From Bottlenecks to Solutions: Leveraging Event-Based Surveillance through the 7-1-7 Framework, Philippines, January 2025

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Certified Applied Epidemiologist

What if…

You stepped on a bathroom scale to check your weight, but there were **no numbers or dial markings.**

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Response: median of 32 days

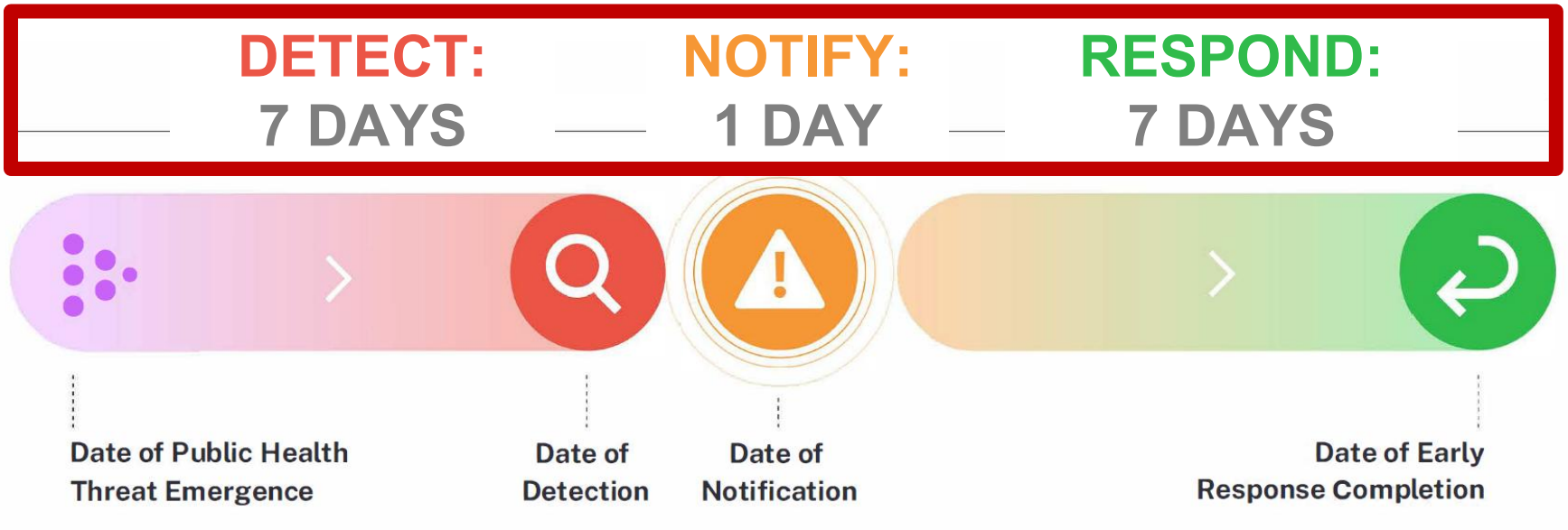
Timeliness Review of Southern Luzon Health Events (N=1,585) from 2017–2021 using Smolinski's Outbreak Milestones (2019)

Response: median of 32 days

Timeliness Review of Southern Luzon Health Events (N=1,535) from 2017–2021 using Smolinski's Outbreak Milestones (2019)

NO TARGETS

The 7-1-7 Framework



Objectives:

- assess **timeliness against set standards**
- identify **bottlenecks** and
- recommend **actionable strategies**

1 Conducted a Retrospective Review

We looked into **11 Public Health Events (PHEs)**

Inclusion criteria:

- ✓ public health threats
- ✓ with complete, time-stamped data

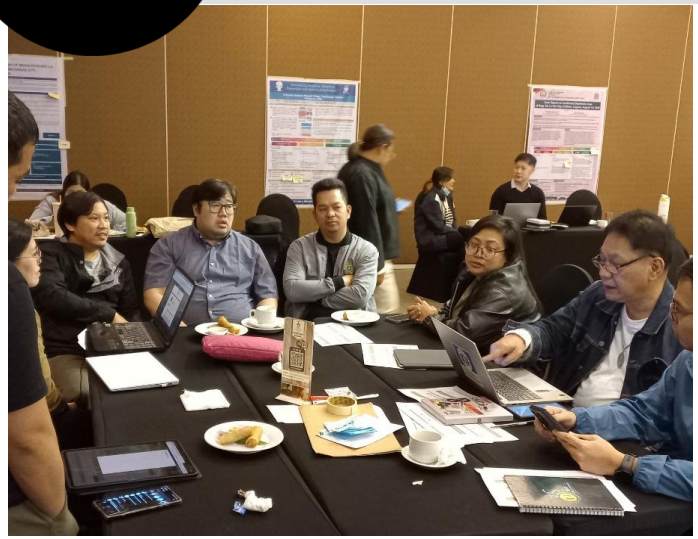
PHEs Evaluated for Timeliness under 7-1-7

