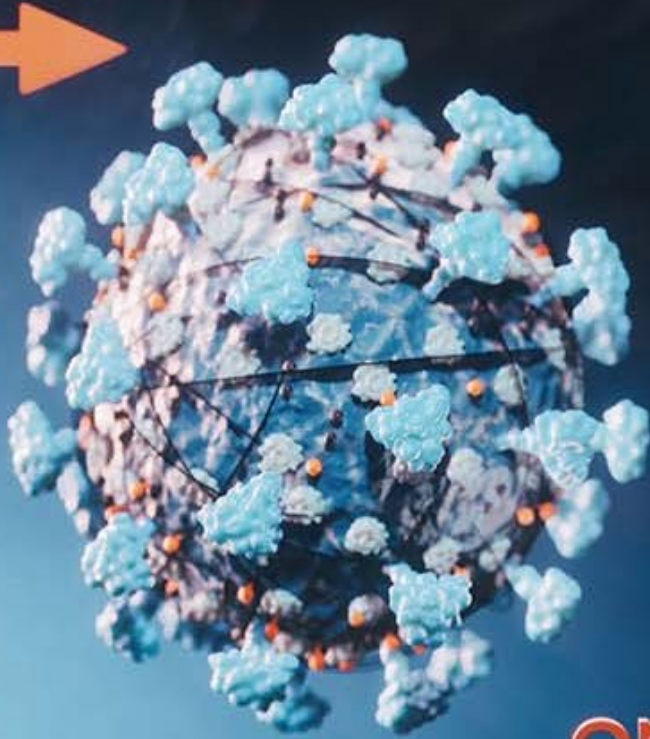


DELTA



OMICRON

OMICRON

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
AMERICAS

Office for Barbados and the
Eastern Caribbean Countries

WEBINAR

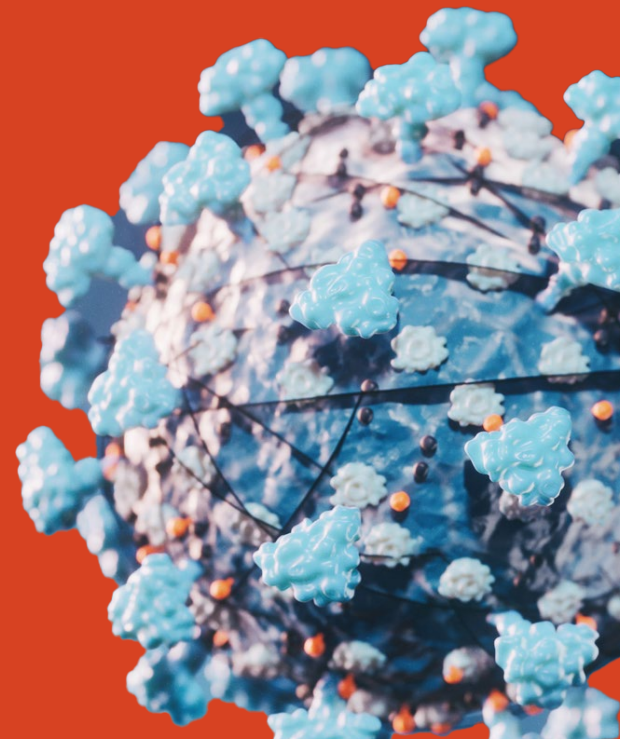
Variant of Concern (VOC) **Delta** to **Omicron**, Transmissibility, Severity,
Impact of Social Mobility - What will drive future trends and Optimizing our response

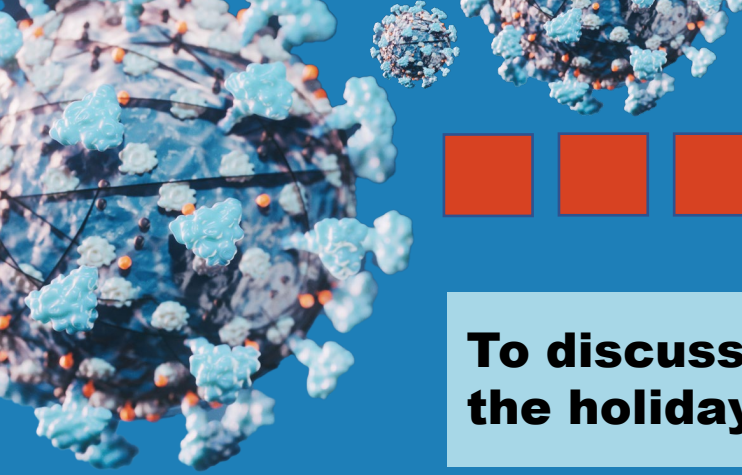
Wednesday, 15 December 2021, 9:30am - 11:00am

Overview of the webinar objectives and country preparedness plan for the surge of cases over the holiday

Dr. Yitades Gebre

PAHO/WHO Representative for Barbados and the Eastern Caribbean Countries





Objectives

To discuss factors contributing to the increase cases during and after the holiday season and Prevention steps to reduce the spread

To provide information on the factors driving transmission of the new VOC Omicron and Delta SARS-CoV-2

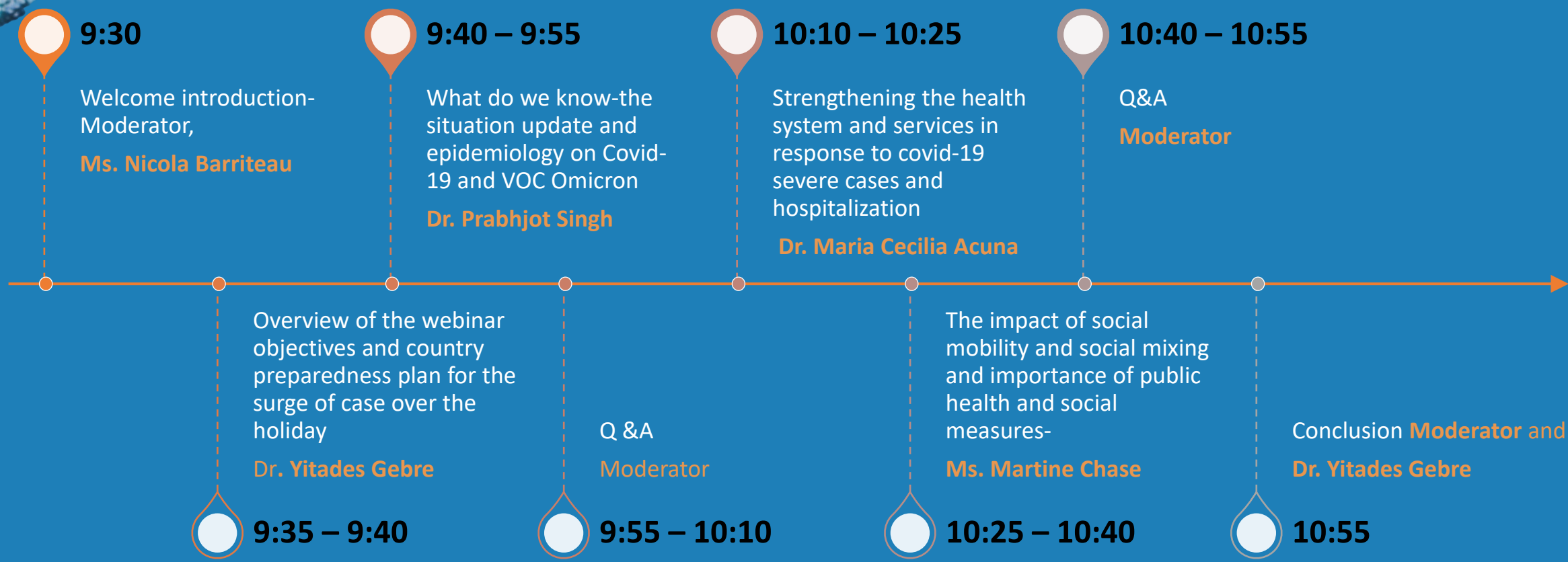
To discuss the impact of social mobility and social mixing and importance of public health and social measures

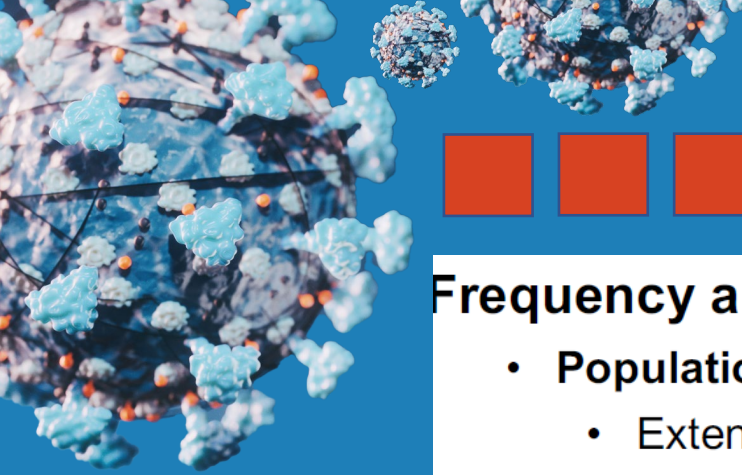
To strengthen the health systems and services for clinical management for patients with Severe Covid-19 Cases

To advise all countries to reassess and revise national plans based the current situation for the new year



Agenda





■ ■ ■ What will continue to drive future trends?

Frequency and magnitude of subsequent waves will depend on multiple factors:

- **Population level immunity from natural infection and/or vaccination**, including
 - Extent of infection
 - Extent of vaccination
 - Vaccine characteristics and efficacy
 - Strategy and priority groups (e.g., at risk groups, by age group)
 - Extent of vaccination coverage/resistance
 - Duration of protection against severe disease/death and infection (vaccine, natural immunity)
- **Severity of disease, access to early clinical care and availability of therapeutics**
- **VOCs** emerging and circulating, and transmissibility of VOCs, properties of immune escape
- **Use of Public Health and Social Measures**, including:
 - Type of measures – identify most effective measures at lowest cost (pandemic fatigue, political/economical cost)
 - Timeliness of implementation
 - Adherence to measures



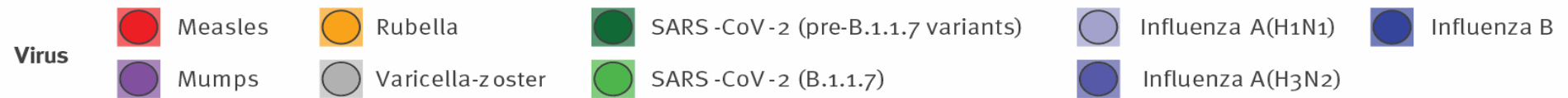
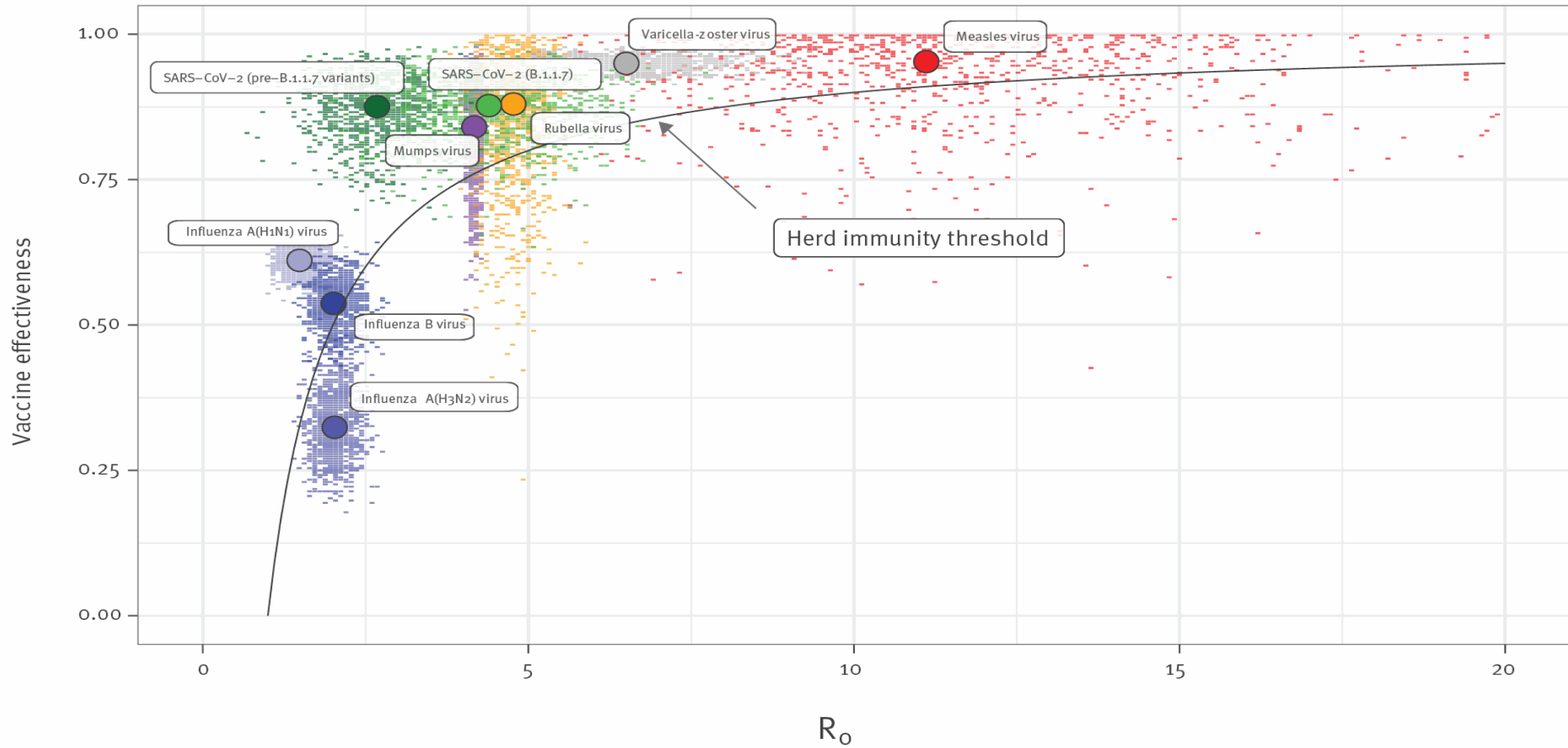
PAHO



