

Data-Driven Decision Making

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Epidemiology Bureau

Mandate

Provide and promote **epidemiologic information for evidence-based decision making**

Mission

We provide stakeholders with **surveillance and epidemiologic information to prevent and control outbreaks** and to **improve health policies, programs, and systems**

Develop competent health personnel to detect and respond to public health threats.



Value of ACT - Accurate, Complete, Timely Data

In any response, we need quality data and information for action

- Surveillance data is different from research or survey data
 - “Living” data that will never be perfect
 - Quality depends on primary data sources - disease reporting units
- Balancing between completeness (which may take more time) VERSUS relevance (not 100% complete but valid info at hand)



COVID-19 Data Challenges

COVID-19 tested capacity of EB and its epidemiology network and the information systems used

- Data quality issues due to varying epidemiology and surveillance capacities across all levels
- Existing information system not immediately modifiable to include new diseases
- Functionality of info systems limited by IT capacity across all levels
- Devolved health system posed challenges towards a coordinated and systematic response



COVID-19 Data Quality Initiatives

Governance



Inter-Agency Task Force
For the Management of
Emerging Infectious
Diseases

COVID-19 Surveillance & Quick Action Unit

Objective:
Enable quick action at all levels through end-to-end management and use of data and surveillance information for effective COVID response



The 2020 Revised Implementing Rules and Regulations of Republic Act No. 11332, or the Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act



Policies and Capacity Building

Data Management



Information Systems



Interoperability

NATIONAL TOPLINE NUMBERS

Category	Value
396,749	
1,167	
US	

Increased data processing efficiency

Data Analytics

Revised Community Quarantine Decision Framework for Provinces/HUCs/ICCs



IATF STWG on Data Analytics



Data Platforms



Strategic Communications

Linkages

Multi-sectoral, -agency partnerships



Epidemiology Network

Risk Assessment

Goal: Assess COVID-19 risk to provide strategic directions

- Community quarantines
- Border (local and international) protocols
- Isolation, quarantine, and testing protocols
- Prioritization of response and logistics



IATF and STWG on Data Analytics

Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID or IATF)

- TF organized by the Executive Branch and tasked to assess, monitor, contain, control and prevent the spread of any potential epidemic in the Philippines
- Policy making body

Sub-Technical Working Group on Data Analytics

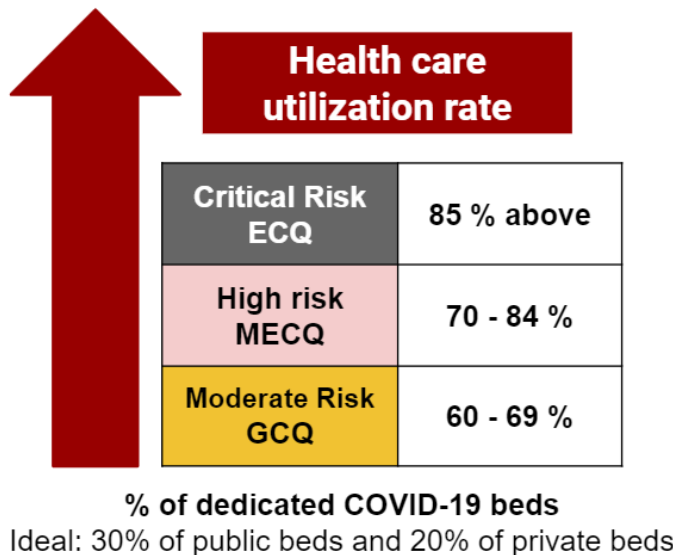
- Provide accurate and timely aggregation and analysis of all relevant data regarding COVID 19 and relevant policy recommendations to the IATF-EID
 - Decision framework for community quarantine
 - LGU Risk Classification
 - National situationer



