

# DEMOCRACY AND PANDEMIC



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# Before, During, and After: Counting What Matters for Public Health Emergencies

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Democracy and Pandemics  
November 15, 2025

**Gates Foundation**

The purpose of public health surveillance  
is to inform decision-making

# Surges and declines in COVID-19 were apparent in high-income countries

*This knowledge informed public health decision-making*

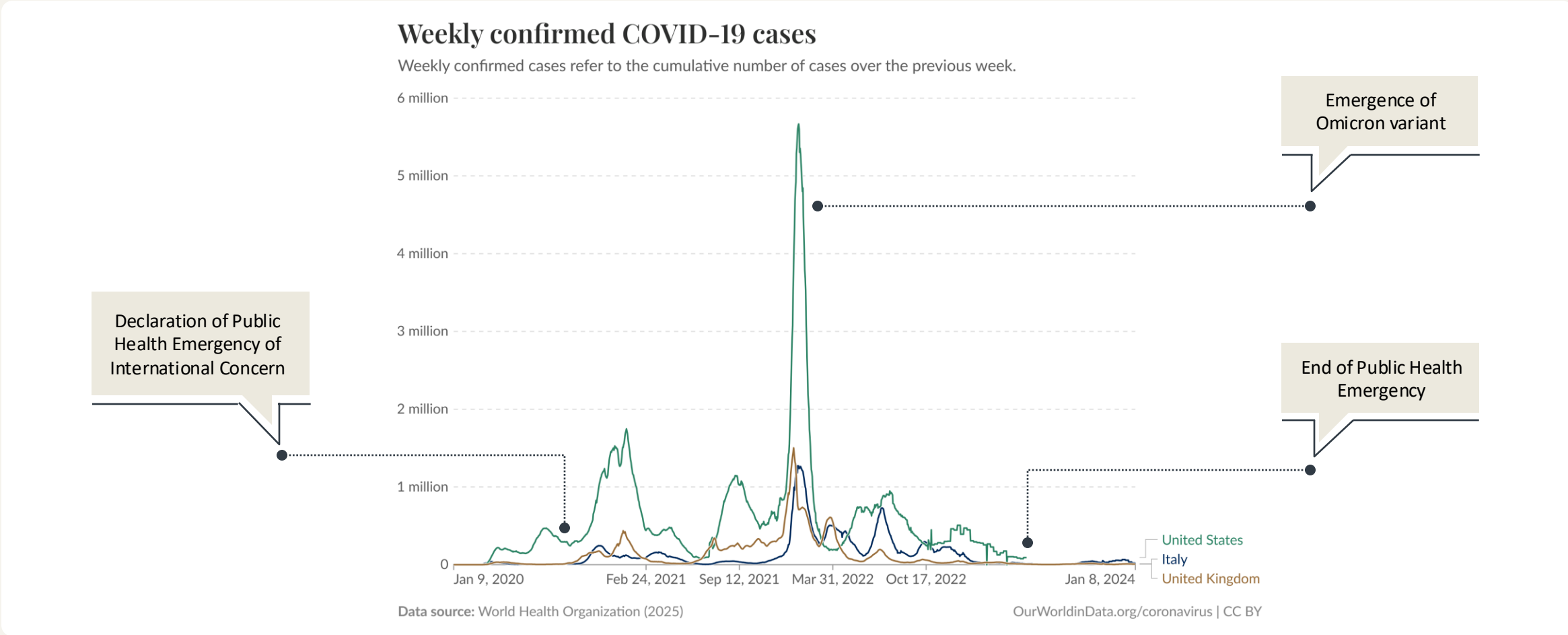


Figure modified from OurWorldInData.org. Data source: World Health Organization (2025)

# Lower income countries were less able to track the pandemic

*This lack of knowledge impeded public health decision-making during the pandemic*

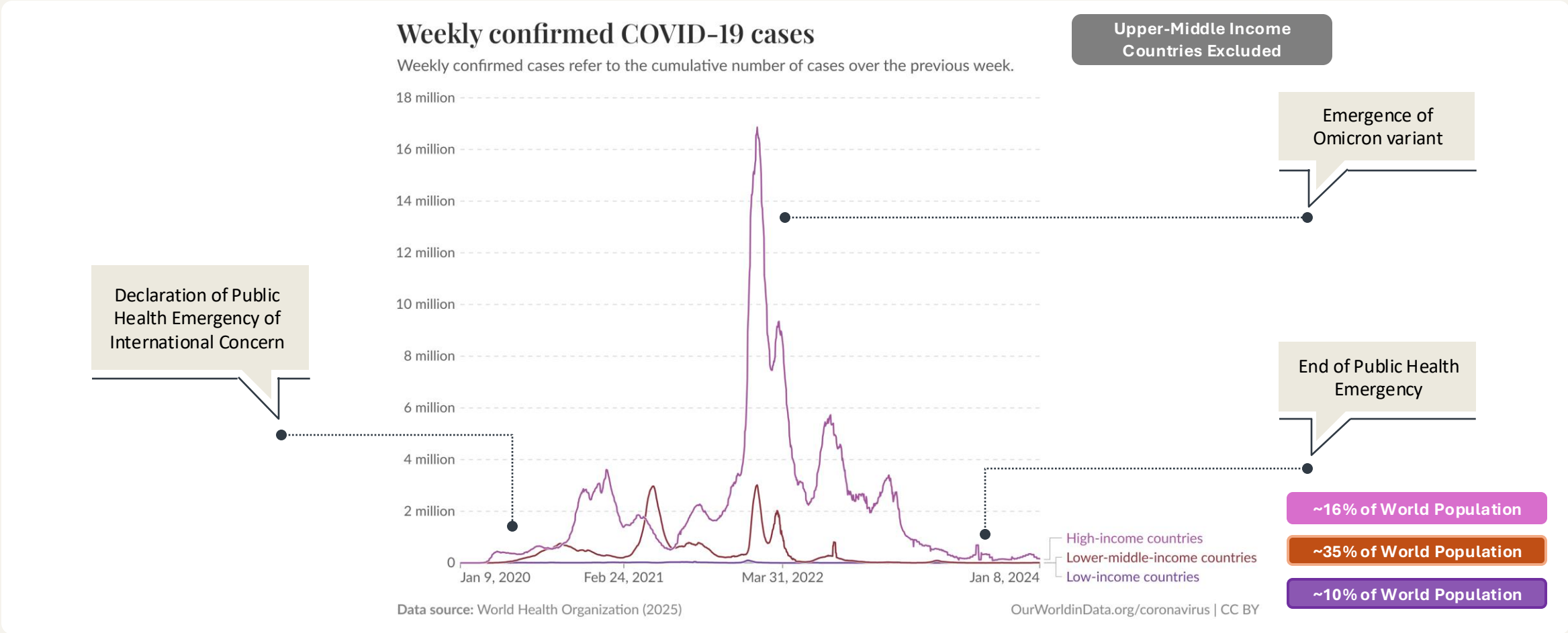


Figure modified from OurWorldInData.org. Data source: World Health Organization (2025)