Factors driving transmission

- The virus continues to evolve resulting in **more transmissible variants**
- **Highly susceptible population:** Driven by unequal vaccine distribution & access to life saving tools, a large proportion of the world population remains susceptible to infection & at increased risk of severe disease and death
- **Increased social mobility and social mixing** provides increases exposure to the virus, combined with **Inappropriate, inconsistent use of proven Public Health and Social Measures**
- **Misinformation, disinformation, conflicting messaging, politicization**





What do we know – current situation and epidemiology of Covid-19 and Variant of Concern Omicron

Dr. Prabhjot Singh

PAHO Advisor, Health Surveillance & Disease Control and Prevention

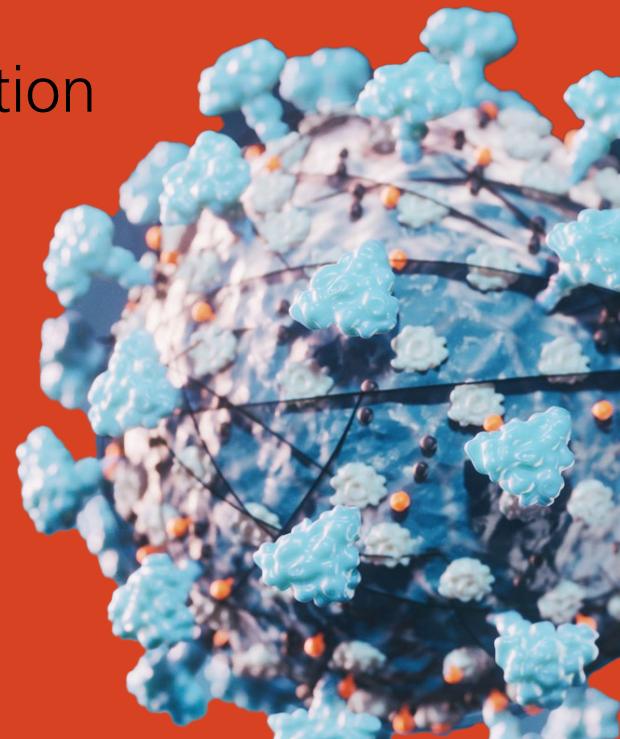
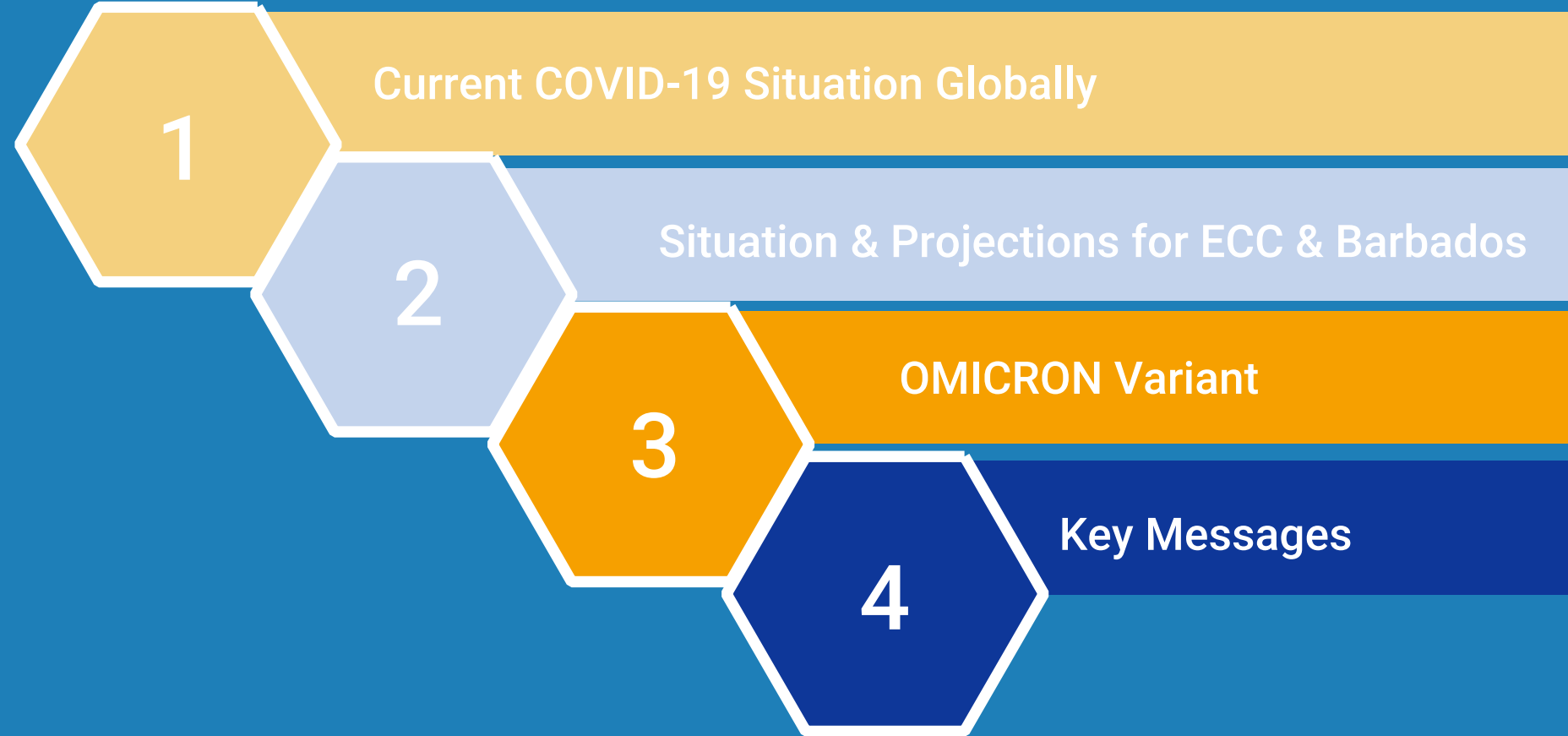




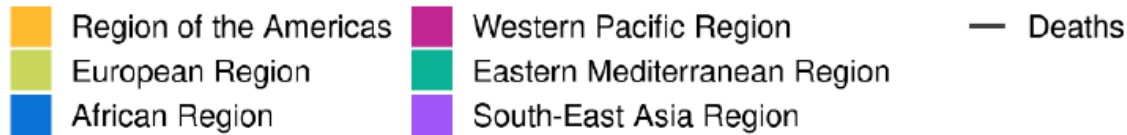
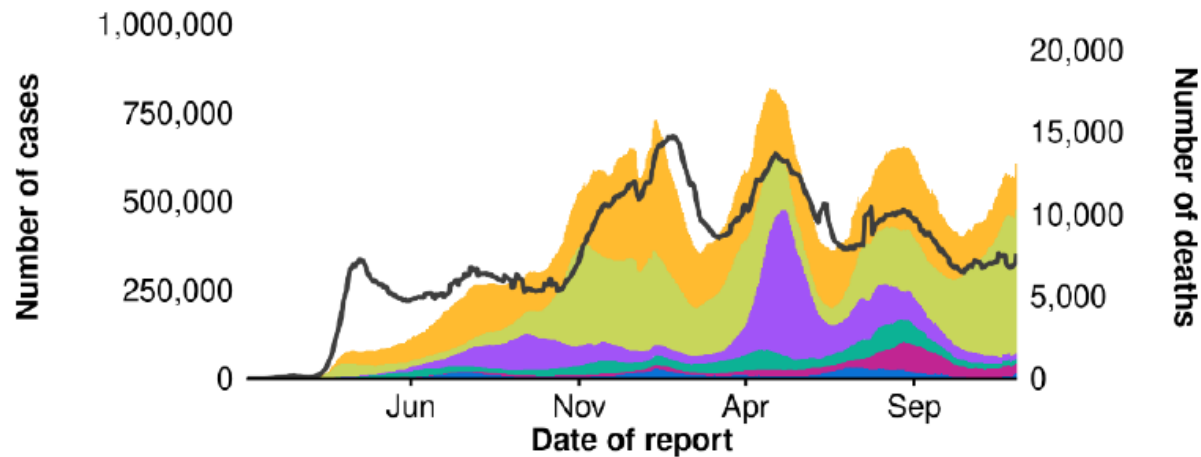
Table of contents



Global Situation

(as of 3 December 10H CET)

- **Previous 24 hours:**
 - 653,682 new confirmed cases.
 - 7,804 new deaths.
- **Cumulative:**
 - 263,563,622 confirmed cases.
 - 5,232,562 deaths.



data smoothed with 7-day moving average

Countries with the highest number of new cases in previous 24 hours

Country		New Cases	Total Cases	New Deaths	Total Deaths
United States of America		131,187	48,413,265	1,831	778,336
Germany		74,352	6,051,560	390	102,568
United Kingdom		53,067	10,329,078	141	145,281
France		48,129	7,538,806	97	116,847
Russian Federation		32,930	9,736,037	1,217	278,857
Poland		26,961	3,623,452	470	85,126
Netherlands		23,142	2,684,734	65	19,524
Turkey		21,747	8,839,891	192	77,230
Czechia		18,582	2,211,972	50	33,450
Italy		16,810	5,060,430	72	134,003

Trend line shown for the past 12 months

COVID-19 Incidence – cases per 1000 people

Country / Territory	May					Jun				Jul				Aug					Sept				Oct				Nov					Dec					Country / Territory
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
Antigua and Barbuda	0.1	0.1	0.1	0	0	0	0	0	0	0	0.1	0.1	0.2	0.4	0.6	1.3	1.8	1.7	4.3	4.4	4.2	3.7	2.6	1.5	1.2	0.5	0.3	0.3	0.1	0.1	0					Antigua and Barbuda	
Barbados	0.2	0.1	0.1	0	0	0	0	0.1	0	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.8	1.1	1.7	1.9	3.6	4.2	5.8	5.2	8.2	8.4	7.2	7	5.3	3.9	3.2	2.5				Barbados	
Dominica	0	0	0.1	0.1	0	0	0	0	0	0	0.1	0	0.1	2.1	7.7	5.5	4.1	2.7	6.9	5.5	5.3	5.3	4.4	0.9	4.9	3.8	2.5	0	8.9	1.9	4.3	2				Dominica	
Grenada	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.3	0.7	7.8	9.8	13	6.7	3.3	2.4	1	0.6	0.2	0.2	0	0.1	0.1	0.2	0.1				Grenada	
St. Kitts & Nevis	0	0	0.1	0.3	0.2	2	2.7	1.6	1.1	0.7	0.4	0.3	0.5	0.4	0.8	3.1	4.3	3.3	4.4	3.7	3.6	2.3	6.8	2.6	1.3	0.8	0.9	0.6	0.3	0.2	0.1	0.1				St. Kitts & Nevis	
St. Lucia	0.5	0.9	0.7	0.6	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.2	0.5	0.8	2.4	4	4.4	5	3.7	3	2.9	2.5	1.5	1.1	1.1	0.7	0.6	0.5	0.4	0.4	0.3	0.3				St. Lucia	
St. Vincent & Grenadines	0.3	0.2	0.3	0.4	0.3	0.3	0.4	0.2	0.1	0	0.2	0.1	0.2	0	0.1	0	0.1	0.4	1	2.5	4.6	3	3.8	2.9	2	1.2	0.9	1.3	0.6	0.8	0.9	0.9				St. Vincent & Grenadines	
Anguilla	0.3	0.7	0	0	0	0	0	0	0.1	0	0.1	0	0.1	0	0.9	1.9	1.9	4.1	1.1	0.9	2.2	4	7.9	8.2	8.3	10	6.3	6.5	8.7	4.4	5.3	7.2				Anguilla	
Montserrat	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.2	0.2	0.4	0.2	0.4	0.2	0.2	0	0.2	1.4	0	0	0	0	0	0.6	0	0	0				Montserrat	
Virgin Islands (UK)	0.8	1	0	1.3	0	0.2	0	0.1	5.2			12	3.7	1.1	0.7	0.5	0	2.4	0.1	0	1.1	1.4	0.2	0	0	0	0	0	0.7	0.3	1.4	0.9				Virgin Islands (UK)	
French Guiana	2.2	2.7	3.1	2.2	2.2	1.9	2.2	2.1	1.3	1.3	1.2	1.8	1.6	1.8	2.4	2.9	3	3.1	2.7	3.4	3.5	5	2.7	1.9	1.6	1.3	1.3	0.7	0.6	0.6	0.5	0.7				French Guiana	
Martinique	0.9	0.5	0.3	0.5	0.2	0.2	0.2	0.2	0.3	1.1	5.8	6	14	9.9	7.8	6.2	3.3	2.7	2	1.6	1.1	0.9	1	0.9	1	0.9	0.8	0.5	1.8	1.5	1.7	1.6				Martinique	
Guadeloupe	2	1.6	1.1	0.9	0.6	0.4	0.3	0.3	0.4	0.3	0.4	0.8	2.7	3.8	7.5	6.7		10	4.9	2.4	1.6	1.1	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0	0.3	0.4				Guadeloupe	
St. Barthelemy	0.6	1.6	0.6	0.7	0.6	0.3	0.8	0.3	0.3	0.6	0.5	0.8		6.5	2.6	2.1	3.9	1.5	0.6	1.1	1	1.5	0.9	0.1	0	0.1	0.1	0	0.5	0.6	0.2	0.9				St. Barthelemy	