Disease Classification	Health Event
 Vaccine-Preventable Disease	Measles-Rubella Cluster Diphtheria, Confirmed Pertussis Outbreak
 Emerging-reemerging Diseases	Monkeypox, Confirmed (Child) Monkeypox, Confirmed (Private Clinic) Monkeypox, Confirmed
 Zoonotic Diseases	Rabies Cases Japanese Encephalitis, Confirmed
 Food and Waterborne Diseases	Staphylococcal Foodborne Disease Outbreak
 Neglected Tropical Disease and others	Helminthiasis Outbreak Clustering of Skin Diseases

2 Calculate timeliness in 7-1-7 intervals

Detection: Was the event recorded within 7 days of emergence?
Notification: Was it reported to public health authorities within 1 day?
Response: Were all 7 essential early response actions completed within 7 days?

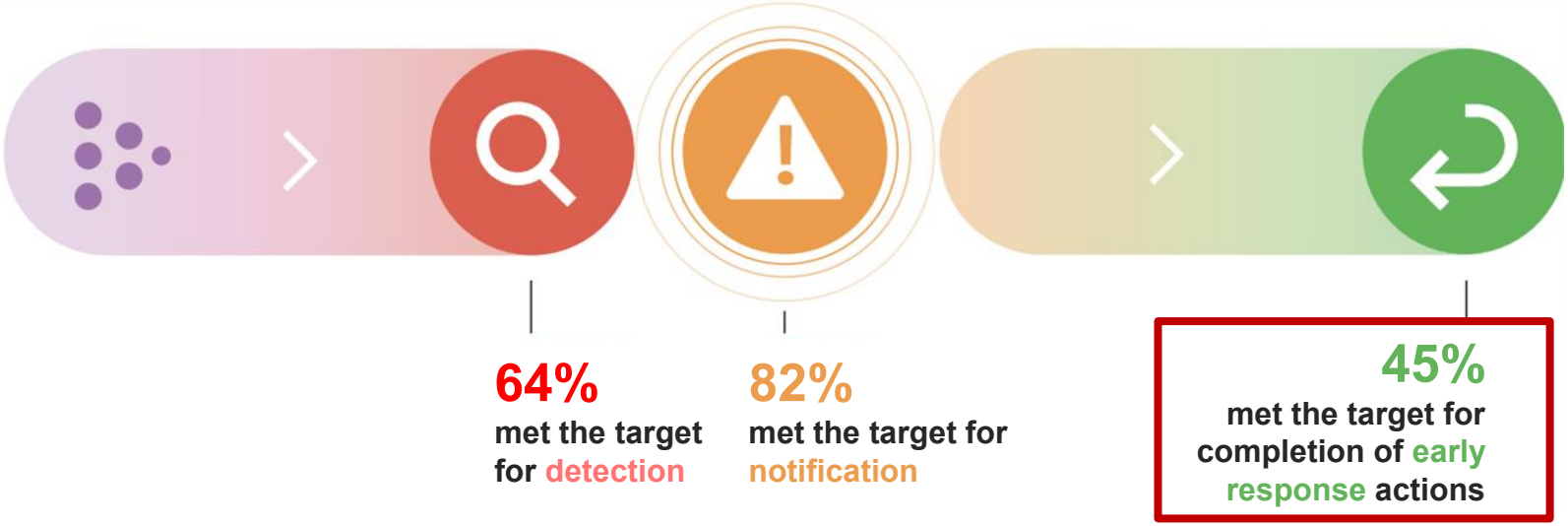
3 Identified and Categorized Bottlenecks



Bottlenecks	*Category*
Lack of standardized Mpox information and training for clinical workers	**Low awareness or clinical suspicion by health workers**
Clinician has limited knowledge of Mpox signs and symptoms	