# In many countries, information is lacking about numbers and causes of death

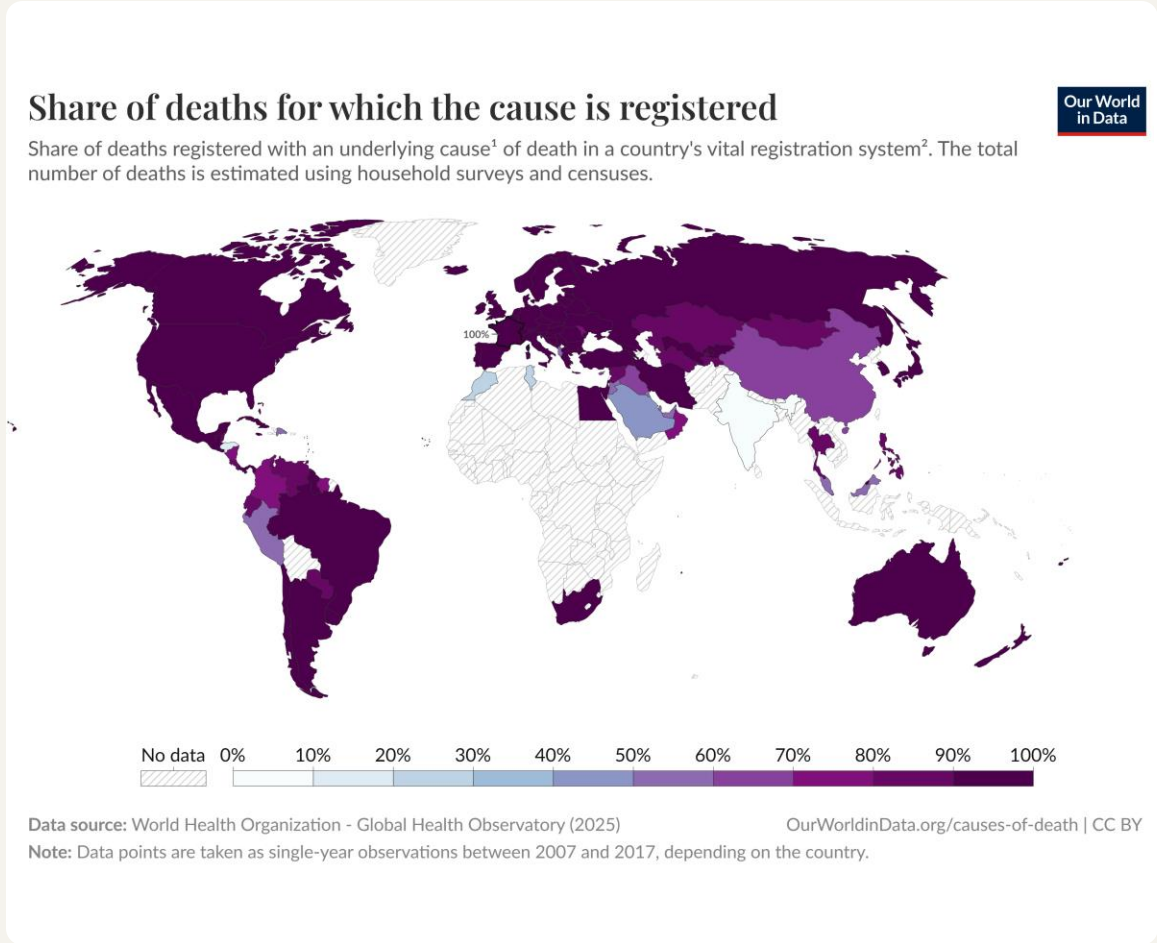
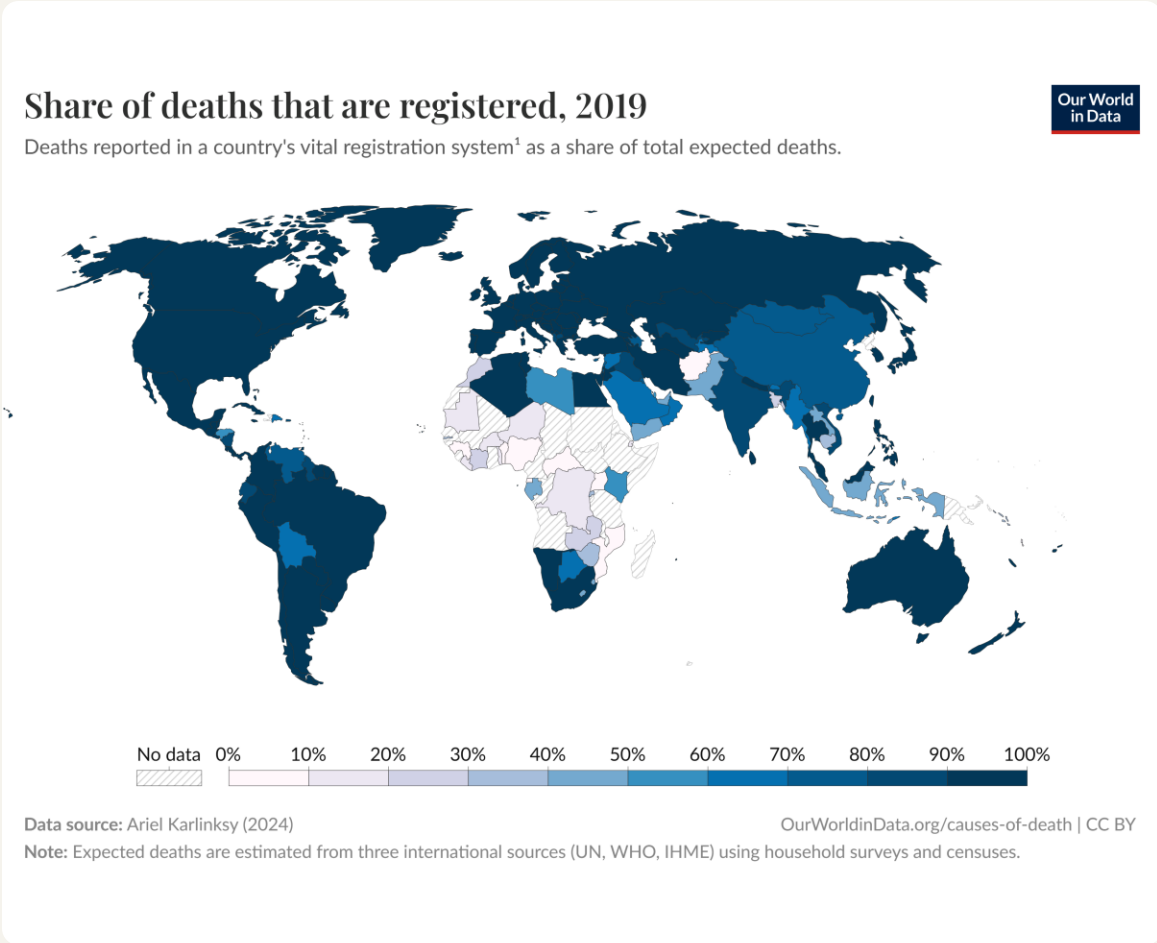


Figure adapted from: Saloni Dattani (2025) - "The Demographic and Health Surveys brought crucial data for more than 90 countries — without them, we risk darkness" Published online at [OurWorldinData.org](https://OurWorldinData.org).