Transmission Intensity
 Low 0 1 3 4 High



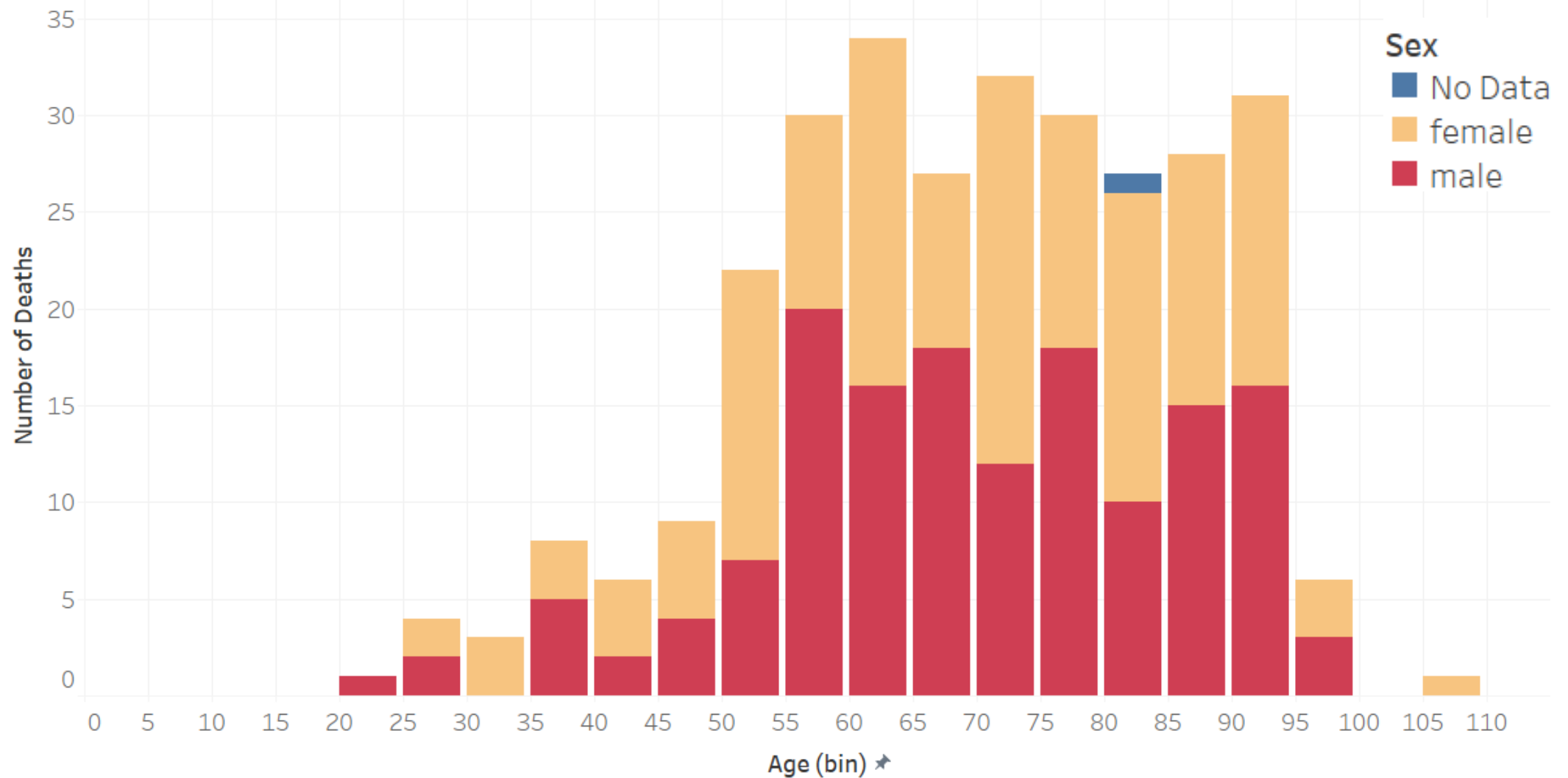
Projections: Jan –Feb (60-day period)

Country	Rt	By End Feb				
		Sick	Med. Consults	Hospitalizations	ICU Adm.	Deaths
Anguilla	1.38	1016	508	203	85	6
Antigua and Barbuda	2.03	2444	1222	489	205	8
Barbados	0.84	1870	935	374	157	13
Saint Kitts and Nevis	0.97	120	60	24	10	1
Dominica	0.27	381	190	76	32	3
Grenada	0.53	80	40	16	7	0
Martinique	0.91	2147	1073	429	180	14
Saint Lucia	0.86	243	122	49	20	2
French Guiana	1.11	1547	774	309	130	10
St. Vincent & the Grenadines	1.04	541	271	108	45	3

Cautious use of estimates – based largely on reported data and surveillance assumptions – wide confidence intervals for some

