Guidance for conducting an early action review (EAR):
rapid performance improvement for outbreak detection and response

31 August 2023
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This guidance for conducting early action reviews (EARs) results from a shared vision of the importance of collective learning during and following a public health event. That vision, and the close collaboration that led to the development of these resources, is shared among the World Health Organization’s (WHO’s) regional offices, headquarters, Member States and their partners.

This document was developed by the Country Simulation Exercises and Reviews Unit, Department of Health Security Preparedness, under the WHO Health Emergencies Programme, at WHO headquarters by Landry Ndriko Mayigane (technical lead), Elliot Brennan, Armand Mbanya and Candice Vente, under the supervision of Liviu Vedrasco and the leadership of Stella Chungong.

The following staff at WHO’s regional offices reviewed this guidance and tools and provided comments: for the Regional Office for South-East Asia – Reuben Samuel and Maung Maung Htike; and for the Regional Office for the Western Pacific – Phuong Nam Nguyen.

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Abbreviations

AAR  after action review
EAR  early action review
EOC  emergency operations centre
GPW13 Thirteenth General Programme of Work 2019–2023 (WHO)
IAR  intra-action review
IMS  incident management system
IPC  infection prevention and control
NAPHS National Action Plan for Health Security
WHO  World Health Organization
Recent outbreaks of epidemic- and pandemic-prone diseases have highlighted the critical importance of ensuring that systems for outbreak detection, notification and response are timely and effective. Early detection and response are crucial in preventing the escalation of outbreaks of infectious disease. To enhance the identification and control of these threats, ambitious and achievable targets are required to promote the evaluation and improvement of systems for early detection and response.

Monitoring timeliness metrics can identify trends and opportunities for improving a system’s capabilities (1). The optimal performance measure is how fast a system detects and effectively responds to a threat (2). By continually assessing and improving the timeliness of these systems, countries can identify performance bottlenecks, accelerate progress in improving such systems and enhance both detection speed and response quality (3, 4). The value of timeliness metrics is highlighted by their integration into the World Health Organization’s (WHO’s) after action review (AAR) process (5) and the Triple Billion targets for its Thirteenth General Programme of Work 2019–2023 (GPW13) (6). To further capitalize on the benefits of timeliness metrics in the early phase of a response, WHO has developed the early action review (EAR) to evaluate early detection activities and responses to outbreaks and public health events.

1.1 What is an early action review?
EAR is a rapid, easily conducted performance improvement approach used to evaluate the timeliness of early detection activities and responses to any big or small health event, and that can result in improvements to workflows and actions. EAR is a performance improvement exercise which when repeated consistently establishes the habit of ensuring there is continual learning and improvement from every event. In addition, it promotes collaboration and coordination among key stakeholders during the early outbreak response, increasing the likelihood of effective control.
1.2 Why is it important?
When a new outbreak or public health event is identified, stakeholders must coordinate efforts to control the spread of disease and reduce risks or impacts. EAR provides an agile framework for measuring the timeliness of detection, notification and response systems to ensure that rapid and coordinated efforts are undertaken. However, EAR is not just an assessment or monitoring tool: it is a performance management process conducted as early as possible while an event is unfolding. It is used by teams responsible for responding to the event to reinforce the implementation of seven early response actions:

- initiating investigations or deploying the investigation and response team;
- conducting epidemiologic analysis of burden, severity and risk factors, and performing initial risk assessment;
- obtaining laboratory confirmation of the etiology of the outbreak;
- initiating appropriate case management and infection prevention and control (IPC) measures in health facilities;
- initiating appropriate public health countermeasures in affected communities;
- initiating appropriate risk communication and community engagement activities;
- establishing a coordination mechanism.

Public health countermeasures include activities such as procuring and distributing commodities in the community to prevent the outbreak from spreading (e.g. vaccines, sachets of oral rehydration salts, antimicrobial agents, water filters, soap, insect repellents, bed nets, personal protective equipment) and introducing public health and social measures (e.g. masking, travel restrictions, quarantine, food recalls, boil-water advisory).
1.3 How is it implemented?