# COVID-19 death counts were very incomplete in some countries

*Ratio between estimated excess mortality rate and reported COVID-19 mortality rate, 2020–21*

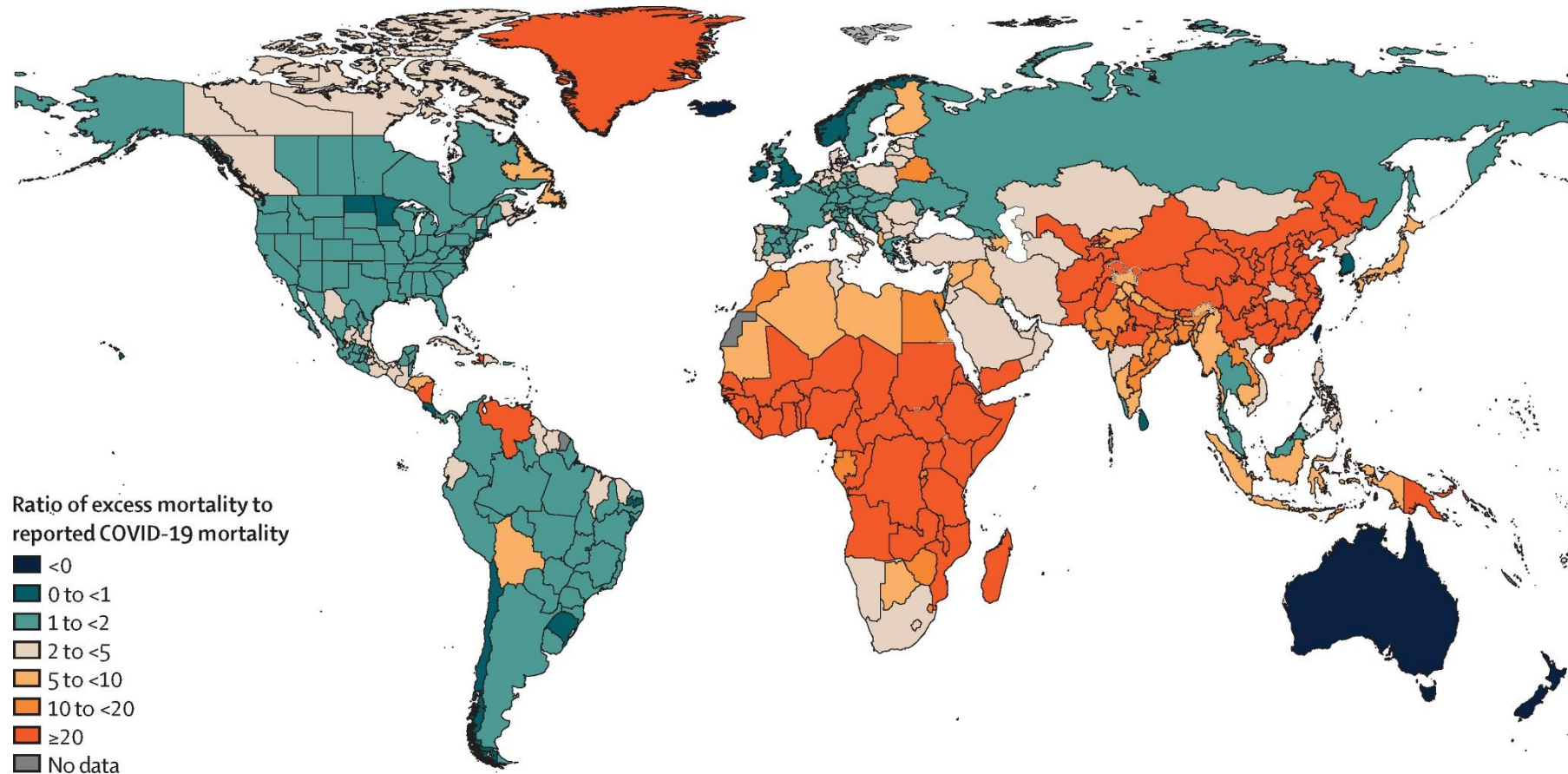


Figure source: IHME, Lancet 2022 [https://doi.org/10.1016/S0140-6736\(21\)02796-3](https://doi.org/10.1016/S0140-6736(21)02796-3)

Cases

Pandemic!