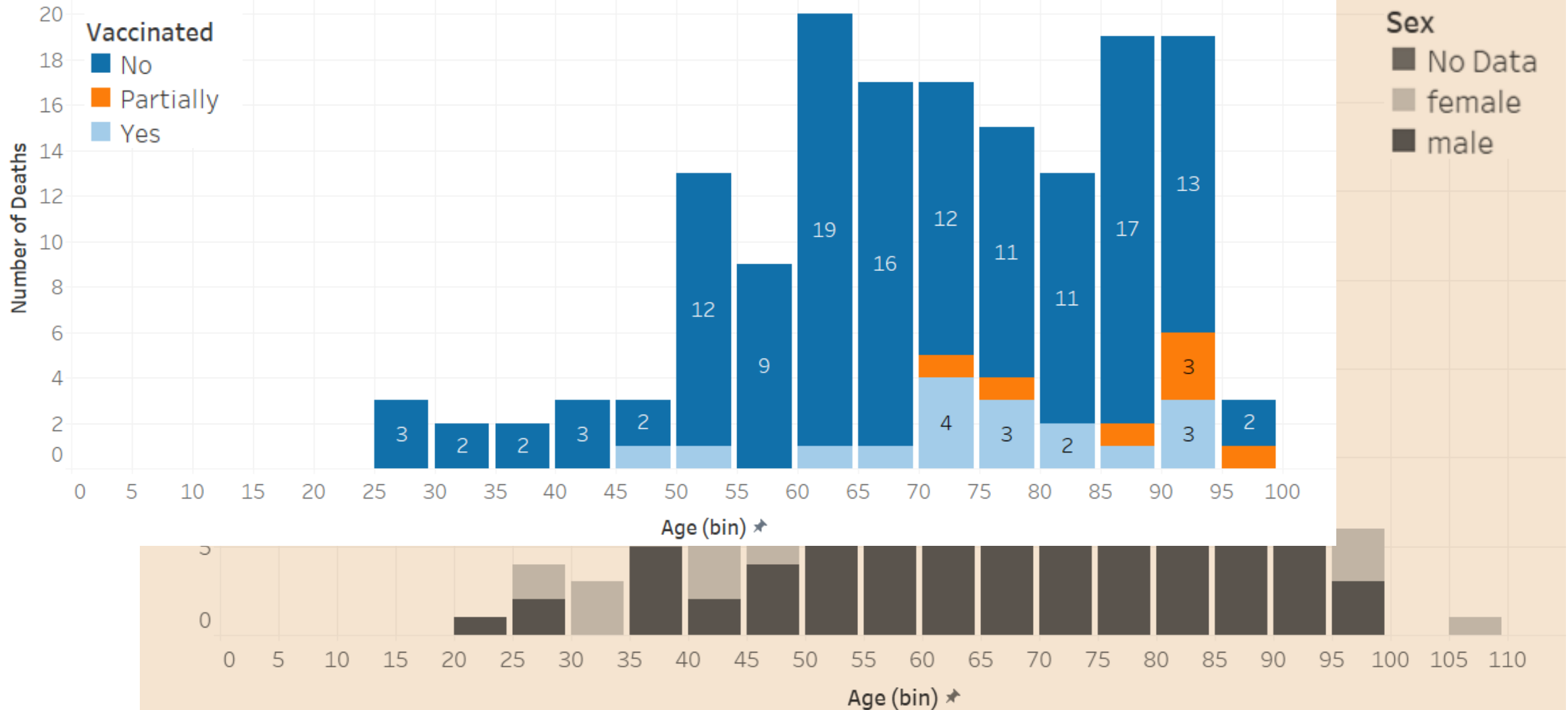
COVID-19 Deaths

Deaths by Age Group and Sex in ECC Countries - Oct - Dec 2021

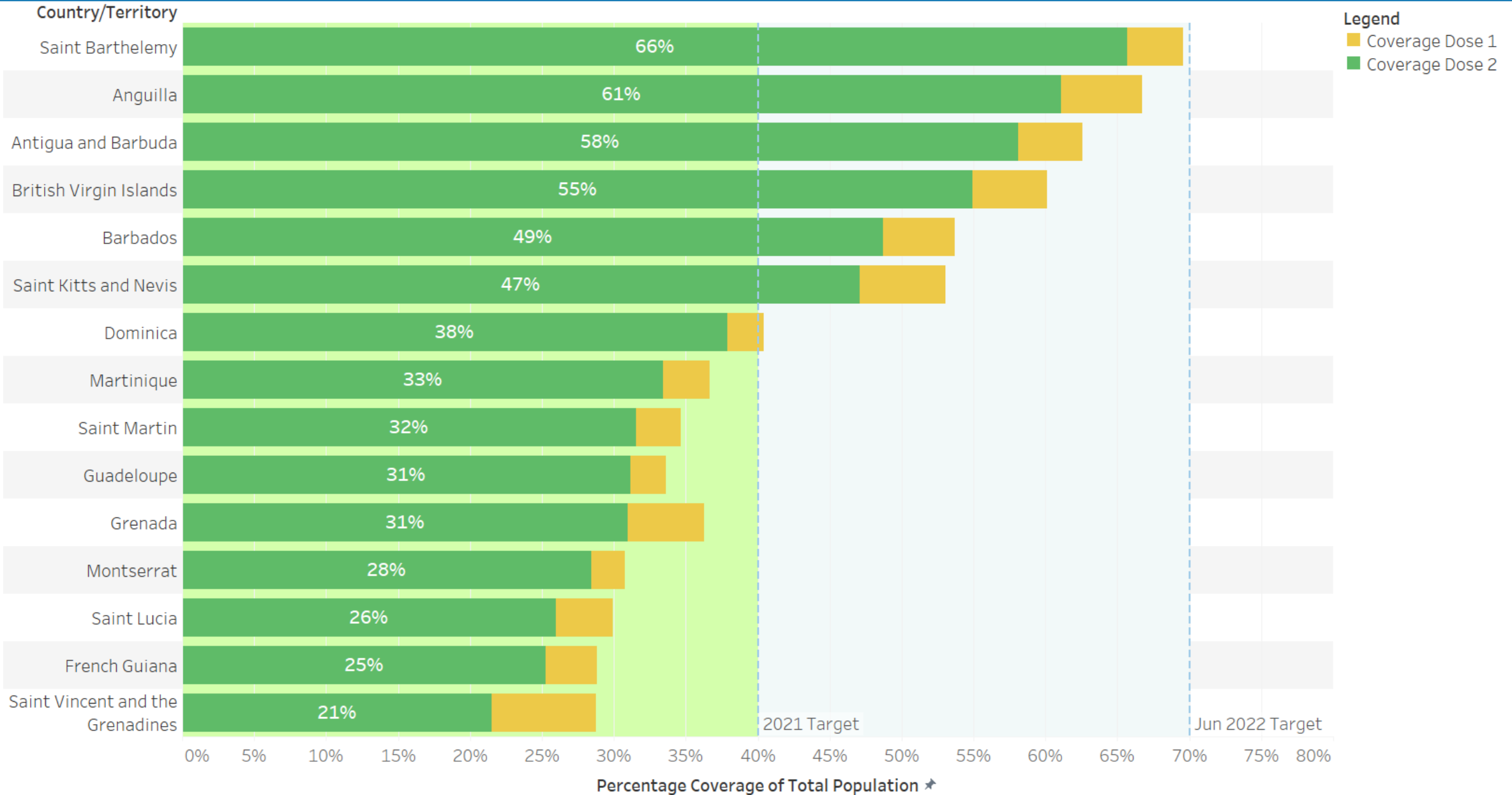


COVID-19 Deaths

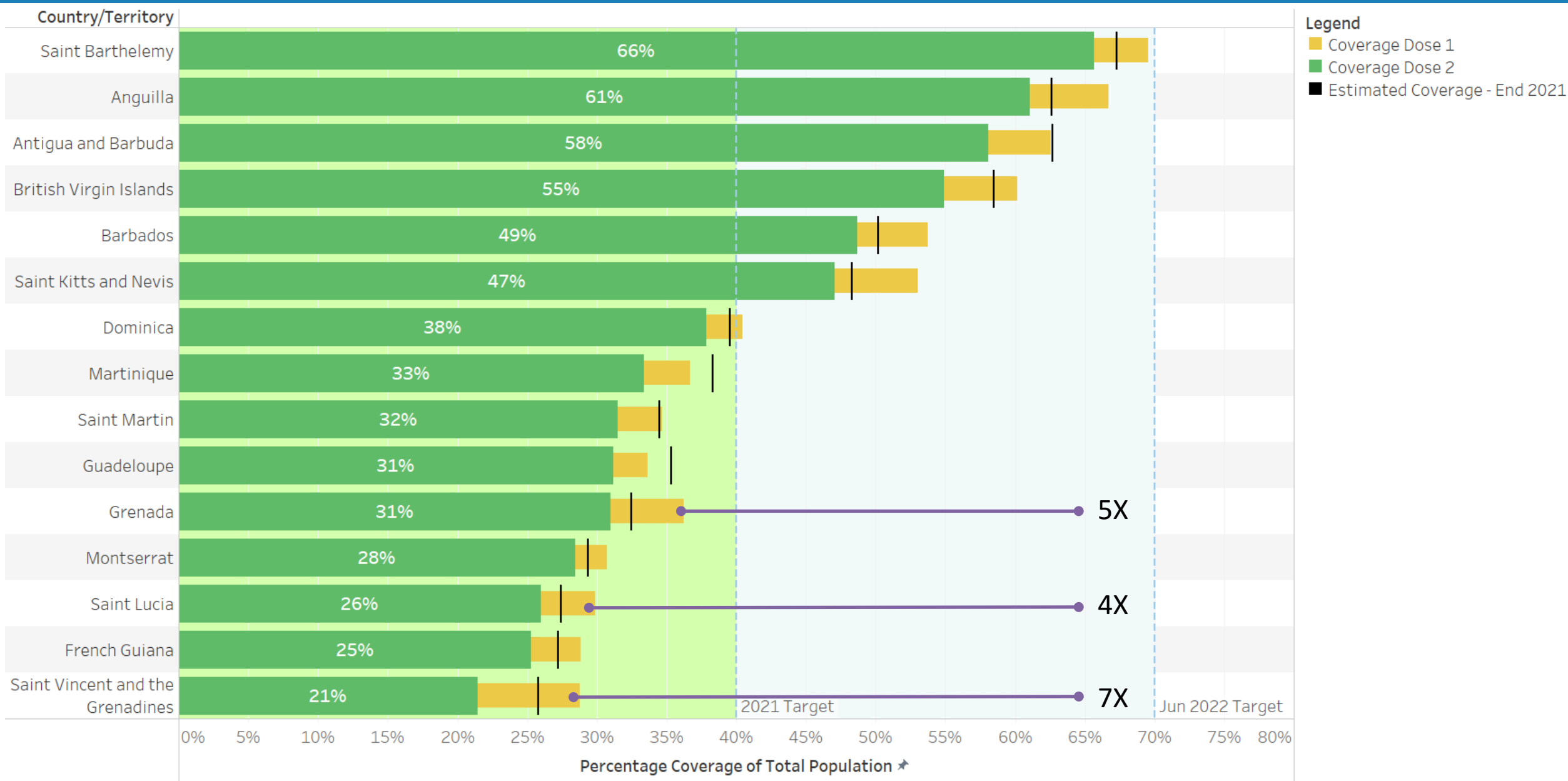
Deaths by Vaccination Status in Barbados - Oct - Dec 2021



Vaccine Coverage in ECC and Barbados

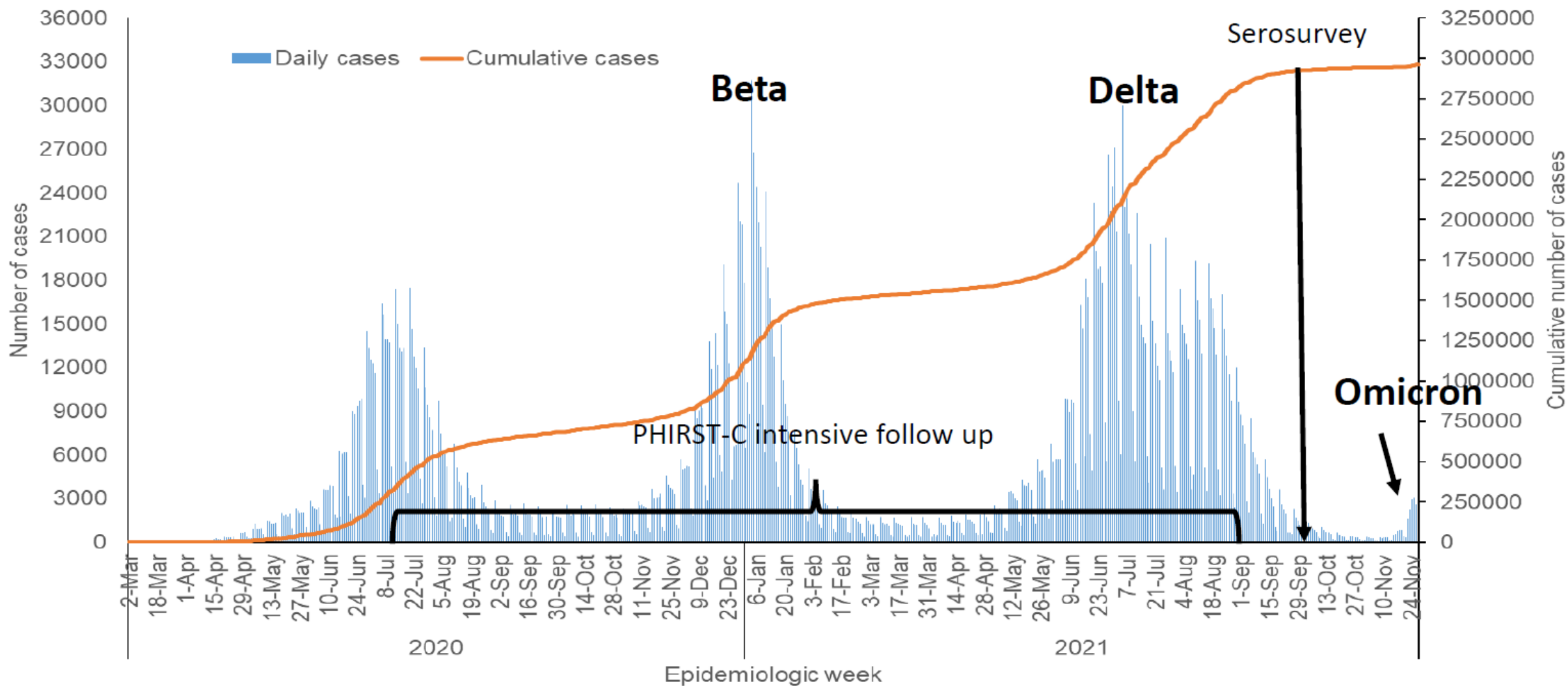


Vaccine Coverage in ECC and Barbados



COVID-19 in South Africa

Omicron after two intense waves of Beta and Delta variants

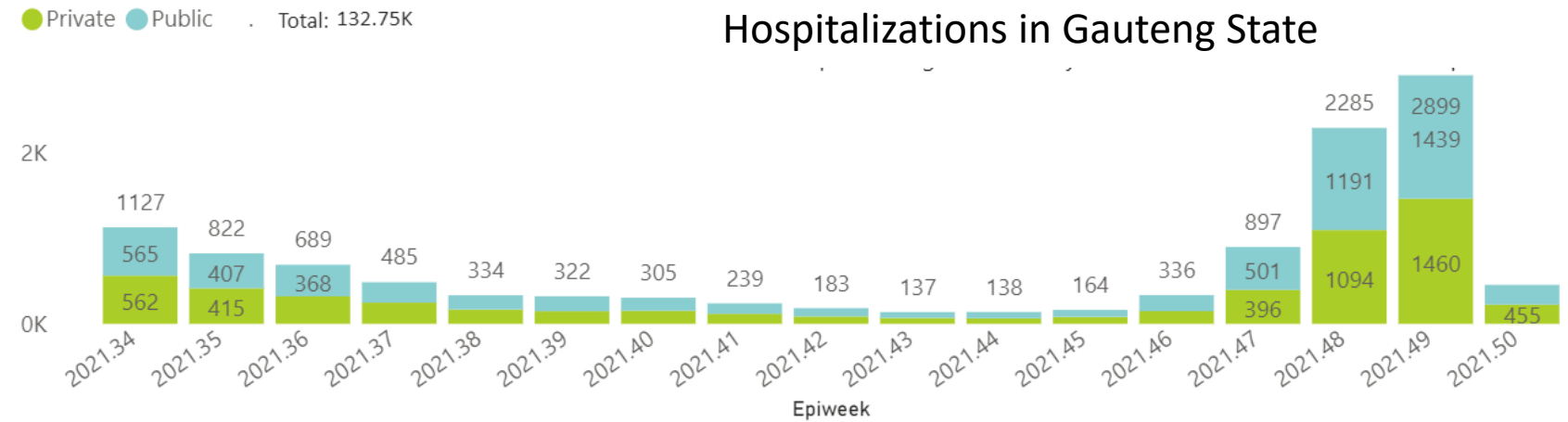


COVID-19 in South Africa – Gauteng State

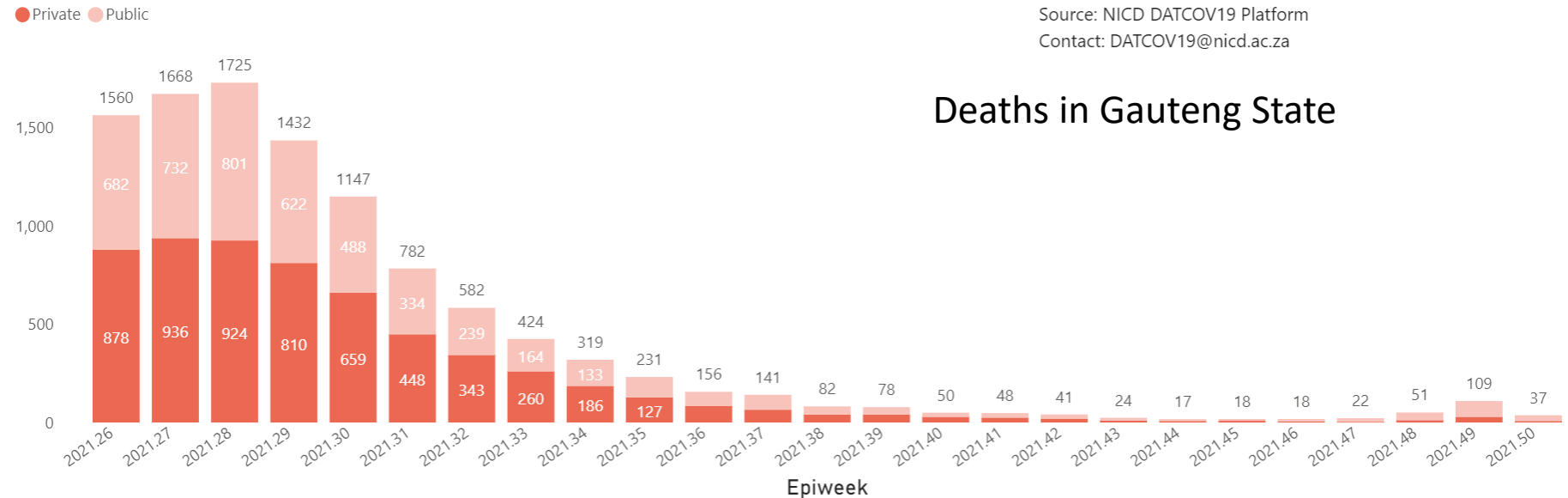
- Hospitalizations are increasing but still a fraction of that during Delta wave
- Not all hospitalizations can be attributed to Omicron
- Minimal increase in deaths
- Lag time between cases – hospitalizations – deaths still not remaining

Source: <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/daily-hospital-surveillance-datcov-report/>

Hospital admissions of COVID-19 cases, by health sector, by epidemiological week



Deaths by epidemiological week and sector



Source: NICD DATCOV19 Platform
Contact: DATCOV19@nicd.ac.za

Countries with detected confirmed Omicron cases by WHO Region

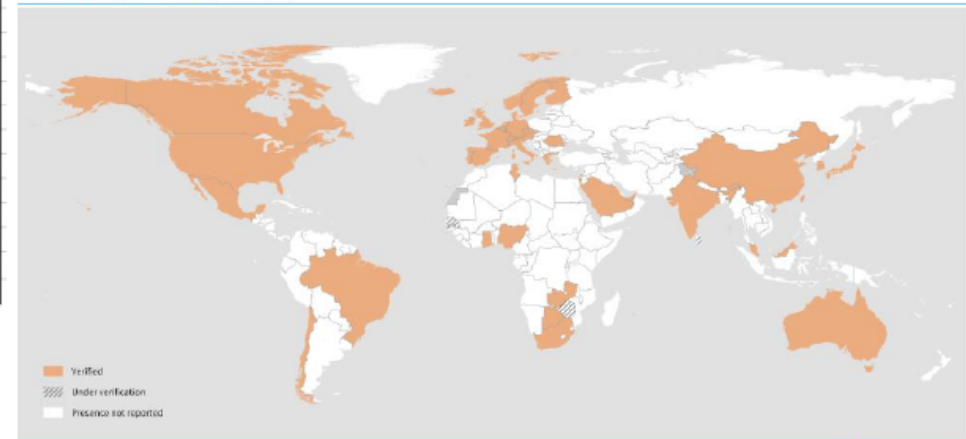
Signals as of 5 Dec 2021, 4pm CET

	Unverified report	Verified report	Number of countries reporting Omicron
AFRO			8
Botswana		X	
Ghana		X	
Nigeria		X	
Réunion		X	
Senegal	X		
South Africa		X	
Zambia		X	
Zimbabwe	X		
EMRO			3
Saudi Arabia		X	
Tunisia		X	
United Arab Emirates		X	
PAHO			5
Brazil		X	
Canada		X	
Chile		X	
Mexico		X	
SEARO			2
India		X	
Sri Lanka	X		
WPRO			6
Australia		X	
China		X	
Japan		X	
Malaysia		X	
Republic of Korea		X	
Singapore	X		