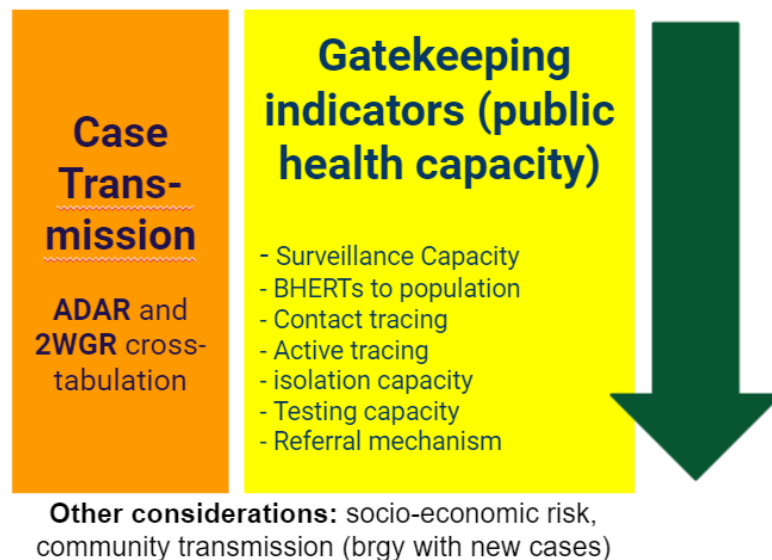
Community Quarantine Decision Framework

In the Community Quarantine Decision Framework developed September 2020, **HCUR, Case Transmission, and Gatekeeping indicators** were the basis for classifying areas into CQs.

Criteria for Escalation



Criteria for De-escalation



WIDE-SCALE lockdowns were imposed with large negative economic impact



Rationale for Policy Shift

- ✓ Even with ECQ, implementation issues and violations abound
- ✓ Granular lockdown implementation is stricter than wide scale community quarantine
- ✓ Cumulative impact of prolonged lockdowns to social, economic, and health objectives
- ✓ Stronger emphasis on actions outside of community quarantine

