for rapid response team to conduct contact tracing

**ENABLERS**
- Syndromic surveillance for acute febrile illness at Mubende Regional Referral who suspected VHF and notified district
- Regional referral hospital immediately called district rapid response team and alerted them of the case
- Regional referral hospital mobilized resources for initial investigation of community deaths

**REMEDIAL ACTIONS**
- **IMMEDIATE**: Identify a building with better facilities for an isolation unit; Identify partners with funds available for contact tracing
- **LONG TERM**: Increase nationwide IDSR trainings for providers at private facilities
7-1-7: an organising principle, target, and accountability metric to make the world safer from pandemics

Implementation of the 7-1-7 target for detection, notification, and response to public health threats in five countries: a retrospective, observational study
The 7-1-7 Alliance

- Technical Steering Group
- Technical support
- Countries implementing 7-1-7
- Grants
- Communities of Practice
- Institutional and academic partners

Secretariat hosted by Resolve to Save Lives
Resources

Resources to support implementation are available at 717alliance.org

- WHO Guidance for conducting an Early Action Review
- Full 7-1-7 Implementation Toolkit
- Introductory fact sheets for decision-makers
- Webinars
- FAQ
Join the Alliance

Interested in learning more about your country or organization becoming an official partner of the 7-1-7 Alliance?

→ Email the Alliance Secretariat at 717alliance@rtsl.org to get started

Interested in staying up-to-date on news and opportunities with the 7-1-7 Alliance?

→ Subscribe to the Alliance news and join our Global Learning Network
Thank you