	Unverified report	Verified report	Number of countries reporting Omicron
EURO			21
Austria		X	
Belgium		X	
Czechia		X	
Denmark		X	
Finland		X	
France		X	
Germany		X	
Greece		X	
Iceland		X	
Ireland		X	
Israel		X	
Italy		X	
Luxembourg		X	
Netherlands		X	
Norway		X	
Portugal		X	
Romania		X	
Spain		X	
Sweden		X	
Switzerland		X	
United Kingdom		X	
TOTAL			45

- Signals of suspected cases are monitored and will only be reported as they are confirmed
- Reports of suspected cases are not included in the table

Countries, territories and areas reporting Omicron COVID-19 variant of concern (situation as of December 5, 2021, 4:00PM (CET))



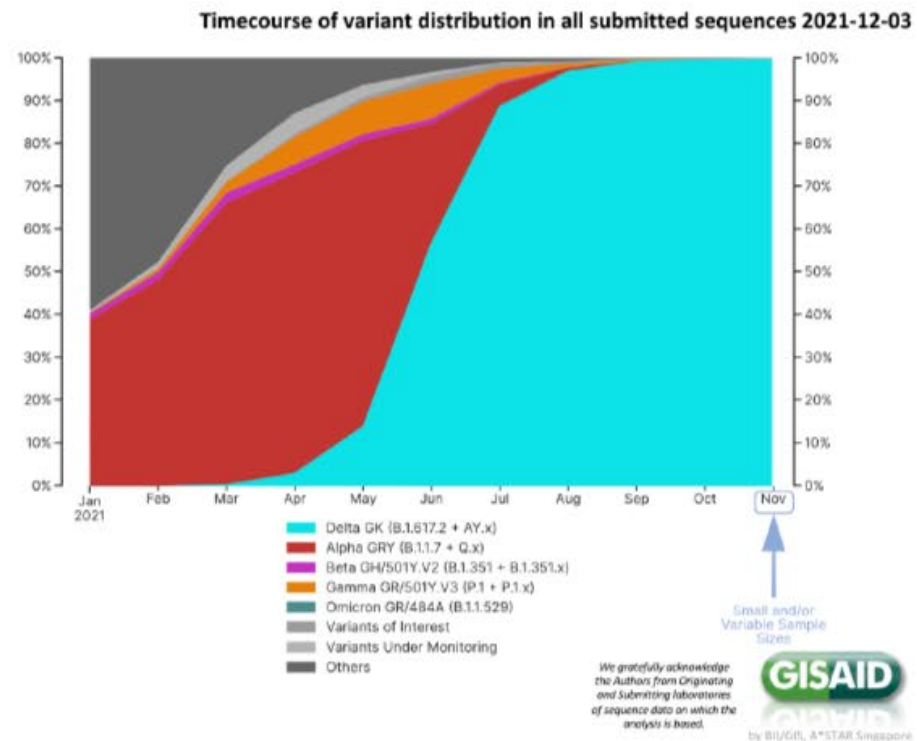
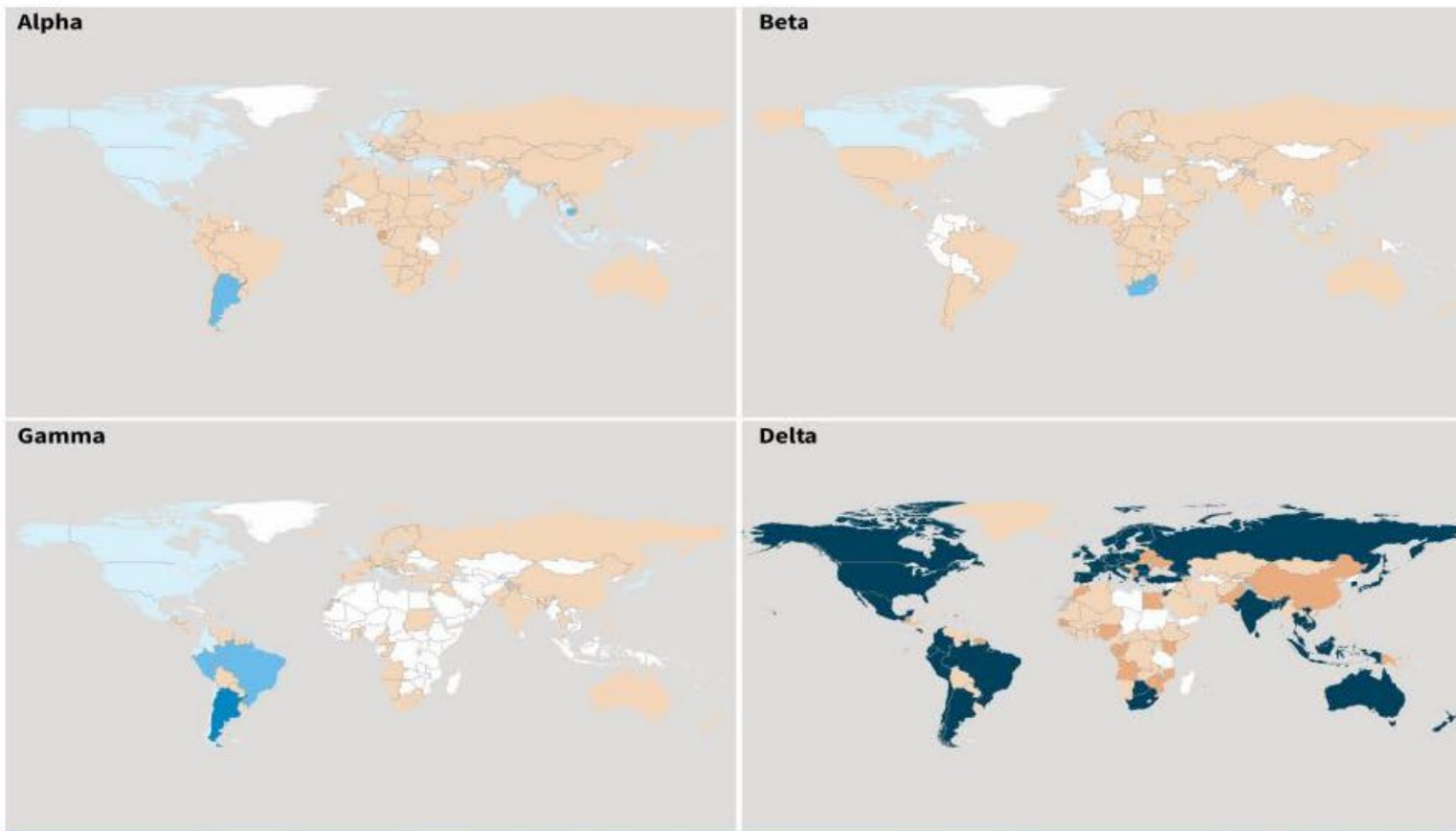
The designations employed and the presentation of the material in this publication do not imply the endorsement of any specific attribution on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not be full agreement.

Data Source: World Health Organization
Map Producer: WHO Health Emergencies Programme
Not applicable



Since last update: Bermuda + Cuba + Argentina + Trinidad and Tobago

Delta is Still the Most Prevalent Variant



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥ 100 total sequences in the same period. Countries assigned by location of sample collection.
 **Includes both official reports to WHO and unofficial reports of VOC detections.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Prevalence data based on sequences reported to [GISAID](https://gisaid.org/), excluding low coverage sequences. See also [Annex 2](#) for reported VOC detections by country/territory/area

Proportion of VOC among total sequences*

- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010

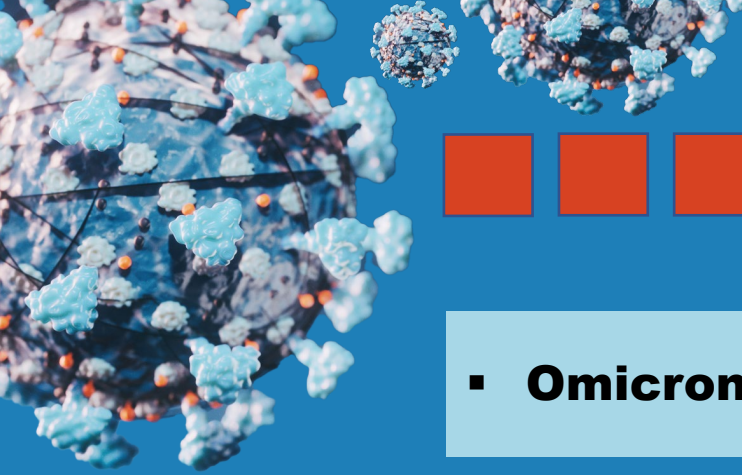
VOC detected, too few sequences to estimate proportion
 No new VOC sequences, VOC previously reported**
 No presence of VOC reported to WHO
 Not applicable



Data Source: World Health Organization, GISAID
 Map Production: WHO Health Emergencies Programme

Recommendations

- Risk based assessment
 - Objective:
 - Prevent Deaths
 - Prevent Cases
 - Prevent Introduction
 - Testing Options: PCR and Rapid Antigen Tests
- Preparing: Forecasting needs and procurement
- Public Health and Social Measures
 - Masks, Hand Sanitizing, Social Distancing and VENTILATION

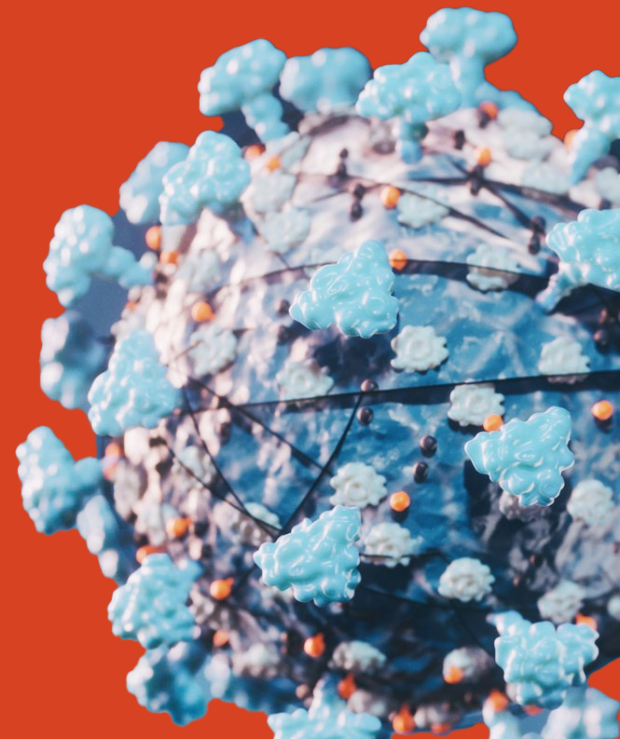


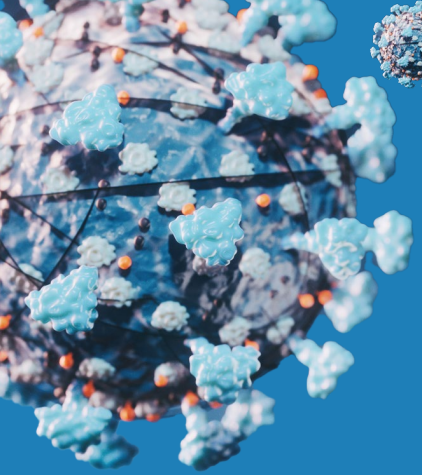
Key Messages / What we Know

- **Omicron is probably more transmissible**
- **Current detection methods are adequate for its diagnosis (PCR and antigen tests)**
- **Effect on severity of disease and vaccine efficacy is still under study**
- **Measures to be taken:**
 - **Masks, hand sanitizing, social distancing and ventilation**
 - **Risk based assessment of entry protocols, quarantine and testing strategy**
 - **Encourage Vaccination**

Strengthening the health system and services in response to Covid-19 severe cases and hospitalization

Dr. Maria Cecilia Acuna
PAHO Advisor, Health Systems and Services





Current knowledge about Omicron

Transmissibility:
Omicron is more transmissible. It is not yet clear whether it causes more or less severe disease compared to other variants, or impacts the effectiveness of current COVID-19 vaccines