Percentage of PHEs (N=11) Meeting the 7-1-7 target

Southern Luzon, Philippines | January 2025



64%
met the target for detection

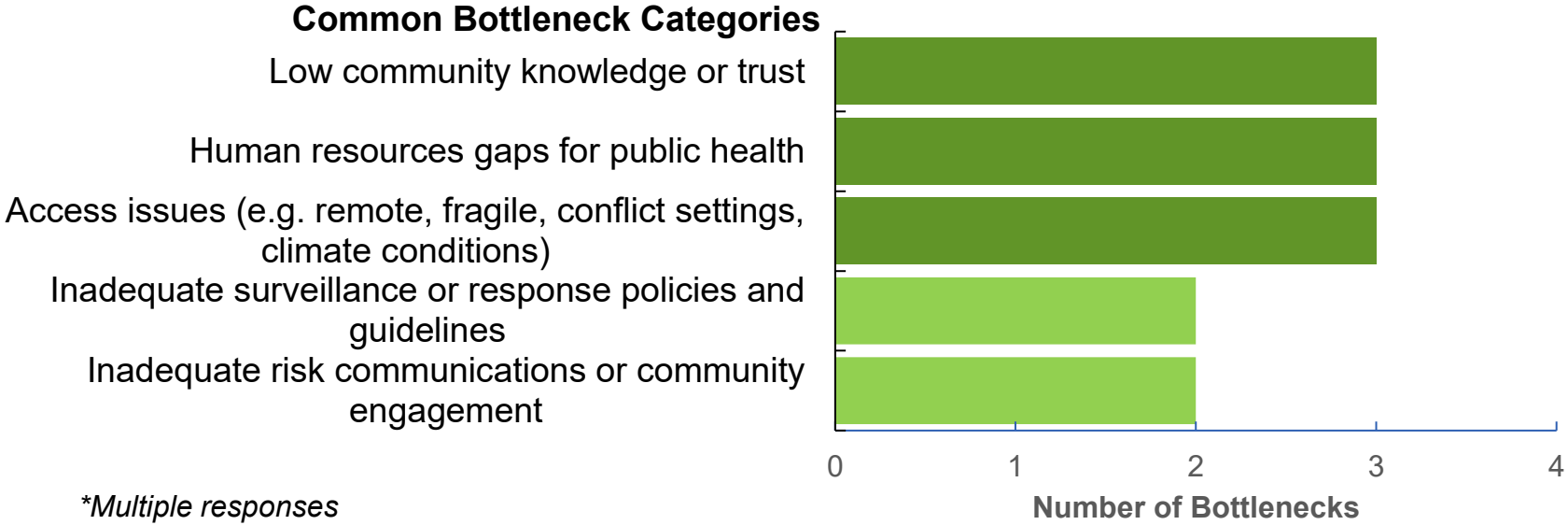
82%
met the target for notification

45%
met the target for completion of early response actions

Only 36% of PHEs met all three components of the 7-1-7 target

Low knowledge and trust, human resources gaps and access issues are primary cause of delay in response.

Top 5 Common Bottleneck Categories* in Response
Southern Luzon, Philippines | January 2025



*Multiple responses

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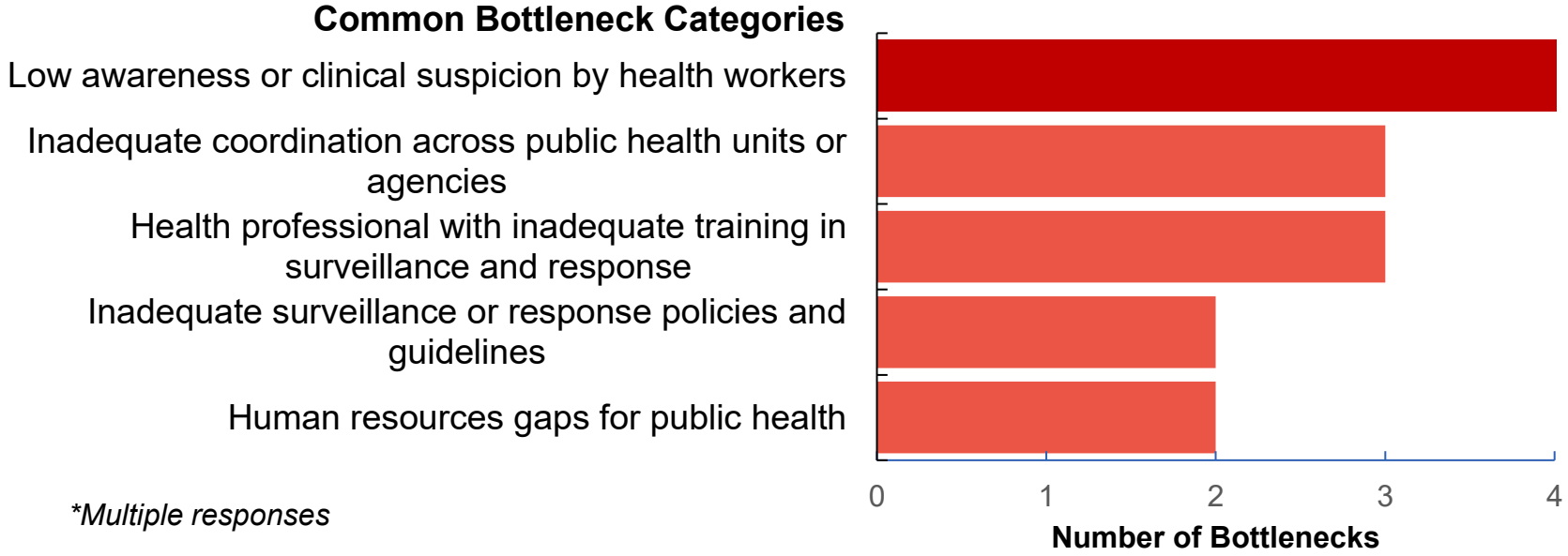
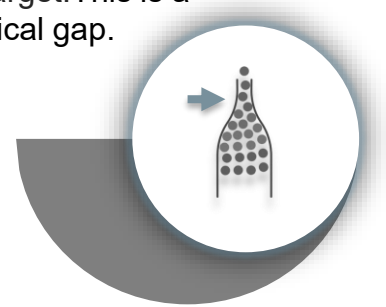