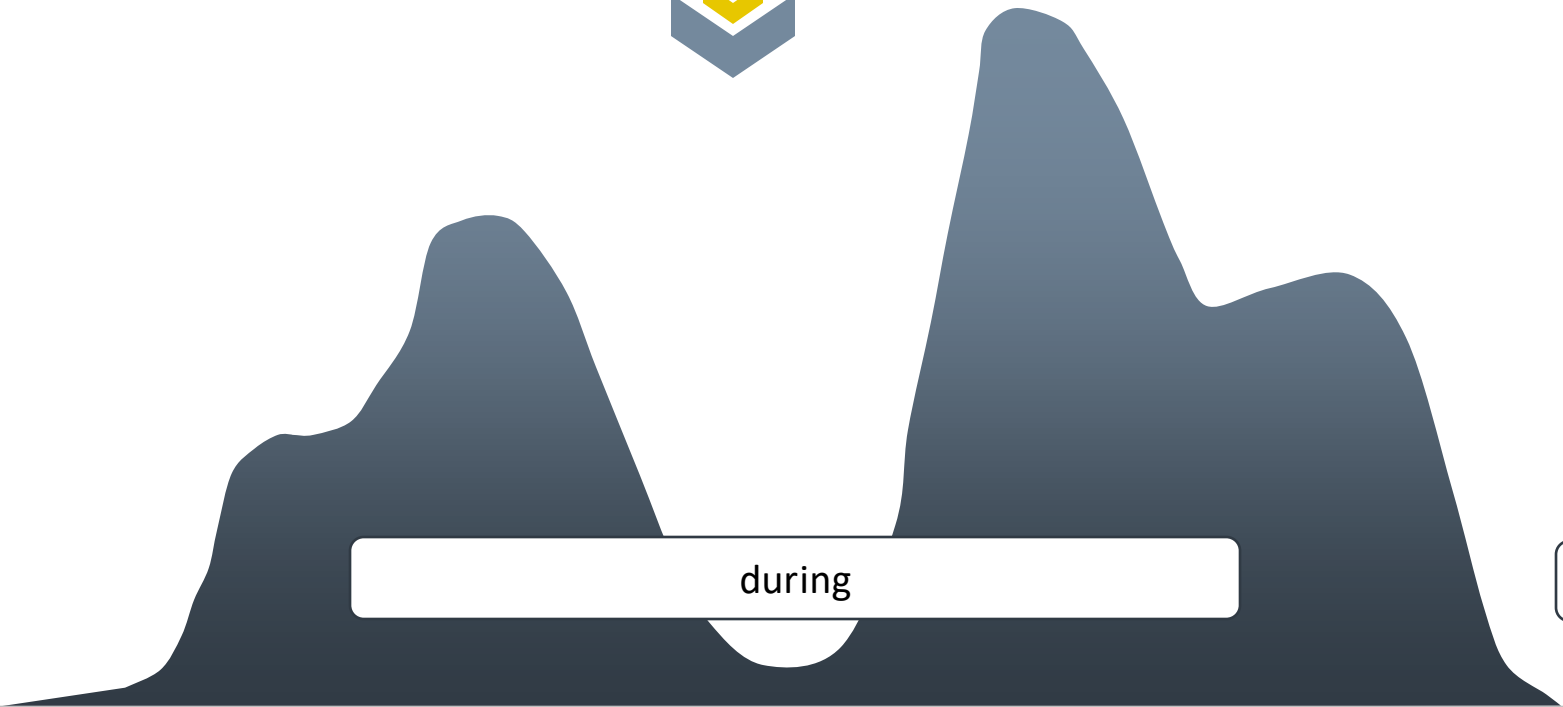


before

during

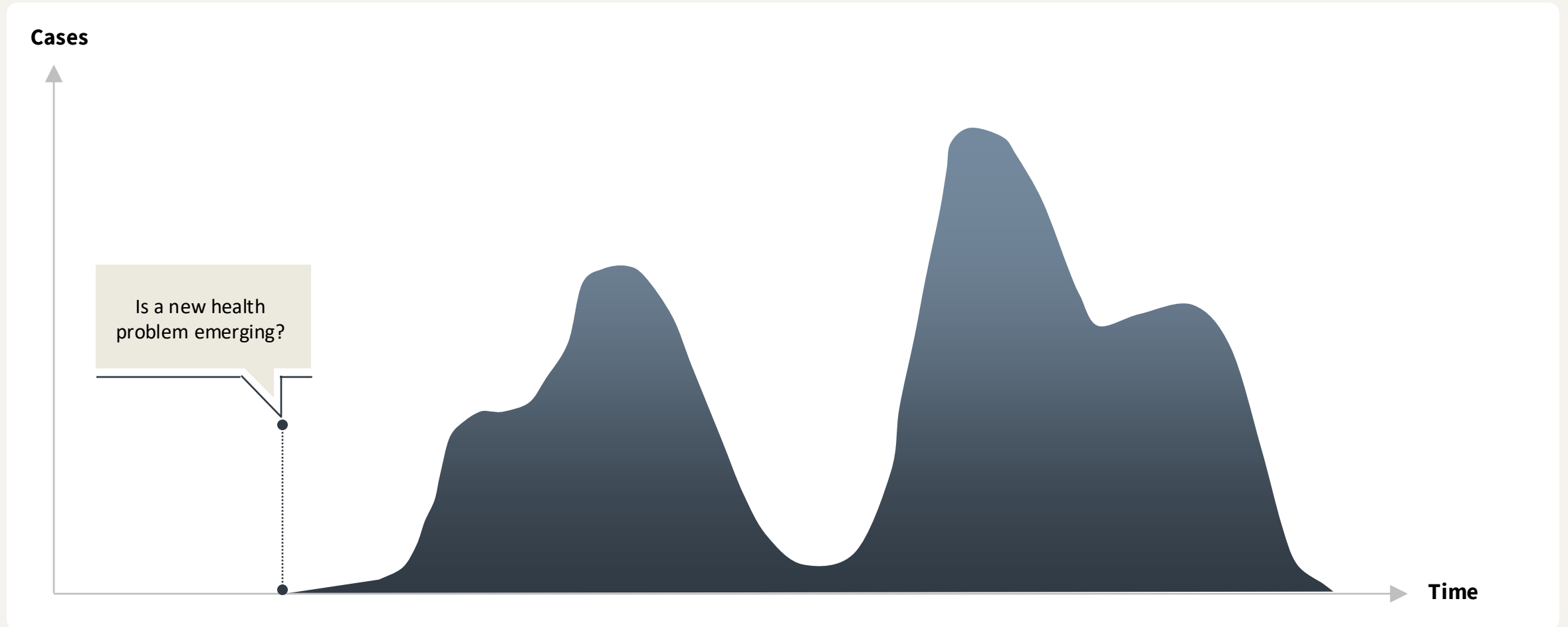
after

Time



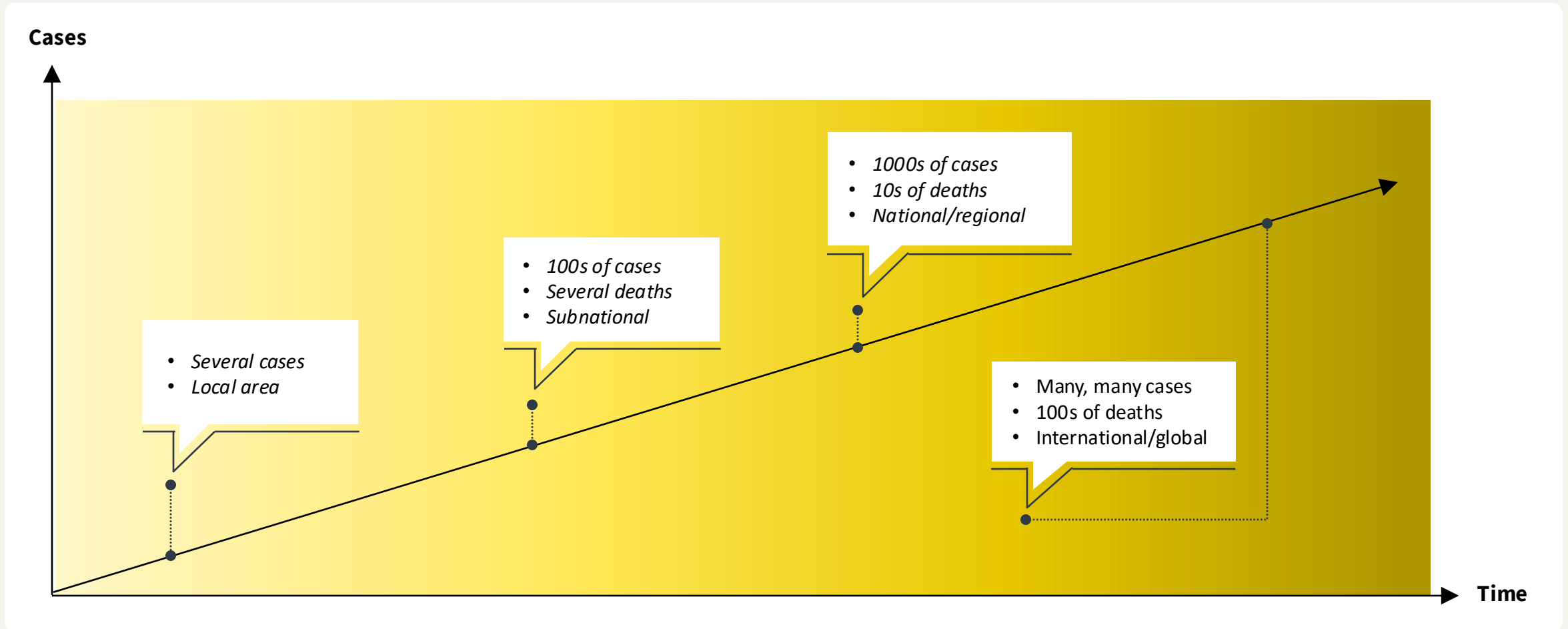
# Surveillance BEFORE a pandemic

*Early Warning*



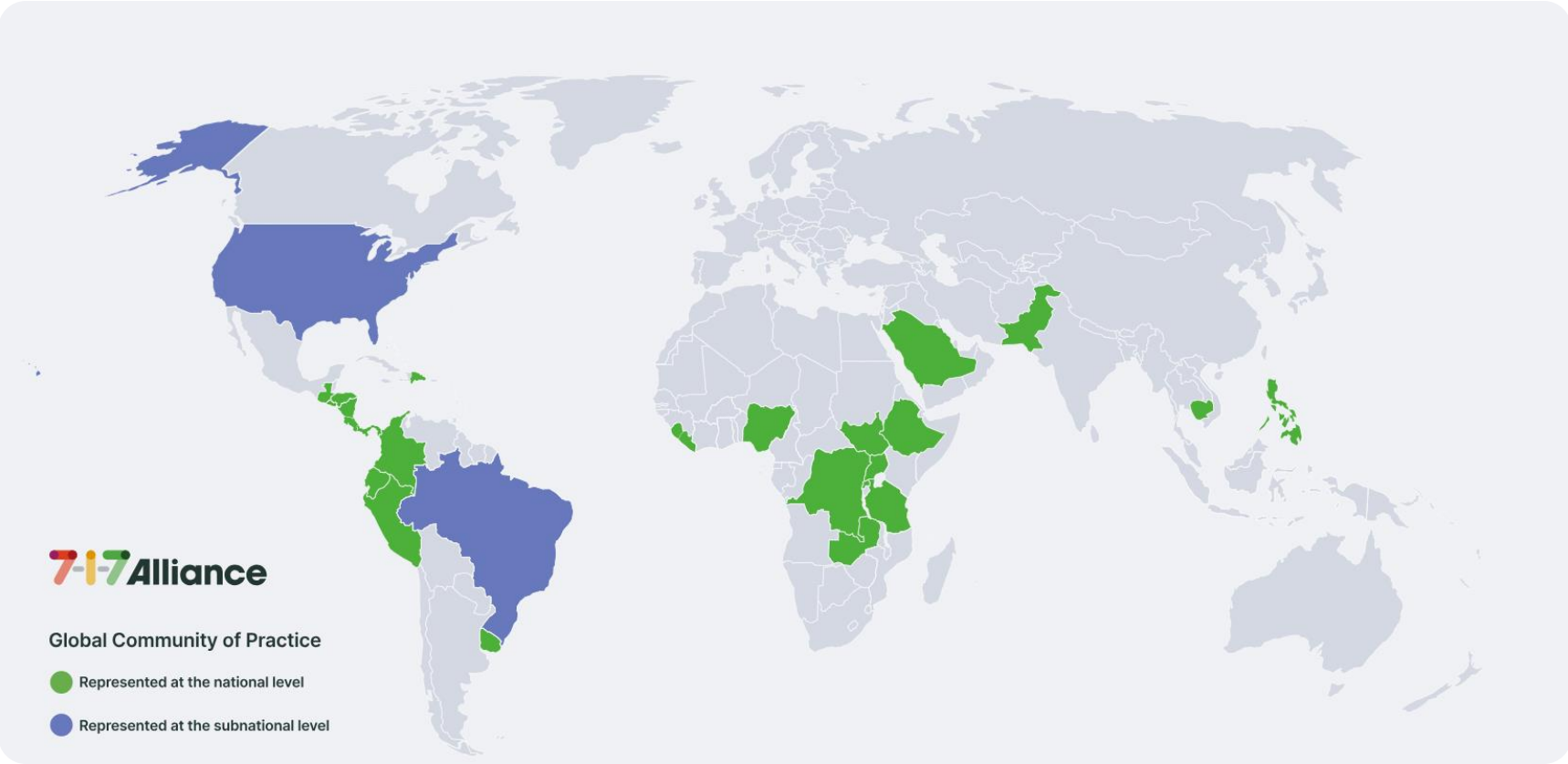