EAR leverages the 7-1-7 target for detection, notification and response (Fig. 1) (1), which defines three timeliness metrics that can be used to assess and improve early detection and response systems:

- ≤ 7 days to detect a suspected public health threat;
- ≤ 1 day to notify a public health authority responsible for action; and
- ≤ 7 days to complete early response actions.

The 7-1-7 target provides a framework for identifying system bottlenecks and enabling factors to promote early and effective action to contain infectious disease outbreaks and other public health threats (7). These targets align with the GPW13, which assesses the impact of the WHO Health Emergencies Programme (6).

This guidance document provides stepwise guidance to support the implementation of an EAR, leveraging the 7-1-7 target, by different levels of government and in various infectious disease contexts.

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**Fig. 1. The 7-1-7 timeliness metrics and targets for detecting, notifying and responding to public health events**

- **≤ 7 DAYS**
  - Time to detection
  - Date of emergence
  - Date of detection

- **≤ 1 DAY**
  - Time to notification
  - Date of notification

- **≤ 7 DAYS**
  - Time to early response
  - Date of early response completion
**2.1 Purpose: to find system bottlenecks and fix them quickly**

Typically, intra-action reviews (IARs) and AARs are conducted with participation from larger groups, such as in workshops. In contrast, countries are encouraged to incorporate the EAR process into their existing response coordination meetings. EARs provide a rapid review for all events to enable response calibration. Stakeholders in a response capture data about the timeliness and completion of early response actions as the event unfolds and then identify bottlenecks in the system and enablers of implementation – that is, factors that prevent or promote timely action. Documenting bottlenecks in and enablers of the early phase of the response is critical for prioritizing immediate or longer-term remedial actions and identifying best practices.

**2.2 Scope: early detection and response**

EAR examines a subset of the systems required for early detection and response rather than for later-stage responses. The 7-1-7 timeliness metrics for key intervals (Table 1) cover this early phase and are based on the dates of relevant milestones (Table 2, Annex 1).

<table>
<thead>
<tr>
<th>Metric</th>
<th>Definition</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to detection</td>
<td>No. of days' difference between dates of emergence and detection</td>
<td>≤ 7 days</td>
</tr>
<tr>
<td>Time to notification</td>
<td>No. of days' difference between dates of detection and notification</td>
<td>≤ 1 day</td>
</tr>
<tr>
<td>Time to early response</td>
<td>No. of days' difference between dates of notification and completion of the early response actions</td>
<td>≤ 7 days</td>
</tr>
</tbody>
</table>

Table 1. EAR performance standards
Table 2. Definitions of key milestones for early action reviews

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of emergence</td>
<td>For endemic diseases: this is the date on which a predetermined increase in case incidence over baseline rates occurred; For non-endemic diseases: this is the date on which the index case or first epidemiologically linked case first had symptoms; For other public health events: this is the date on which the threat first met the criteria for a reportable event, based on the country’s reporting standards.</td>
</tr>
<tr>
<td>Date of detection</td>
<td>Date the event is first recorded by any source or in any system.</td>
</tr>
<tr>
<td>Date of notification</td>
<td>Date the event is first reported to a public health authority responsible for taking action.</td>
</tr>
<tr>
<td>Date early response initiated</td>
<td>The date on which the first of the seven early response actions occurred.</td>
</tr>
<tr>
<td>Date early response completed</td>
<td>The date on which all applicable early response actions were completed.</td>
</tr>
</tbody>
</table>

* The date of emergence may change as data are updated throughout the epidemiological investigation.

EARLY RESPONSE ACTIONS
To ensure that all pillars of a successful response have been activated, conduct the following actions within 7 days of notification to relevant public health authorities.