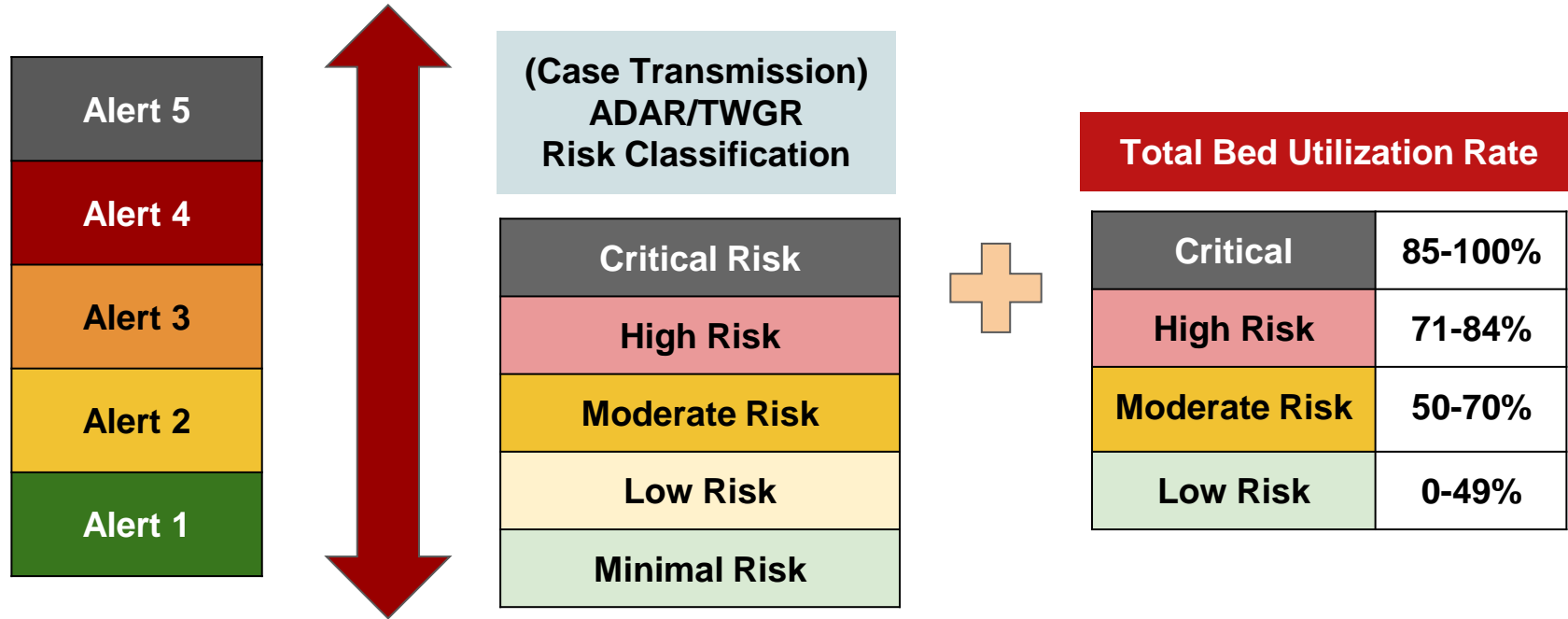
COVID-19 Mitigation Strategies: Global

- Targeted restrictions of high risk activities (i.e. gatherings, indoor, non-essential)
- Guided by results of case investigations on causes of transmission
- Mobility restrictions (i.e. shelter-in-place) at smaller scale when there is community transmission
- Public messaging on risk levels
- Strong border control (i.e. restrictions, quarantine, monitoring)



The Alert Level System

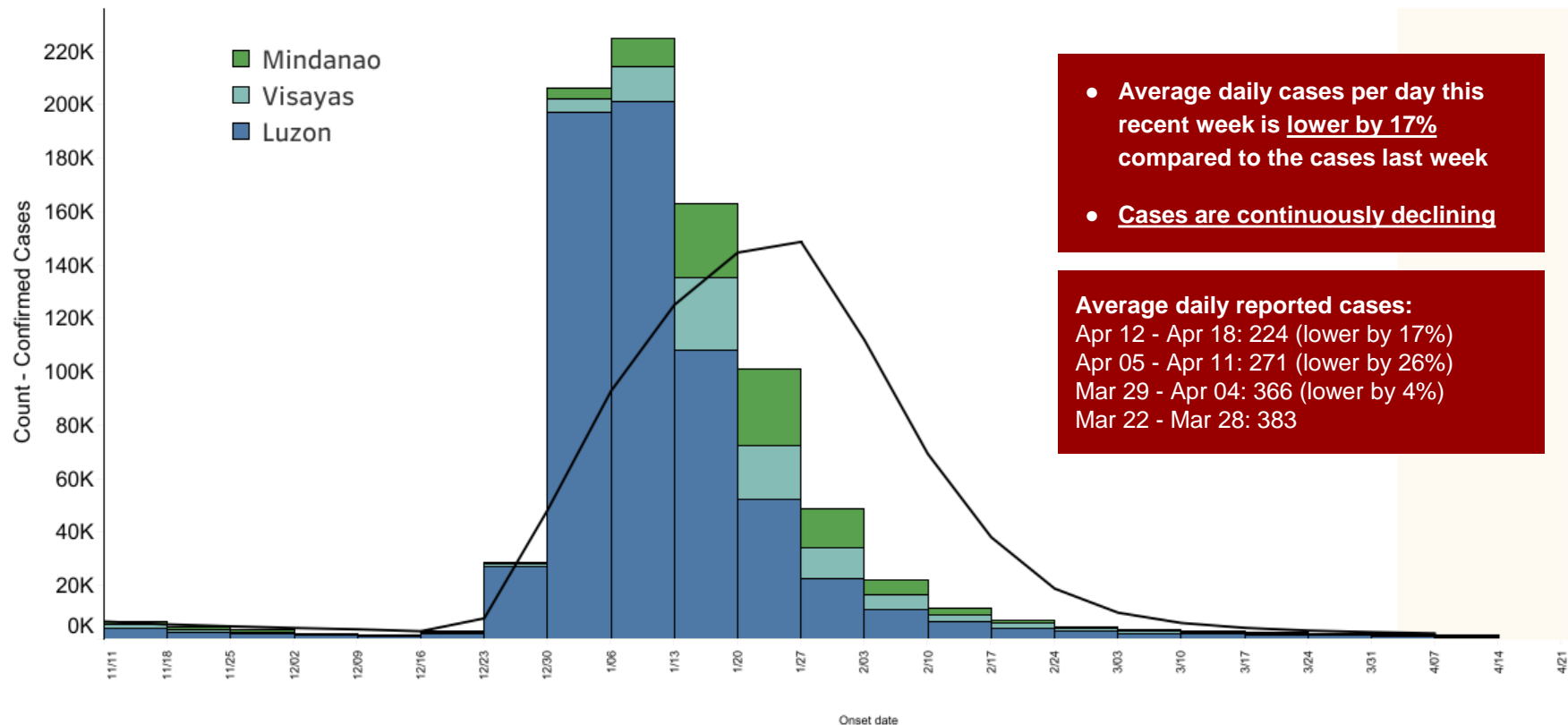
For the current Alert Level System, beds utilization rate and ADAR/TWGR risk classification are still used but **BOTH** are considered when classifying areas into Alert Levels.