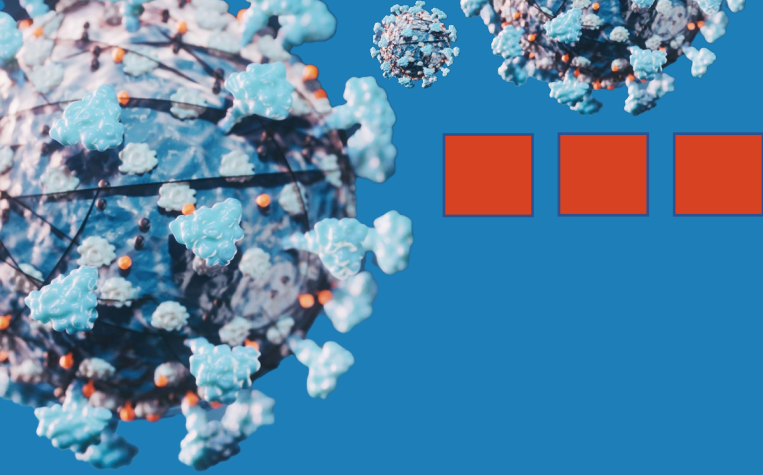
Reinfection:
Preliminary evidence suggests there may be an increased risk of reinfection with Omicron, however information is limited*

Detection:
Diagnostic tests, including PCR and antigen detection tests, continue to detect infection with Omicron

Clinical management:
Corticosteroids and IL-6 receptor blockers do not target the spike protein and are still effective for managing patients with severe COVID-19

While characteristics of Omicron are being studied, evidence shows that COVID-19 vaccines are still effective to protect against severe disease due to current circulating SARS-CoV-2 variants, including Delta

*<https://www.who.int/news/item/28-11-2021-update-on-omicron>



The health system response

A higher transmissibility increases the probability of a rapid rise in hospitalizations

Interventions at community level under the leadership of the PHC teams are key to ensure adequate care for mild and moderate cases and to keep hospitals available for severe and critical cases

The best way to reduce hospitalizations is to vaccinate the at-risk and vulnerable population

There are lessons to be learned from the past 22 months



Americas report surge in drug-resistant infections due to misuse of antimicrobials during pandemic

17 Nov 2021



- Data shows that more than 90% of hospitalized COVID patients in the Americas were given an antimicrobial, while only 7% required these drugs to treat a secondary infection.
- Drugs such as Ivermectin, Azithromycin and Chloroquine were also widely used, despite strong evidence that they have no benefit against COVID-19.
- Funds saved by avoiding the purchase of unnecessary medicines can be invested in medicines and other health technologies with proven efficacy

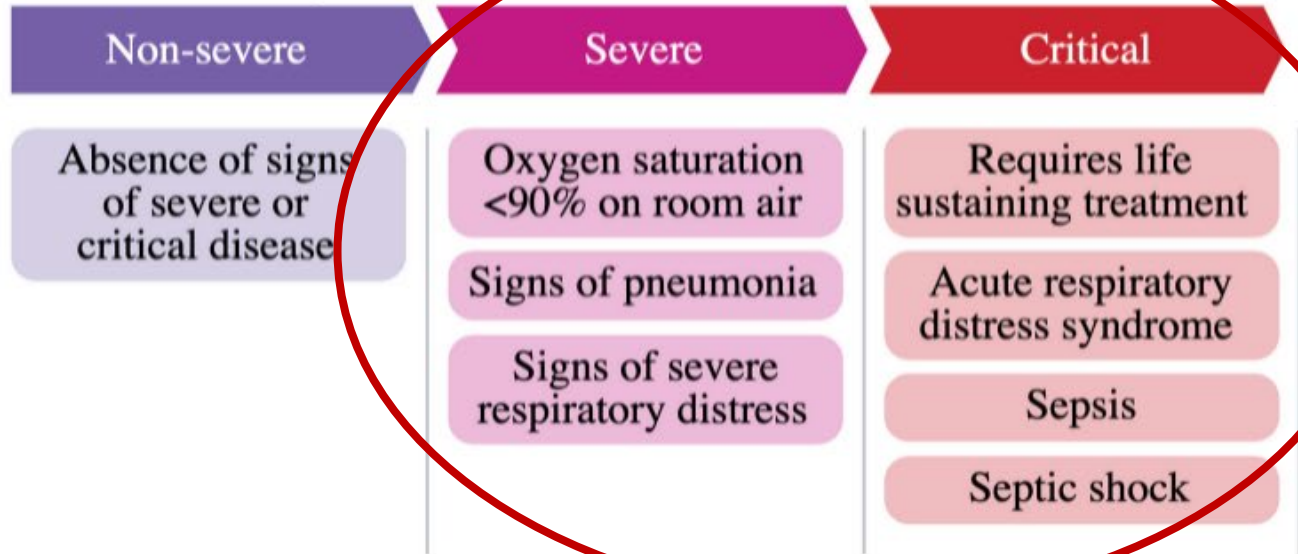


Population

This recommendation applies only to people with these characteristics:



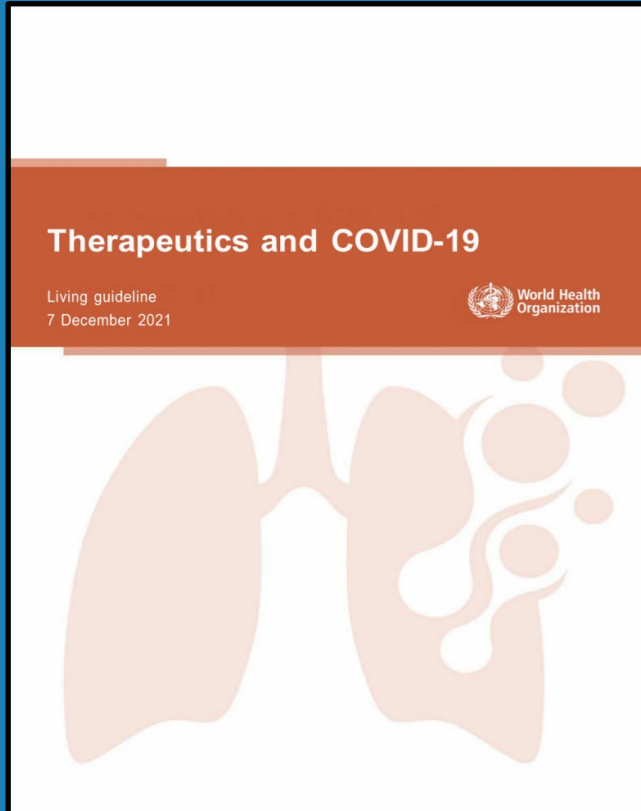
Disease severity



Infographic co-produced by the BMJ and MAGIC; designer Will Stahl-Timmins (see [BMJ Rapid Recommendations](#)).



Pharmaceutical management of severe/critical patients



New strong recommendation for use of IL6-receptor blockers for patients with severe/critical COVID-19 (tocilizumab, sarilumab)

- Immunomodulator function
- Reduction in mortality and need for mechanical ventilation

Three pillars of pharmaceutical treatment for patients with severe/critical COVID-19

OXYGEN + CORTICOSTEROIDS + IL6-Receptor blockers

NOT recommended regardless of COVID-19 disease

- a conditional recommendation against remdesivir;
- a strong recommendation against hydroxychloroquine;
- a strong recommendation against lopinavir/ritonavir;
- a recommendation against ivermectin, except in the context of a clinical trial.

<https://www.who.int/publications/i/item/WHO-2019-nCoV-therapeutics-2021.1>



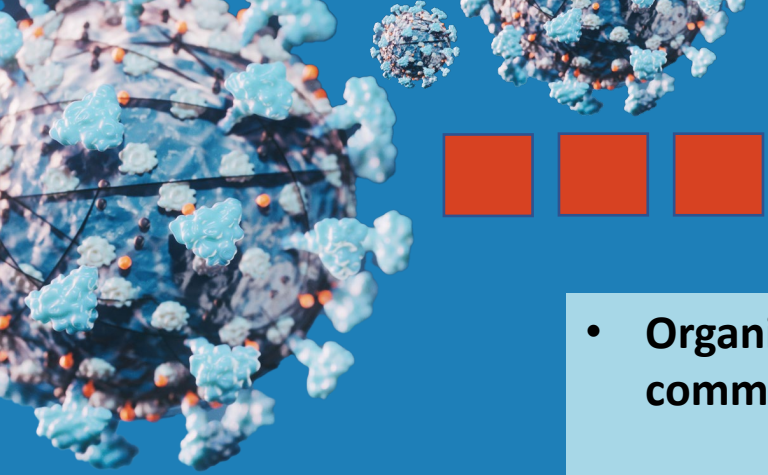
**GUIDELINES FOR CARE OF
CRITICALLY ILL
ADULT PATIENTS
WITH COVID-19 IN THE AMERICAS**

Summary, version 3



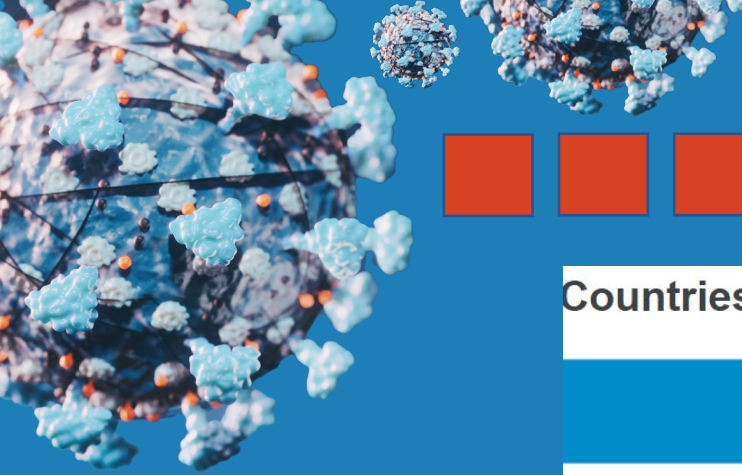
Available at: <https://iris.paho.org/handle/10665.2/53895>





Core elements of successful containment strategies across the health system

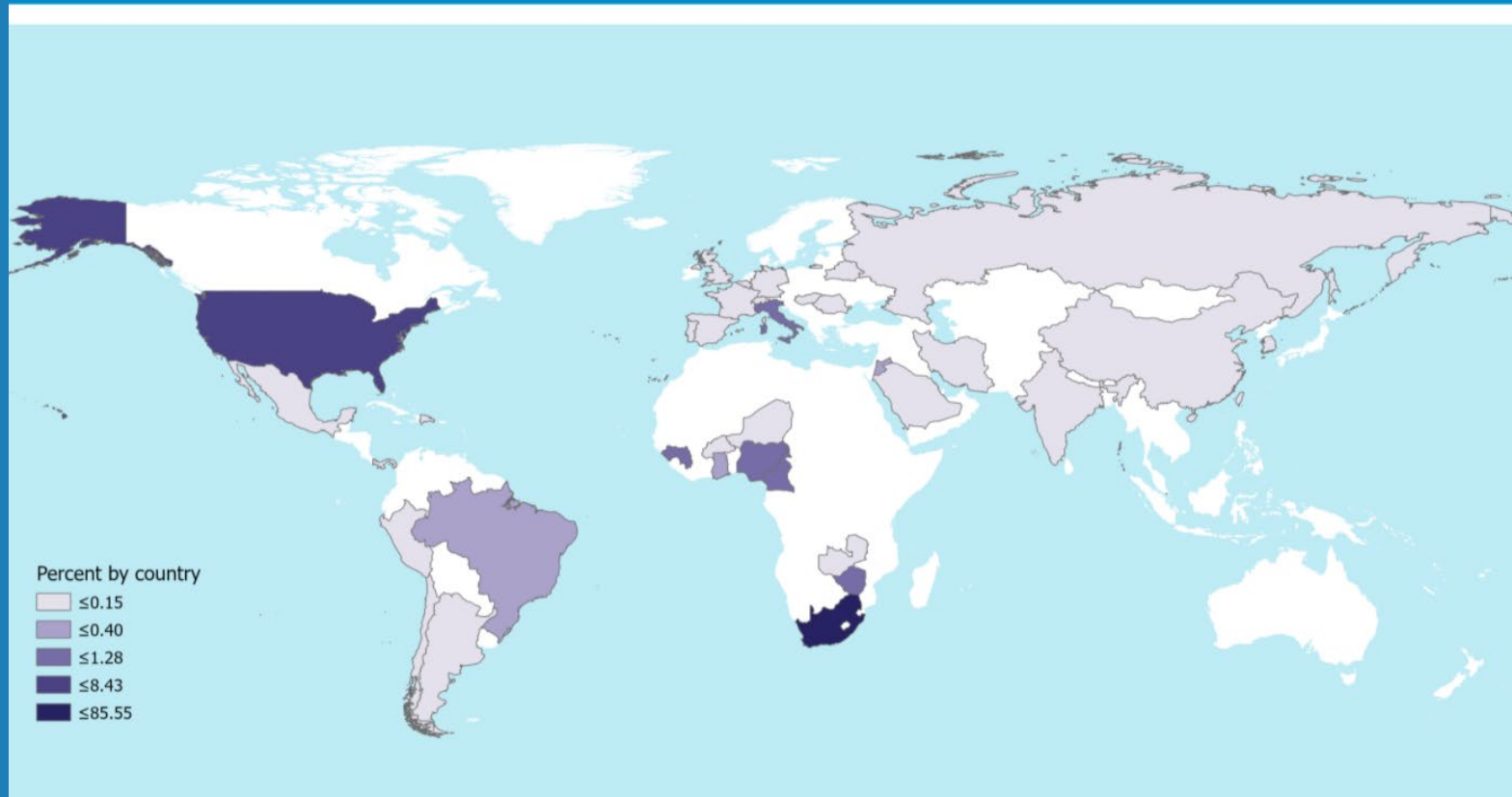
- Organize isolation centers and treatment facilities for mild and moderate cases at community level
- Promote self-isolation of mildly symptomatic patients, set up health hotlines and remote health consultation
- Establish a national plan to recruit, hire, train and retain Health Care Workers
- Increase the availability of personal protective equipment for the healthcare workers
- Increase inpatient capacity. Reduce the number of non-COVID-19 or mild COVID-19 patients in medical centers and hospitals
- Ensure availability of essential medical supplies and equipment for the treatment of severe and critical patients. Follow the Guidelines!!
- Provide training in oxygen management: not only for the clinical teams