- Initiate investigation or deploy investigation/response team
- Conduct epidemiologic analysis of burden, severity and risk factors, and perform initial risk assessment
- Obtain laboratory confirmation of the outbreak etiology
- Initiate appropriate case management and infection prevention and control (IPC) measures in health facilities
- Initiate appropriate public health countermeasures* in affected communities
- Initiate appropriate risk communication and community engagement activities
- Establish a coordination mechanism

*Procurement and distribution of commodities in the community to prevent outbreak spread (e.g., vaccines, ORS sachets, antimicrobial agents, water treatment, soap, insect repellents, bed nets, PPE), initiation of public health and social measures (e.g., masking, travel restrictions, quarantine, food recall, boil water advisory).

EARs secure critical support from stakeholders and simplify downstream IAR or AAR processes, or both because of the documentation that the EAR enables (Fig. 2). An EAR is not a prerequisite to undertaking these more extensive reviews, and countries should continue to conduct these voluntary review processes in accordance with the International Health Regulations (2005).
Fig. 2. Continuum of reviews of emergency responses

- **Early action review**
  - for all events, in real-time
  - for rapid improvement

- **Intra-action review**
  - for protracted responses
  - requiring course correction

- **After action review**
  - for the response to all events,
  - after official declaration of the end
  - of the event

- **Emergence**

- **End**

- **Early phase of the response**
  - Detection, notification and early response

- **During the response**

- **After the response**
  - Learning from the response to
  - inform preparedness and health
  - systems strengthening activities

**Within 3 months**
Methodology

The methods and tools defined for an EAR support making improvements to workflows within the existing response coordination structure by tracking and enabling tasks that are critical for detection, notification and early response activities (Fig. 3).

3.1 Before the review, while the event is ongoing

3.1.1 Document performance

The Early action assessment tool, Tool 1, captures how well systems are performing during an outbreak or other public health event and identifies initial bottlenecks preventing and enablers of rapid improvements in performance to facilitate data capture (Box 1). These data, which can be
collected by the team responsible for the initial investigation will be discussed in the event review meeting to calibrate the response. The steps in Tool 1 include the following:

1. Record dates for milestones: document the dates of key milestones to inform calculations in the next step.
2. Calculate timeliness in 7-1-7 intervals: calculate the time to detect, notify and respond to the event against the 7-1-7 target.
3. Identify bottlenecks and enablers: for bottlenecks, identify the potential root causes of delays; for enablers, identify best practices.
4. Propose remedial actions to address bottlenecks: formulate actionable recommendations for immediate or longer-term implementation. Immediate actions address priority bottlenecks with the available resources, while longer-term actions can be compiled and systematically addressed during future strategic planning or advocacy windows.

The link to download Tool 1 is provided in Chapter 4.
3.2 During the review, while the event is ongoing

3.2.1 Review performance and calibrate the response

Integrate event review into existing meetings of emergency operations centres (EOCs) or incident management systems (IMS).

EARs are best conducted within the response coordination structure to engage relevant stakeholders (e.g. clinical services, surveillance and response teams). EOCs or equivalent IMS structures are the optimal hosts for this exercise due to their pre-existing mandate to support data collection and analysis, decision-making and coordination (Table 3) (8).

Table 3. Potential settings for event reviews

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended practice:</strong> EOCs or IMS&lt;br&gt;meetings of emergency operations centres or incident management systems</td>
<td>Review of performance for an ongoing public health threat in a meeting dedicated to coordinating the investigation or response</td>
</tr>
<tr>
<td><strong>Alternative practice:</strong> Epidemiology or outbreak review meetings held weekly or monthly</td>
<td>Review of performance during recent public health threats is incorporated into routinely held meetings</td>
</tr>
</tbody>
</table>

Conducting the EAR within the EOC or IMS structure as early as possible after the initial notification allows for lessons learned from the ongoing response to be calibrated in real-time. Countries may also routinely review one or more events during larger national coordination meetings (e.g. weekly epidemiology or outbreak review meetings). Recommendations from the EAR can support the development of an outbreak response or incident action plan or other response planning tools.