Restrictions confined to 3C settings and more value placed on non-restriction related interventions - masking, adequate ventilation, vaccination



Confirmed COVID-19 Cases by Adjusted Date of Onset (N=3,683,211) Philippines, As of April 18, 2022



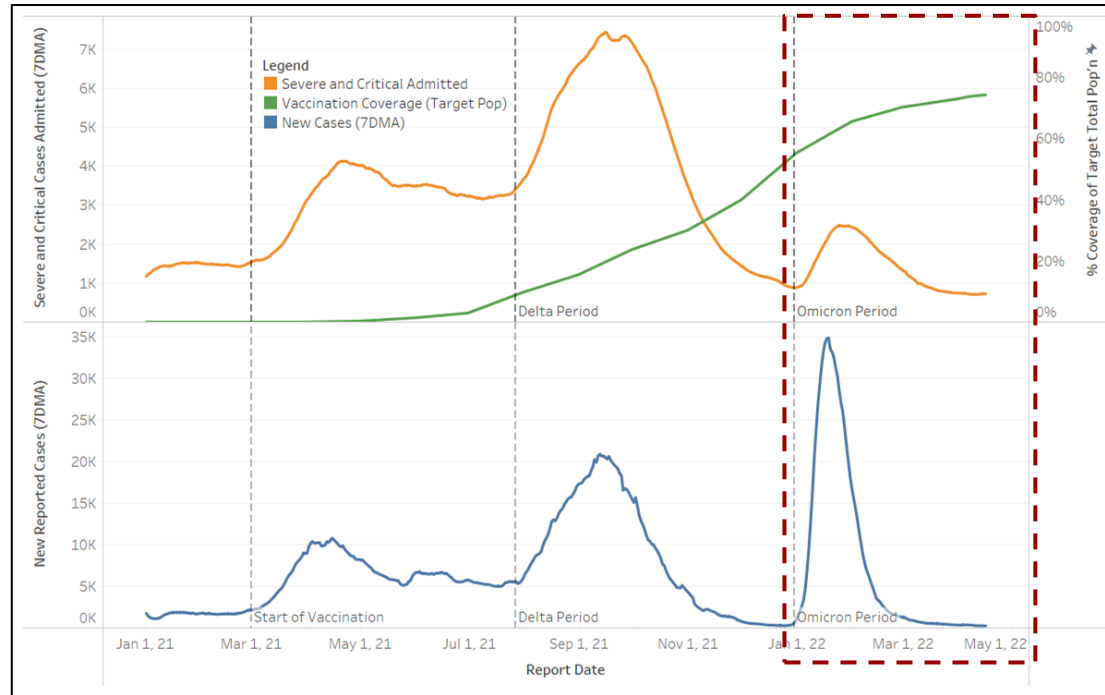
Note: Date of specimen collection (minus 3) or date of report (minus 9) were used as proxy, if date of onset is unavailable.