The WHO Global Clinical Platform for Covid-19

Countries contributing data to the WHO Platform (June, 2021)

Global COVID-19 Clinical Data Platform: Data Contributors



<https://www.who.int/teams/health-care-readiness-clinical-unit/covid-19/data-platform>



PAHO

Living guidance for clinical management of COVID-19

LIVING GUIDANCE
23 NOVEMBER 2021



Free COVID-19 online courses on OpenWHO and PAHO VCPH

Clinical management of patients with COVID-19:

- General considerations
- Initial approach to the acutely ill patient
- Investigations and care for mild, moderate and severe disease
- Rehabilitation of patients with COVID-19
- [Online training \(who.int\)](https://www.who.int)

Hospital Readiness checklist for COVID-19

Interim document - Version 5. February 10, 2020



Description of hospital	Evaluation date:	
	Name of the hospital:	
	City:	Country:
	Administrative status: state <input type="checkbox"/> private <input type="checkbox"/> university <input type="checkbox"/> other <input type="checkbox"/>	
	Beds:	Annual discharges:
	Annual occupied bed days:	
	Beds Intensive Care Unit (ICU):	Microbiology laboratory: Y <input type="radio"/> N <input type="radio"/>
	ICU beds for adults:	Number of isolations / year:
	ICU beds for pediatrics:	Number of antibiograms / year:
	ICU beds for neonatology:	
	Names and positions of the people interviewed:	
	Name of evaluators:	

Readiness checklist

Response functions	Objective	Response-readiness activities	Verification		
			Meets	Does not meet	In Process
Leadership	Ensure comprehensive management of the hospital response to the emergency	1. Activate the emergency response mechanism: Hospital Committee for Emergencies and Disasters and/or Hospital Incident Management System.	○	○	○
		2. Designate a response operations manager.	○	○	○
		3. Establish a secure and well-equipped physical area that is protected and easily accessible, with immediate operational capacity to coordinate the response (Emergency Operations Center), paying attention to internal and external communications.	○	○	○
		4. Assign roles and responsibilities for the different response functions, with enough trained staff available to ensure operational continuity; include up-to-date directory of telephone numbers and email addresses.	○	○	○
		5. Designate official spokespersons.	○	○	○
		6. Use occupational health mechanisms that ensure the well-being and safety of personnel during the response, including monitoring of exposed personnel.	○	○	○
		7. Distribute information to all staff about the emergency and the roles and responsibilities of personnel and the hospital, as well as current and future actions.	○	○	○

Response functions	Objective	Response-readiness activities	Verification		
			Meets	Does not meet	In Process
Coordination	Ensure proper functioning of coordination mechanisms	8. Identify and establish coordination mechanisms with health and disaster management authorities.	○	○	○
		9. Activate mechanisms for coordination, communication, and collaboration with the integrated health services network at the level local, considering patient care, the necessary drugs, supplies and equipment, and patient transfer.	○	○	○
Information	Compile, compare, and analyze information on developments in the emergency, response management, and other contextual data on existing risks and needs	10. Make procedures and personnel available to collect, confirm, and validate data and information related to the emergency.	○	○	○
		11. Provide a standardized form for reporting on emergency activities, hospitalizations (including critical care), incidence of suspected and confirmed cases, clinical situation, and deaths.	○	○	○
Logistics and operations	Facilitate emergency response, supported by the logistical capacities of the facility	12. Establish a physical space to triage patients with acute respiratory symptoms. Locate a space with optimal conditions for the prevention and control of infections.	○	○	○
		13. Identify areas that can be used to increase patient care capacity (expanded capacity), considering the necessary personnel, equipment, and supplies.	○	○	○
		14. Identify nonessential services that could be suspended, if necessary, in order to increase hospital capacities (human and material resources, equipment, and physical space).	○	○	○
		15. Have a procedure in place and someone responsible for supply chain management (medicines and supplies), considering increased demands on the supply and distribution chain, and respecting technical specifications and established protocols.	○	○	○
		16. Have a procedure in place and someone responsible for the management of work teams, including rest areas, safe transportation, and staff well-being.	○	○	○
		17. Test the facility's telecommunications systems.	○	○	○
Administration and Finance	Implement financial, managerial, and administrative support mechanisms needed for the response	18. Have a procedure in place and someone responsible for the management of ambulances for transportation between hospitals and for the inventory of available vehicles.	○	○	○
		19. Activate legally available and authorized administrative and financial mechanisms for emergency management, as well as procedures for the purchase and procurement of supplies and services.	○	○	○

WHO COVID-19 Essential supplies forecasting tool

Implementing COVID 19 Essential Supplies Forecasting Tool

This slide provides information regarding implementation of COVID 19 essential supplies forecasting tool (ESFT) that helps to manage and organize essential medical supplies during the pandemic.



This tool will help government authorities, partners and other stakeholders estimate their potential requirements for essential supplies.



This tool forecasts essential supplies and medical services during COVID 19 pandemic.



The current version of the tool covers 5 major categories of essential supplies i.e.

- > Hygiene
- > PPE (personal protective equipment)
- > Drugs and medications
- > Diagnostics
- > Biomedical equipment's.



This tool is user friendly and its implementation will allow the user to estimate medical supplies.



Inputs that are forecasted by the tool are equipment use, cumulative case count, oxygen usage, testing criteria's, medical supplies requirements etc.

This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

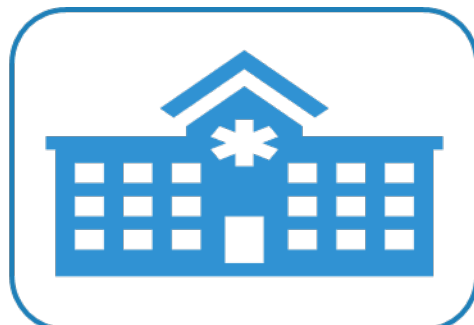
Estimate the gaps in personal protective equipment, diagnostic kits, consumable medical supplies, essential drugs and biomedical equipment that will be needed for supportive care and treatment of COVID-19 in the next three months

A more organized and comprehensive approach to preparedness

**F
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Staff: multi-disciplinary, trained, safe, outpatient, inpatient



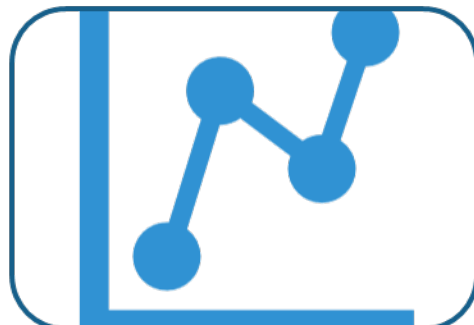
Structures: patient flow, ventilation, IPC controls



Supplies: medicines, biomedical equipment



Systems: home care, community care, referral paths



Study: clinical characterization, clinical trials



Standards: guidelines, tools



**Because no one
will be safe until
everyone is safe**

**Building resilient health
systems to reach
universal health**



Universal health
Access and coverage for all

Salud universal
Acceso y cobertura para todos

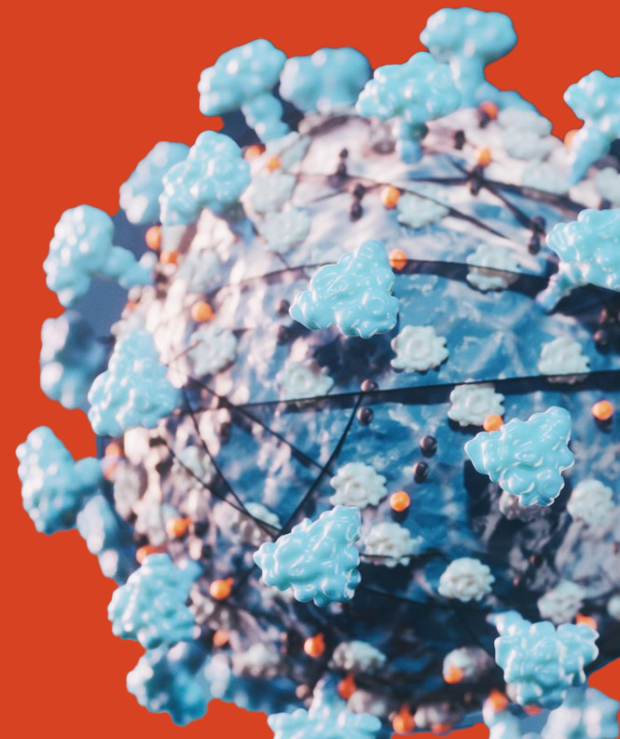
Saúde universal
Acesso e cobertura para todos

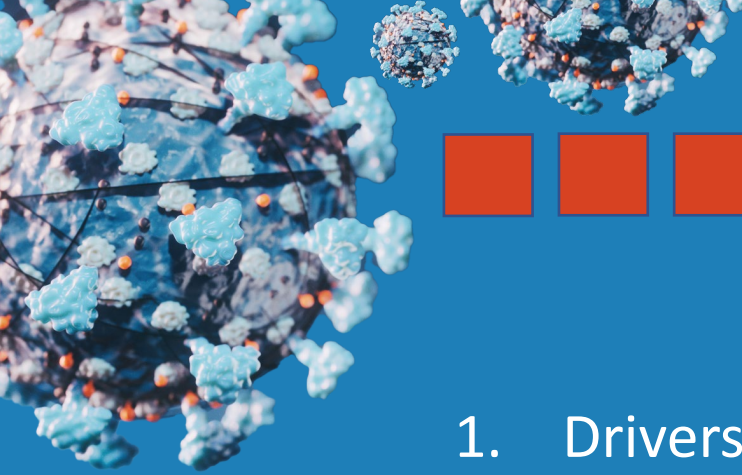
Santé universelle
Accès et couverture pour tous



The impact of social mobility and social mixing and the importance of public health and social measures

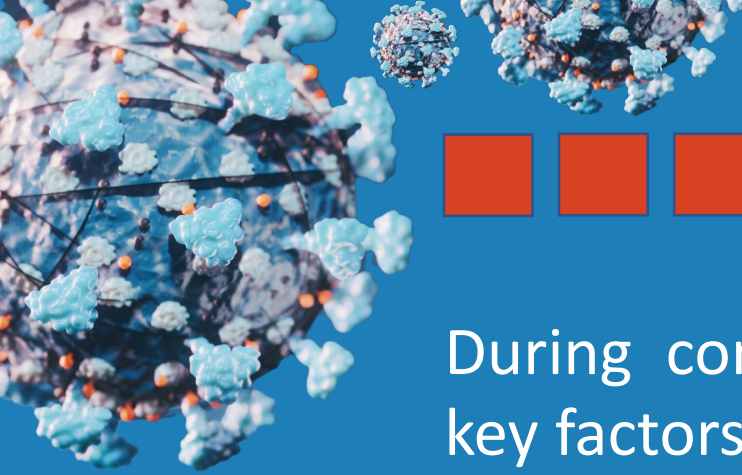
Ms. Martine Chase
PAHO Consultant





Outline

1. Drivers of COVID-19 Transmission
2. Overview of Public Health & Social Measures (**PHSMs**)
3. Assessing the Intensity and Effect of PHSMs
4. Trends in PHSM Intensity and Transmission in select ECTs
5. Considerations for Adjusting PHSMs
6. Key Messages



■ ■ ■ Drivers of COVID-19 Transmission

During community transmission, incidence is impacted by key factors including:

1. Population level immunity
2. Characteristics of dominant variants
3. Population mobility and social mixing (increased number of contacts and likelihood of exposure to COVID-19)

Public health and social measures that limit mobility and support personal protection remain important tools in the control of COVID-19 transmission



Overview of Public Health & Social Measures

1. **Aim** to reduce interpersonal contact (and probability of exposure)
2. **Range** from personal protection, to restrictions on movement and physical distancing
3. **Effectiveness** is influenced by timing, stringency and compliance
4. **Complement** surveillance and vaccination measures

Relaxing too early can contribute to resurgence; adjustments should be phased and based on epidemiological, health system and socioeconomic data.

Mendez-Brito, Alba et al. (2021) Systematic review of empirical studies comparing the effectiveness of non-pharmaceutical interventions against COVID-19. *Journal of Infection*, Volume 83, Issue 3, 281 – 293

Wang, Z, Whittington, J, Yuan, H-Y, et al (2021) Evaluating the effectiveness of control measures in multiple regions during the early phase of the COVID-19 pandemic in 2020, *Biosafety and Health* (2021), doi: <https://doi.org/10.1016/j.bsheal.2021.09.002>

Wei Lyu and George L. Wehby (2020) *Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US*. *Health Affairs* 2020 39:8, 1419-1425

Haug N, Geyrhofer L, Londei A, Dervic E, Desvars-Larrive A, Loreto V, Pinior B, Thurner S, Klimek P (2020). Ranking the effectiveness of worldwide COVID-19 government interventions. *Nat Hum Behav.* 2020 Dec;4(12):1303-1312. doi: 10.1038/s41562-020-01009-0. Epub 2020 Nov 16. PMID: 33199859.