To incorporate the EAR into an existing meeting, include an agenda item to discuss the event as well as information about the timeliness of the response, bottlenecks and enablers, and remedial actions.

Table 4 provides a sample 20-minute agenda. Data can be summarized for presentation at the meeting using the Event review template, Tool 2 (Box 2).

The link to download Tool 2 is provided in Chapter 4.

Table 4. Sample 20-minute agenda for an early action review

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
<td>Discuss event background information, key milestones and timeliness metrics (use Tool 2)</td>
</tr>
<tr>
<td>5 minutes</td>
<td>Discuss bottlenecks and enablers to detection, notification and early response (use Tool 2)</td>
</tr>
<tr>
<td>10 minutes</td>
<td>Prioritize the implementation of remedial actions and any remaining early response actions, and assign responsible authorities for any immediate actions.</td>
</tr>
</tbody>
</table>
Box 3 presents an example of how some countries have used the early action review approach to inform disease outbreak performance improvement efforts at national and subnational levels.

**Box 3. Case study: Sudan Ebola virus disease outbreak response in Mubende, Uganda (Tool 5)**

To coordinate the Sudan Ebola virus disease response, the Uganda Ministry of Health and the Infectious Diseases Institute implemented a rapid performance improvement approach aligned with an early action review as part of its adoption of the 7-1-7 target. Coordination was implemented as the outbreak unfolded and was led by the Public Health Emergency Operations Centre, which is responsible for national responses to higher-risk or geographically dispersed events. Stakeholders used the Event review template (Tool 2), to assess 7-1-7 performance and discuss bottlenecks and enablers, which led to immediate remedial action. Immediate actions included identifying partners to fund contact tracing and designating better isolation facilities; longer-term actions to be incorporated into Uganda’s national planning included increasing nationwide training in integrated disease surveillance and response for providers at private facilities. The slide presented in Tool 5 (Country early action review (EAR): Uganda Sudan virus disease (SVD) outbreak response case study) summarizes the data discussed in the review meetings.
Follow up on the implementation of remedial actions.

Ensure that the implementation status of immediate remedial actions is monitored by adapting the Post–EAR action tracker, Tool 3 (Box 4). The Post-EAR action tracker monitors and assesses the status of remedial actions.

The tracker’s rating scale uses five categories to assess progress:

- completed (implementation was successful);
- in progress (implementation is ongoing);
- stuck (implementation has encountered an obstacle and is not progressing; potential reprioritization or resourcing must be discussed to alleviate bottlenecks to implementation);
- waiting (implementation is on hold prior to start date);
- deferred (implementation has been reprioritized to the next implementation cycle).

Incorporating routine monitoring into each meeting promotes accountability and helps ensure that actions are completed on time to support performance improvement. Some actions initially selected for immediate implementation may remain incomplete and ultimately may need to be considered alongside other longer-term actions tied to planning and financing opportunities, such as a National Action Plan for Health Security (NAPHS) or equivalent.

The link to download Tool 3 is provided in Chapter 4.

3.3 After the review, when the event concludes

3.3.1 Incorporate findings into national planning, advocacy and larger reviews

Synthesize results in a periodic report.

While reviewing single events can enable immediate improvements, evaluating aggregated data across several events can identify critical patterns and support the prioritization of funding and implementation to address recurring bottlenecks.

The Synthesis report template (Tool 4) can be used to review events over time to look for patterns and aggregate bottlenecks (Box 5). Tracking improvements against the 7-1-7 target over time can be used as an impact indicator to show progress for advocacy efforts and to inform priorities for strengthening systems through national planning or the NAPHS or equivalent.

The link to download Tool 4 is provided in Chapter 4.
Box 5. Synthesis report template (Tool 4)

Use this tool to develop a high-level summary of the most important lessons learned across multiple events.

► Incorporate findings into larger action reviews.