# Early outbreak detection

*facilitates response, limits cases and deaths, can prevent a pandemic*



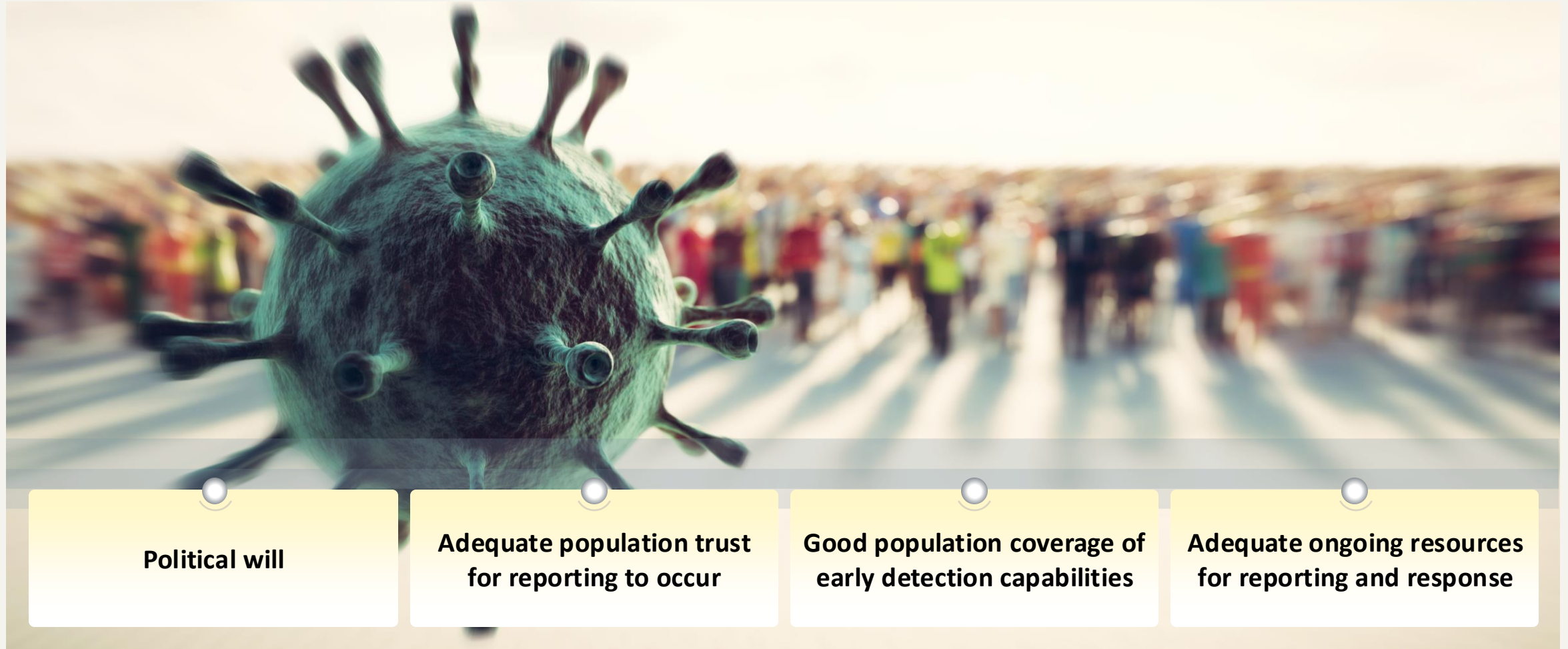
# Early warning and timely response

7-1-7 timeliness metrics and milestones



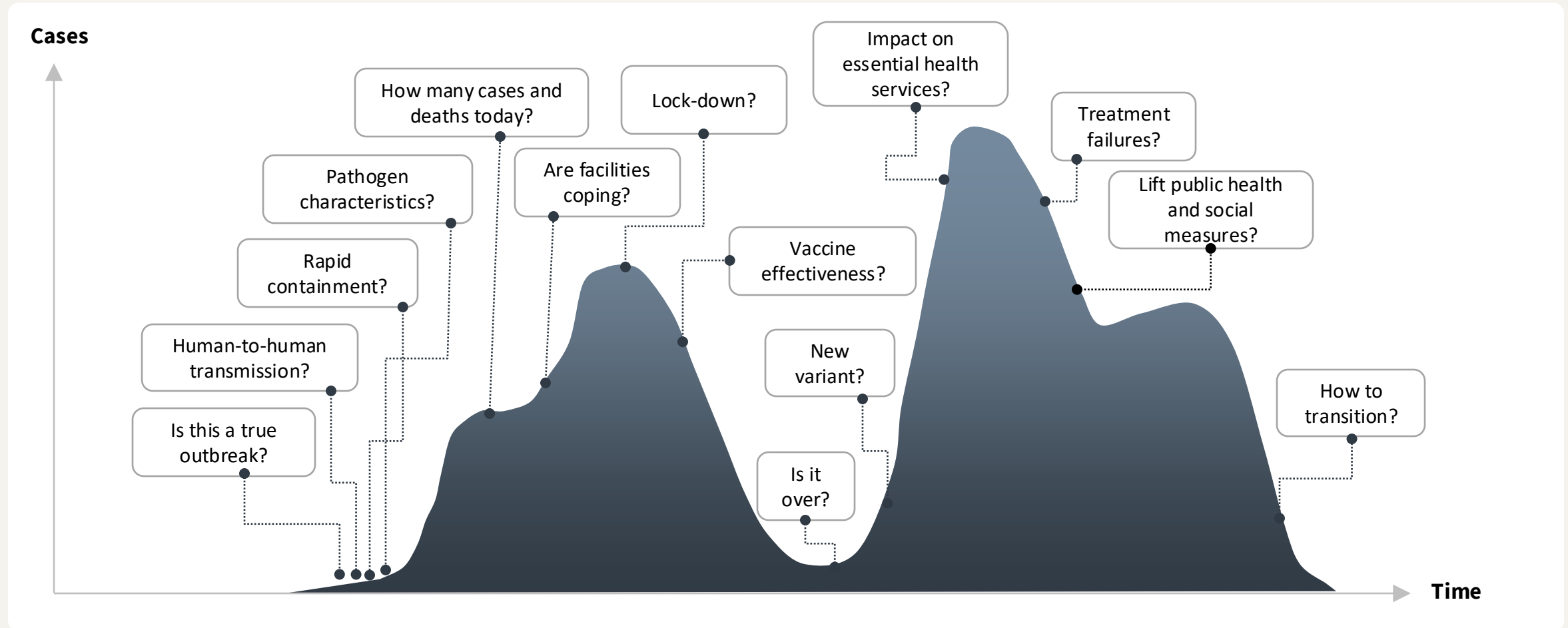