*Multiple responses

Conclusion

The Bottleneck

Only 36% met the 7-1-7 target.This is a critical gap.



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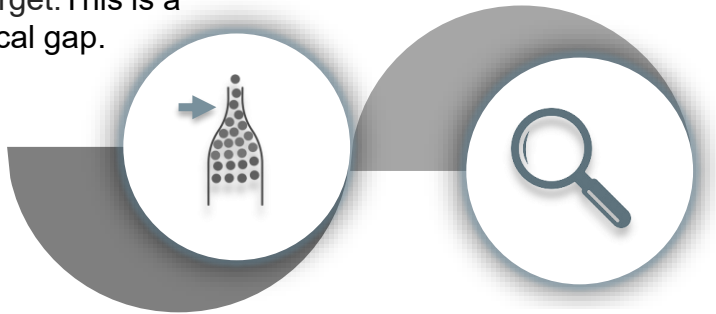

Breaking Down the Delay:

Detection and responses is where the system is slow.

Conclusion

The Bottleneck

Only 36% met the 7-1-7 target.This is a critical gap.

Root Causes

low community knowledge and trust, human resources gaps, and access issues

Breaking Down the Delay:

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Breaking Down the Delay:

Detection and responses is where the system is slow.

The Breakthrough

Targeted interventions, such as training, surge HR, and institutional 7-1-7 use, can break the cycle.

The Breakthrough

- Quarterly clinical refresher training on notifiable diseases for frontline health workers
- Surge staffing mechanisms at the provincial level should be institutionalized
- Emergency response kits and transport partnerships are to be established in geographically isolated areas
- Institutionalizing the use of the 7-1-7 framework for routine EBS performance review

Actions Taken

- **Integration of 7-1-7 Assessment to EBS Reports**
- **Conducted cluster-based capacity-building for hospitals and local health unit staff**
- **7-1-7 Roll Out Training to Local Counterparts**

Percentage of PHEs (N=22) Meeting the 7-1-7 target

Southern Luzon, Philippines | August 2025

73%
met the target for detection

95%
met the target for notification

68%
met the target for completion of early response actions

59% of PHEs met all three components of the 7-1-7 target

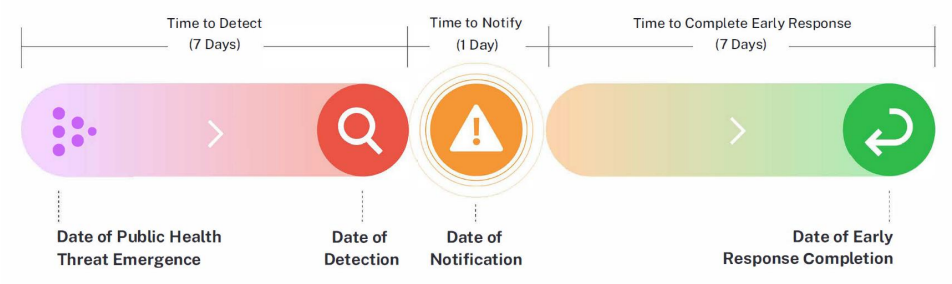
Important Next Steps

Follow-up actions and tie key bottlenecks to long-term planning

Adoption of 7-1-7 as part of early action review in outbreak investigations

YOU HAVE THE POWER TO MAKE A DIFFERENCE

Let's turn our bottlenecks into breakthroughs



before another delay can take its toll.