Countries that have implemented the EAR approach may feed their reports and documentation into the IAR or AAR process. When referencing EAR outputs during a workshop convened for an IAR or AAR, include an agenda item to present a high-level overview of the EAR approach and results, distribute completed templates to participants, and use the data to inform discussions during the key steps outlined in WHO's IAR and AAR guidance documents (Table 5) (9, 10).

Table 5. Alignment of the steps and outputs from early action reviews with intra-action and after action reviews

<table>
<thead>
<tr>
<th>Questions and steps in IAR and AAR guidance</th>
<th>EAR 7-1-7 data</th>
<th>Link with IAR or AAR output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What was in place before the response?</td>
<td>Bottlenecks, enablers</td>
<td>Inventory of capacities and capabilities</td>
</tr>
<tr>
<td>2. What happened during the response?</td>
<td>Timeliness metrics</td>
<td>Event timeline and mapping</td>
</tr>
<tr>
<td>4. What can we do to improve for next time?</td>
<td>Remedial actions</td>
<td>Corrective actions and areas for future improvement</td>
</tr>
<tr>
<td>5. The way forward</td>
<td>Various</td>
<td>Reporting, follow-up advocacy and planning</td>
</tr>
</tbody>
</table>

AAR: after action review; EAR: early action review; IAR: intra-action review.

► Incorporate findings into national planning and advocacy efforts.

Leverage EAR data to easily communicate about performance, successes and areas for improvement; to maintain momentum for implementing immediate actions; and to support resource advocacy and prioritization of longer-term actions in the NAPHS or equivalent. For example, stakeholders involved in preparedness planning may reference the bottlenecks and long-term actions prioritized in the EAR report (see the Synthesis report template, Tool 4).

Clearly articulating performance against the 7-1-7 target can help prioritize planning and also help advocacy for financing the resources needed for improvement. Moreover, this approach also offers an easy means to capture and report on improvements once investments have been made. This creates a virtuous cycle of accountability and advocacy by providing stakeholders with a clear view of progress and a measure of the impact on their investments.
The five tools to support the conduct of an EAR are all available for download from the links below in Table 6. These will be periodically updated, as required.

Table 6. List of tools to support an early action review

<table>
<thead>
<tr>
<th>Tool</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Event review template</td>
<td><a href="https://apps.who.int/iris/bitstream/handle/10665/372094/WHO-WPE-HSP-CER-2023.3-eng.pptx">https://apps.who.int/iris/bitstream/handle/10665/372094/WHO-WPE-HSP-CER-2023.3-eng.pptx</a></td>
</tr>
<tr>
<td>5. EAR Country Case Study</td>
<td><a href="https://apps.who.int/iris/bitstream/handle/10665/372097/WHO-WPE-HSP-CER-2023.6-eng.pptx">https://apps.who.int/iris/bitstream/handle/10665/372097/WHO-WPE-HSP-CER-2023.6-eng.pptx</a></td>
</tr>
</tbody>
</table>


Annex. Determining key milestone dates

1. Date of emergence

When a health event is first detected, the date of emergence is often unknown. Epidemiological information gathered during the outbreak investigation should be used to determine the date of emergence. The date may change as more is learned and earlier cases are identified (Table A1).

The approach to determining the date of emergence varies by type of public health event:

- for endemic diseases, it is the date when a predetermined increase in case incidence over baseline rates occurred (e.g. integrated disease surveillance alert thresholds);
- for non-endemic diseases, it is the date when the index case or first epidemiologically linked case experienced symptoms;
- for other health threats, it is the date the threat first met the criteria for a reportable event, based on current reporting standards.