# Democracy and...early warning surveillance

*What is needed?*



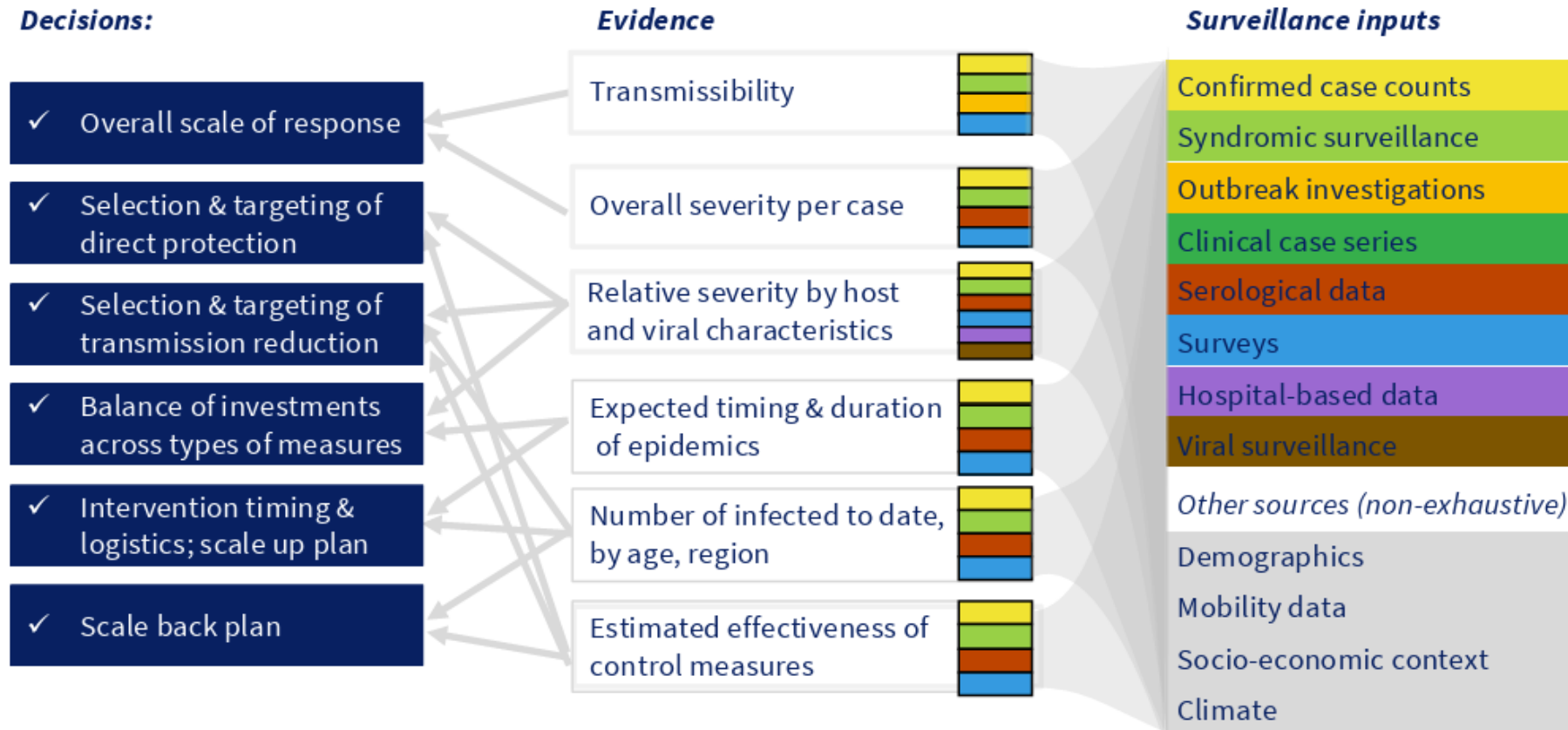
# Surveillance DURING a pandemic

*Health emergencies raise a complex set of questions that traditional disease surveillance systems alone cannot fully answer*