Data in this area may
change due to
incoming reports

More severe disease 66% lower during Omicron wave despite almost 2x higher new cases as our vaccination coverage increased

New Reported Cases, Severe and Critical Cases Admitted, and Vaccination Coverage

Philippines, January 2021 to April 2022

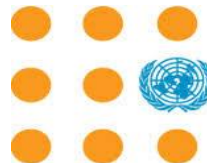


Country Learnings

- Quality data is ideal but should not limit our capacity to provide a good risk assessment and effective recommendations
- Learning to adapt to evolving situation using existing as well as innovative tools
- Crucial to regularly assess our risk assessment tools to ensure that these remain relevant based on country needs, current situation, and available resources



IATF Sub-Technical Working Group on Data Analytics

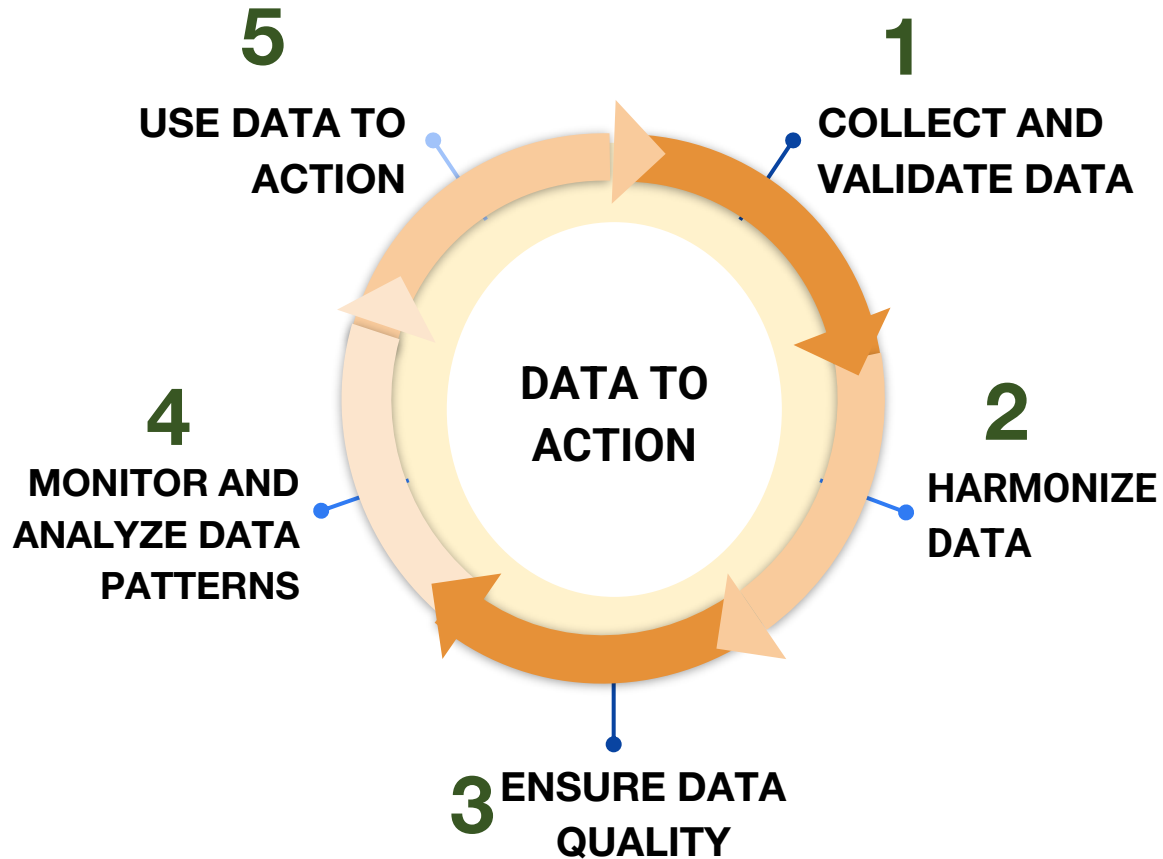


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Epidemiology Bureau COVID-19 Surveillance & Quick Action Unit

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Maraming salamat.