<table>
<thead>
<tr>
<th>Type of event</th>
<th>Example of date of emergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endemic disease (e.g. malaria)</td>
<td>Malaria alert thresholds are incidence-based in country X. During epidemiological week 32, malaria cases surpass the alert threshold of 50 cases/100,000 population in district Y. Because data are aggregated and analysed weekly, the last day of epidemiological week 32 is the date of emergence.</td>
</tr>
<tr>
<td>Non-endemic disease (e.g. Ebola virus disease in a human)</td>
<td>The date the outbreak emerged is the date of symptom onset for the index case or first epidemiologically linked case.</td>
</tr>
<tr>
<td>Animal disease (e.g. avian influenza in a bird)</td>
<td>The date the outbreak emerged is the earliest known date of symptom onset in a bird or the earliest known date of death in a bird if no other symptom data are available.</td>
</tr>
<tr>
<td>Other health threats (e.g. contaminated food product)</td>
<td>The date the outbreak emerged is the earliest date of symptom onset among persons exposed to the contaminated product.</td>
</tr>
</tbody>
</table>
2. Date of detection

The date of detection is the date when the public health event was first recorded by any source or in any system (Table A2). For indicator-based surveillance, the date of detection would be when case or incidence data were recorded (e.g. in a logbook or on a case investigation form or laboratory requisition form).

For event-based surveillance, the date of detection would be when information about the event was first recorded (e.g. detected by a media-scanning system, recorded by a community health worker, recorded by a hotline operator).

<table>
<thead>
<tr>
<th>Type of detection</th>
<th>Example of date of detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator-based surveillance (e.g. aggregated data for malaria cases)</td>
<td>Malaria outbreaks are declared at the district level in country X. The date of detection of the malaria outbreak in district Y is the first date on which the district aggregated the data and recorded that the incidence threshold had been exceeded.</td>
</tr>
<tr>
<td>Indicator-based surveillance (e.g. case of Ebola virus disease detected in a health facility)</td>
<td>The date of detection is the date when the health facility recorded a suspected case of Ebola virus disease in any system. Most frequently, this case is documented by completing a case investigation or laboratory requisition form, but it may also be indicated on a clinical chart.</td>
</tr>
<tr>
<td>Event-based surveillance (e.g. media scanning)</td>
<td>A measles outbreak occurred in state Z for 3 weeks, but nobody had aggregated or analysed the data so no one recorded that an outbreak had started. A local newspaper reported on a cluster of deaths among children that was likely due to measles, and this was then picked up by an event-based surveillance analyst at the national public health institute. The date of detection of the outbreak is the date this event was recorded by the analyst.</td>
</tr>
<tr>
<td>Event-based surveillance (e.g. event–based community surveillance)</td>
<td>A community health worker notices acute flaccid paralysis in a young child during a home visit. The date of detection is the date when the community health worker recorded the suspected case of polio (e.g. in a logbook or a mobile application, or on an investigation form).</td>
</tr>
</tbody>
</table>

3. Date of notification

The date of notification is the date when the event is first reported to a public health authority responsible for taking action (Table A3). For countries requiring notification of reportable events to multiple levels of government that are tasked with different actions, the earliest date that any of these public health authorities was notified is the date of notification. Often, the most immediate public health jurisdiction (e.g. city, district) will be the public health authority responsible for taking action and the first public health authority to be notified. In some guidance, this step may be referred to as reporting to a public health authority or district health team.

The notification by responsible health authorities could be from a clinical setting to a district surveillance officer. In the case of event-based surveillance or when outbreaks are detected centrally, notification to a responsible authority might be from the central level to the subnational level. This step should not be confused with notification to WHO as defined by the International Health Regulations (2005), which is typically done only after local or national public health authorities have become aware of an event.
Annex

4. Date early response actions completed

The 7-1-7 approach identifies seven early response actions that should be completed within 7 days of notification. The date when the early response is completed is the latest date on which any of these seven early response actions is completed (see Table A4).

All seven of the early response actions may not apply to all public health events. For example, an event may be determined to be low risk and, thus, implementing countermeasures and establishing a coordination mechanism are unnecessary. For events in which some response actions are not applicable, the latest date among the applicable actions should be used as the date that the early response activities were completed.