*\*figure adapted from Dr M. Kato, Multi-source Surveillance, WHO SEARO*

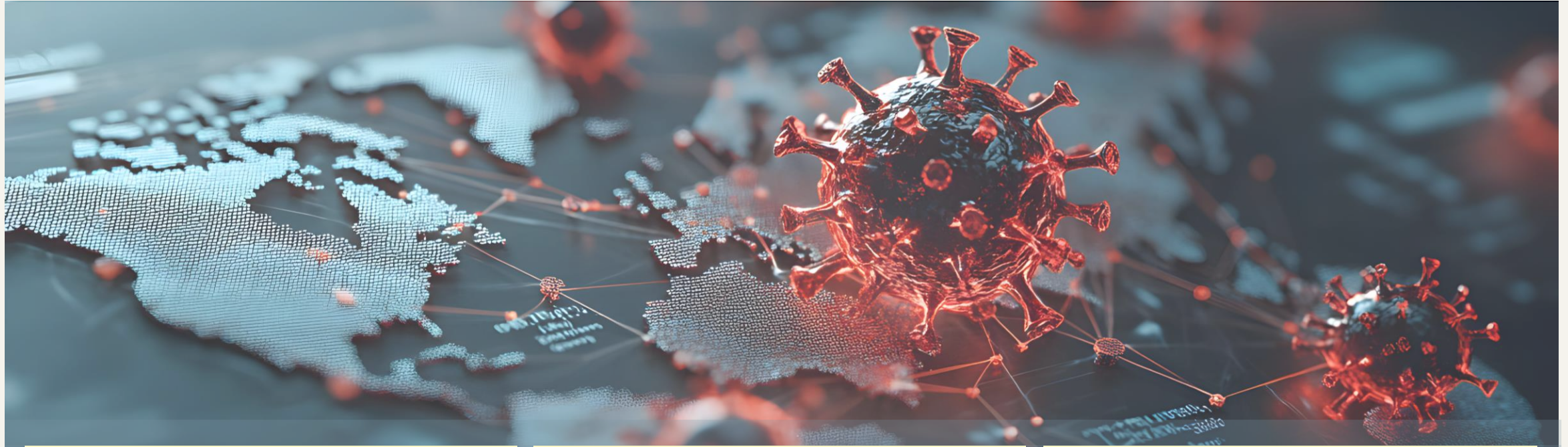
# In a pandemic, many surveillance inputs are needed for effective public health decision-making



\*Source: Lipsitch M and Santillana M, *Curr Top Microbiol Immunol*, 2019

# Democracy and...surveillance during a pandemic

*What is needed?*



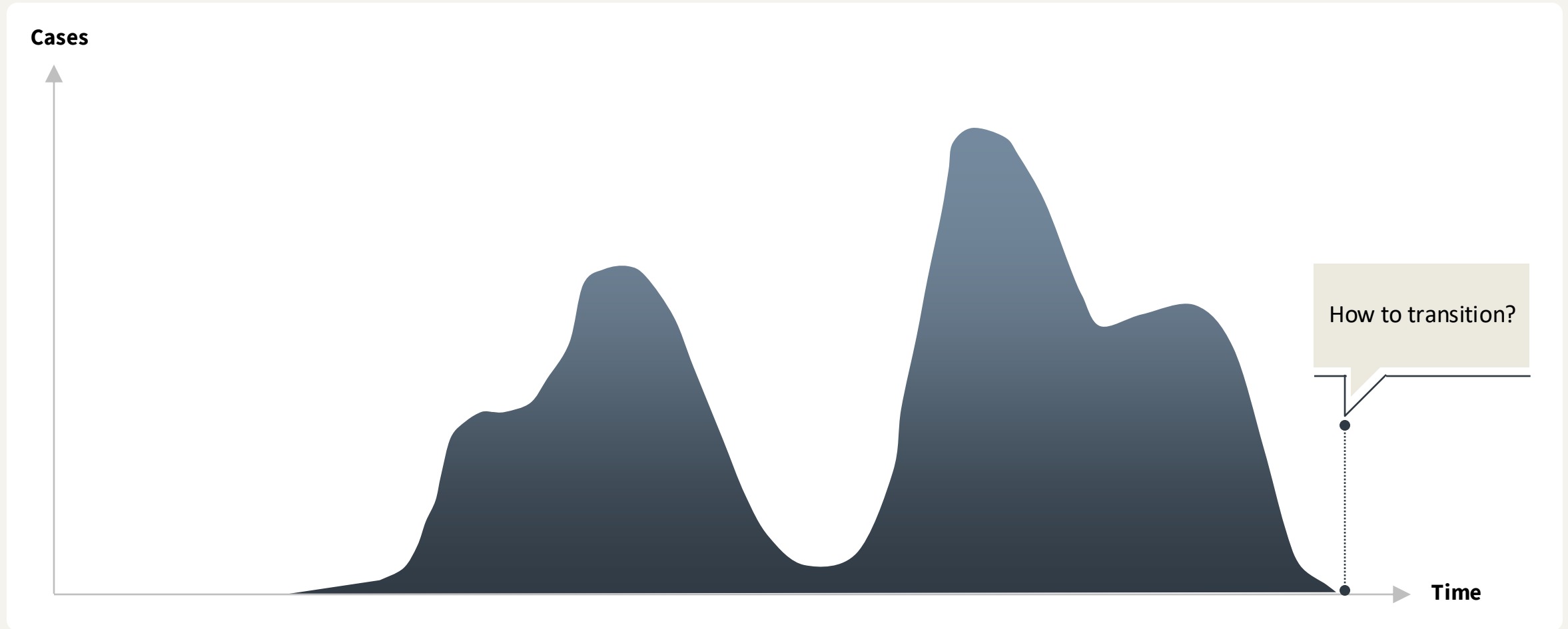
**Collaboration and information-sharing  
across government ministries, across  
sectors, and between countries**

**Adequate communication of changing  
situation for public understanding and  
cooperation**

**Adequate ongoing resources for  
collection, analysis, and dissemination  
of information about rapidly  
changing situation**

# Surveillance AFTER a pandemic

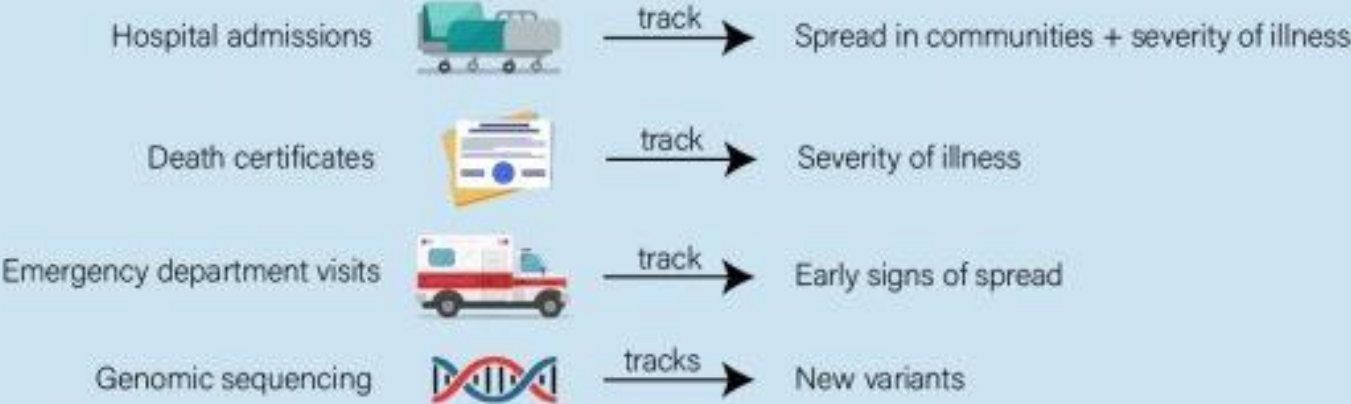
*Integrating surveillance for the pandemic pathogen into routine public health practice*



# COVID-19 surveillance after the public health emergency in the United States

**Although COVID-19 cases and associated hospitalizations have decreased in recent months, COVID-19 remains an ongoing public health challenge**

**Updated public health tracking\* will keep you informed about COVID-19**



**Check [COVID.cdc.gov](https://www.cdc.gov) to know when to take action**

\*To account for changes in available data after the end of the U.S. Public Health Emergency declaration.