Table A3. Examples of date of notification of a public health event, by notification scenario

<table>
<thead>
<tr>
<th>Notification scenario</th>
<th>Example of date of notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidemic-prone disease detected by a health worker (e.g. Ebola virus disease)</td>
<td>The notification date is the date when a clinician or facility surveillance focal point contacted the public health department or local surveillance officer to inform them of a suspected case of viral haemorrhagic fever. Note that if the facility sent a specimen to a laboratory (i.e. detected the case) but did not contact a public health department or local surveillance officer, and public health authorities became aware of the suspected case only when the laboratory result became available, the date the public health authorities received the laboratory result is the date of notification.</td>
</tr>
<tr>
<td>Event detected by a community health worker</td>
<td>If a community health worker reported an event to a surveillance officer or public health department directly, this is the date of notification. If a community health worker reported the event to a health facility, the date of notification is when the health facility reported the event to the surveillance officer or public health department.</td>
</tr>
<tr>
<td>Event detected by a central media-scanning unit</td>
<td>The notification date is the date when the central media-scanning unit or event–based surveillance programme notified the public health authorities at the jurisdictional level responsible for investigating or responding to an event.</td>
</tr>
<tr>
<td>Event detected by aggregated indicator-based surveillance</td>
<td>The notification date is when the analyst or surveillance officer notified a team member responsible for investigating or ensuring a public health response.</td>
</tr>
</tbody>
</table>

Table A4. Examples of how to date early response actions for public health events

<table>
<thead>
<tr>
<th>Early response actions</th>
<th>Examples of dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate investigation or deploy investigation or response team</td>
<td>Date the district initiated the investigation of a suspected outbreak or in response to a signal</td>
</tr>
<tr>
<td></td>
<td>Date a rapid response team was deployed</td>
</tr>
<tr>
<td>Conduct epidemiological analyses of burden, severity, transmissibility, and risk factors, and perform an initial risk assessment</td>
<td>Date when the first results of the epidemiological analyses were published and the risk assessment was completed</td>
</tr>
<tr>
<td></td>
<td>Date when the first situation report was published and the risk assessment level was indicated</td>
</tr>
<tr>
<td>Obtain laboratory confirmation of the etiology of the outbreak</td>
<td>Date when laboratory confirmation of the pathogen was completed</td>
</tr>
<tr>
<td></td>
<td>Date when the etiology of a toxicological or chemical poisoning event was confirmed</td>
</tr>
<tr>
<td>Initiate appropriate case management and IPC measures in health facilities</td>
<td>Date when a facility IPC assessment was initiated in affected health facilities</td>
</tr>
<tr>
<td></td>
<td>Date when appropriate case management procedures were assessed at affected health facilities</td>
</tr>
<tr>
<td></td>
<td>Date when training in IPC or case management was initiated</td>
</tr>
<tr>
<td></td>
<td>Date when appropriate therapeutics, vaccines or personal protective equipment were distributed to health facilities</td>
</tr>
<tr>
<td></td>
<td>Date when known cases were transferred to a specialist centre or isolation unit with known capacity for case management and IPC measures to address the etiology</td>
</tr>
</tbody>
</table>

Continues ...
In addition to the date when the early response activities were completed, it is also recommended to review the date on which the early response was initiated – that is, the date when the first of the seven early response actions was completed. While the date of early response initiation is not used to calculate the 7-1-7 metrics, this date is helpful in identifying bottlenecks that affected response initiation. The aim should be to initiate the early response within 1 day of notification. Initiating response actions within 1 day (i.e. the first action taken) can support the monitoring of current guidance for response initiation and steps towards meeting the targets of WHO’s Thirteenth Global Programme of Work 2019–2023.

The early response actions in Table A4 indicate the initiation rather than the completion of a response and provide a framework to ensure that the relevant pillars of a response, which are explained in greater detail in other guidance and tools (1, 2), have been activated. They provide simple indicators, modified through pilot-testing, that can be used to identify the date when actions were taken. Some countries have found that expanding early response actions into event-related or disease-specific job aids that detail specific activities enhances improvements in performance and accountability.

References


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