[bit.ly/mm7219e1](https://bit.ly/mm7219e1)

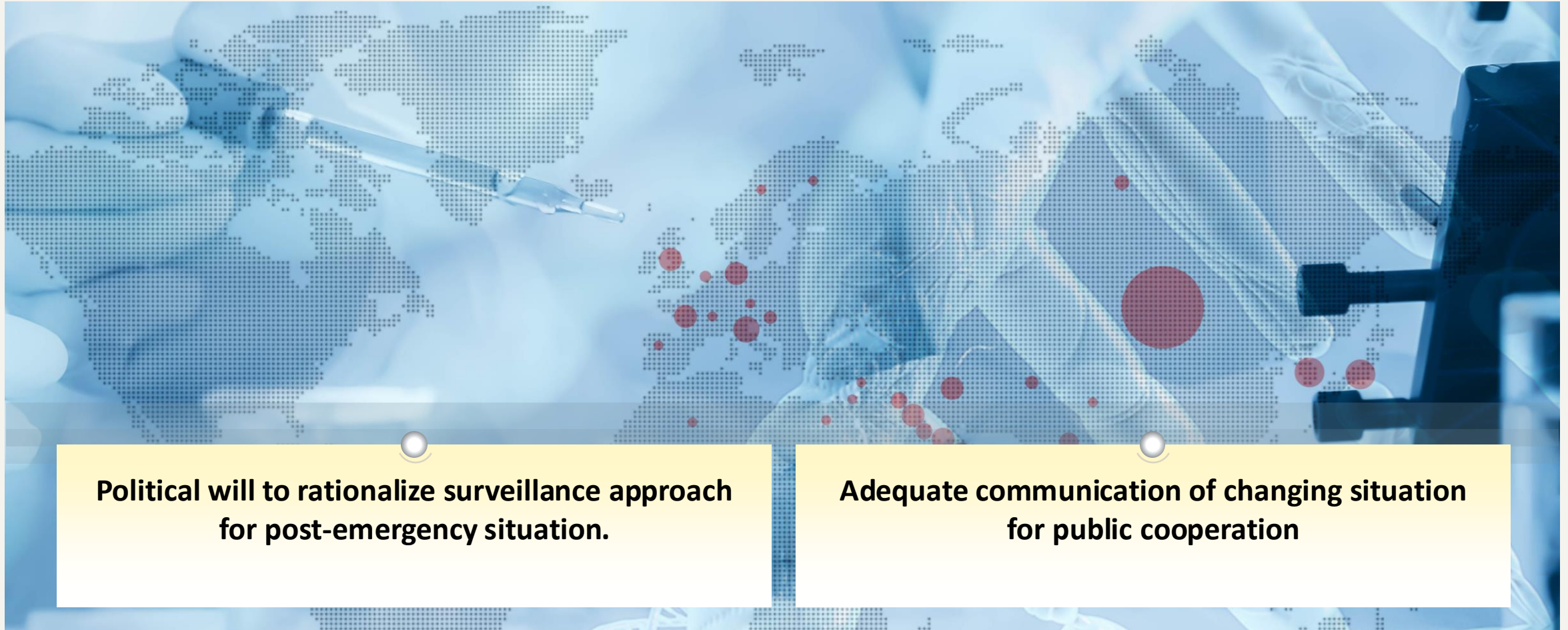
MAY 5, 2023



<https://www.cdc.gov/mmwr/volumes/72/wr/mm7219e1.htm>

# Democracy and...surveillance after a pandemic

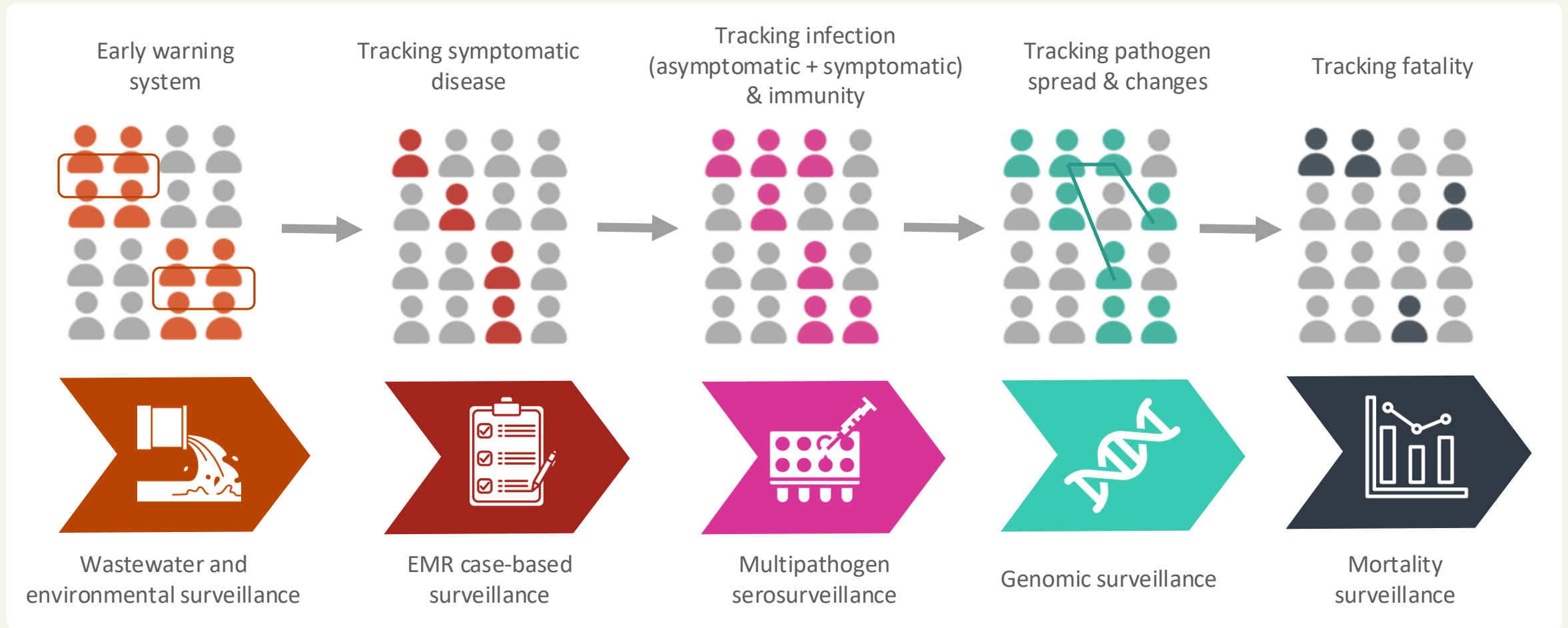
*What is needed?*



**Political will to rationalize surveillance approach for post-emergency situation.**

**Adequate communication of changing situation for public cooperation**

# Newer technologies can efficiently complement traditional surveillance approaches



# In summary...



Public health surveillance systems should be designed to inform decision-making



Information needs are different before, during, and after a pandemic—surveillance approaches need to be flexible and to be able to surge



## Effective surveillance requires

- Political will to address current issues and questions
- Adequate trust from the population
- Adequate resources



Newer tools like wastewater surveillance, multipathogen serosurveillance, and AI for data integration and analytics are promising



Good decision-making in the next pandemic will require reliable information about cases and trends from the whole world





THANK YOU  
**GRAZIE**