Public Health & Social Measures (PHSMs)

	Domain	Select PHSMs
1	Personal Protection	Masks: Use of masks/ face coverings
2	Movement	Travel: Restrictions on International Travel (Border Health)
3		Movement: limitations on domestic movement
4	Physical	Gatherings: Limitations to Mass Gatherings
5		Business: Adjustments to operations of Businesses & Institutions
6		Schools: Adjustments to educational teaching modalities

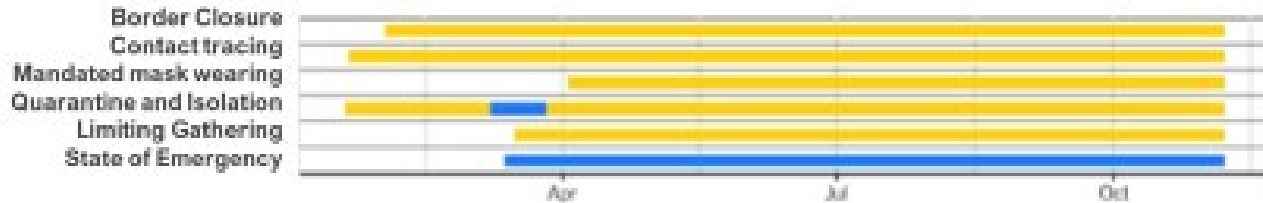
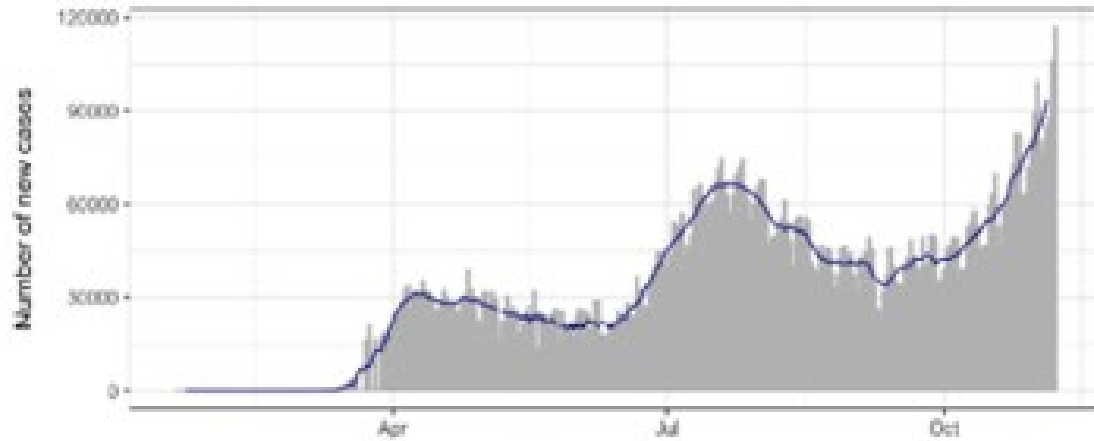


World Health Organization (May 18, 2020) Overview of public health and social measures in the context of COVID-19. Interim Guidance. Available online at [[Overview of Public Health and Social Measures in the context of COVID-19 \(who.int\)](#)] Date accessed: September 6, 2021

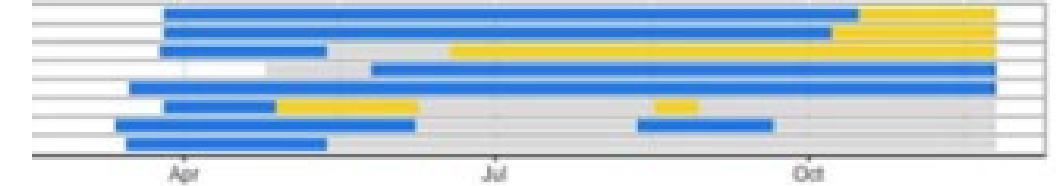
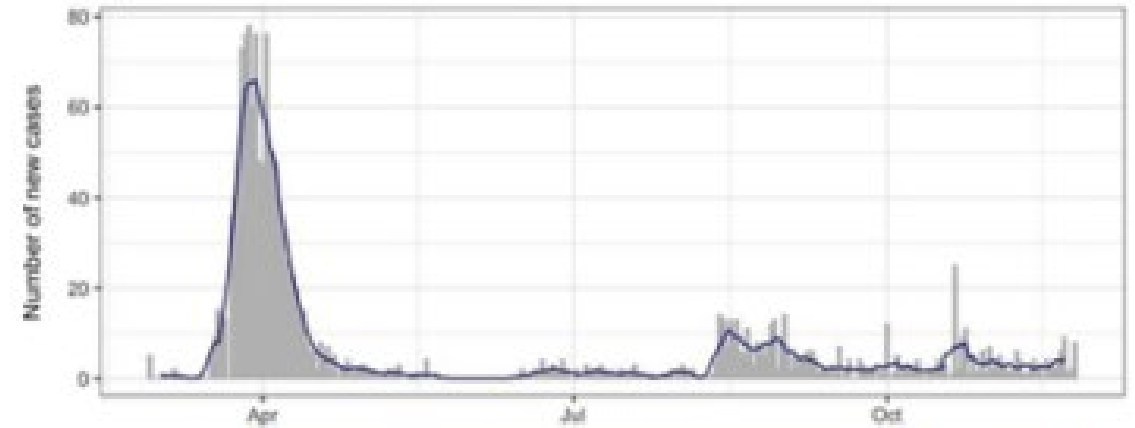
World Health Organization (2020) A systematic approach to monitoring and analysing public health and social measures (PHSM) in the context of the COVID-19 pandemic: underlying methodology and application of the PHSM database and PHSM Severity Index. Copenhagen: WHO Regional Office for Europe; 2020. Licence: CC BY-NC-SA 3.0 IGO.

Assessing the Intensity and Effect of PHSMs

Epidemic curve for United States of America

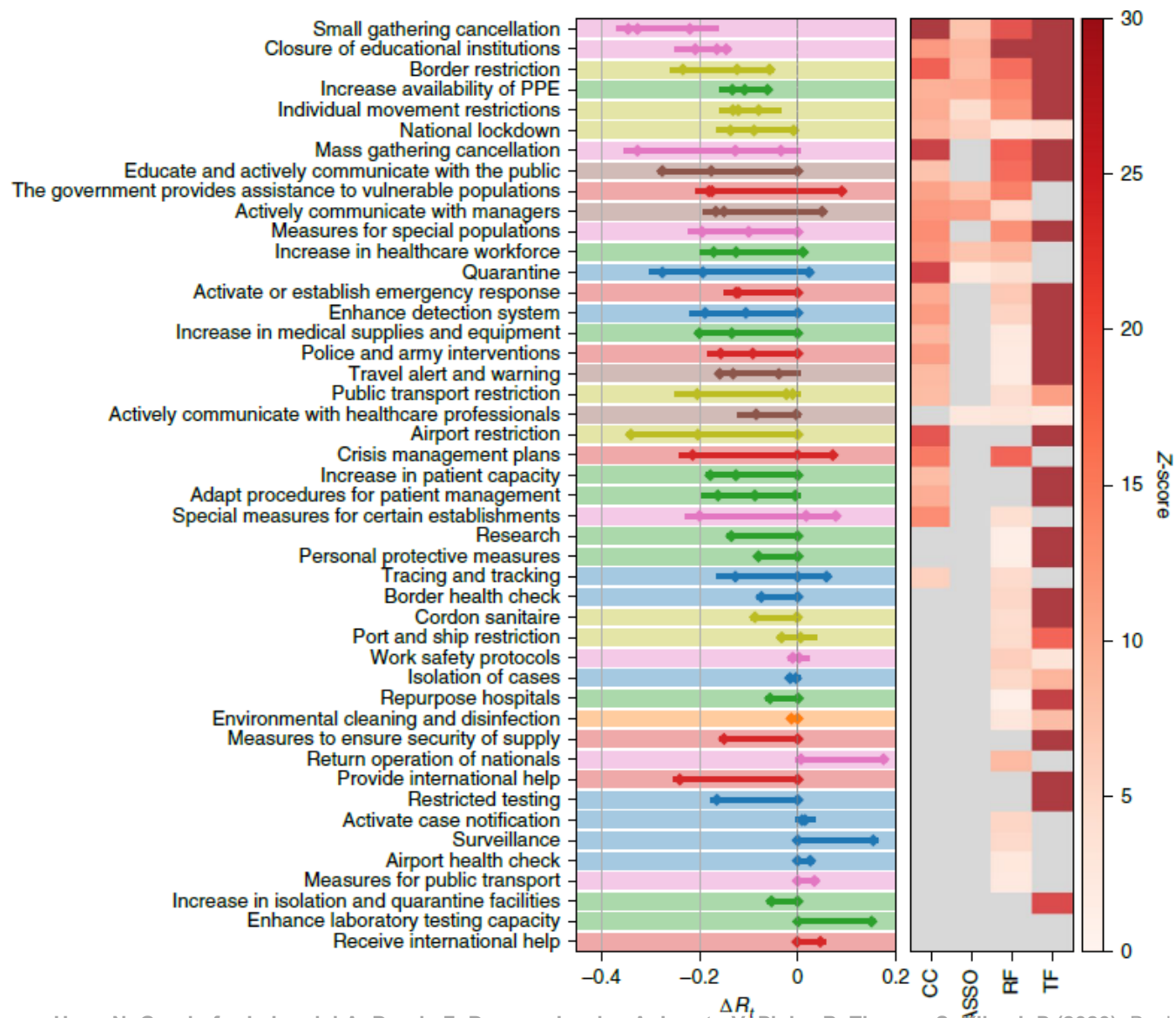


Epidemic curve for New Zealand



Implementation Intensity ■ Strongly Implemented ■ Partially Implemented ■ Implementation Suspended

Assessing the Intensity and Effect of PHSMs

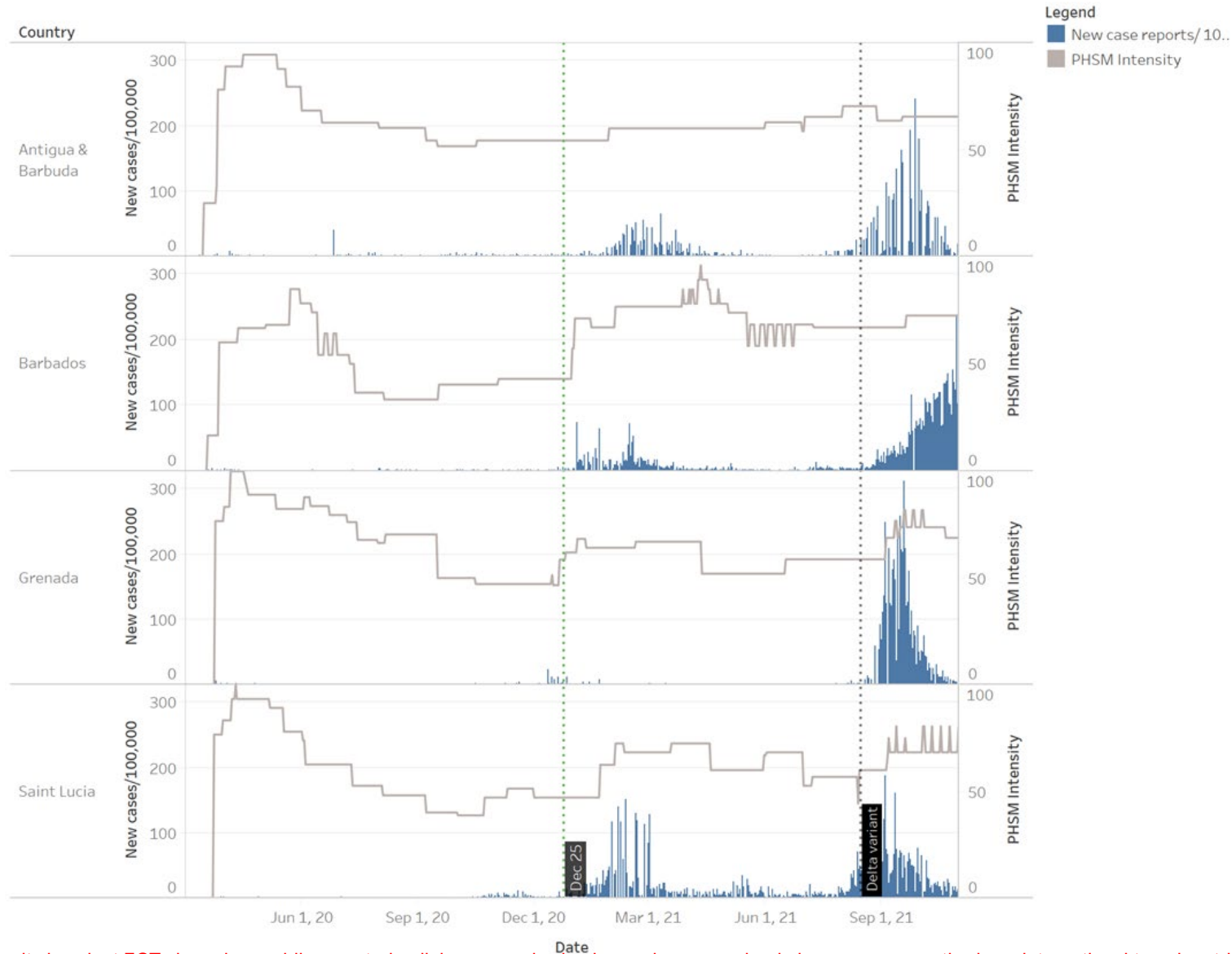


Analysis of PHSMs in 73 countries

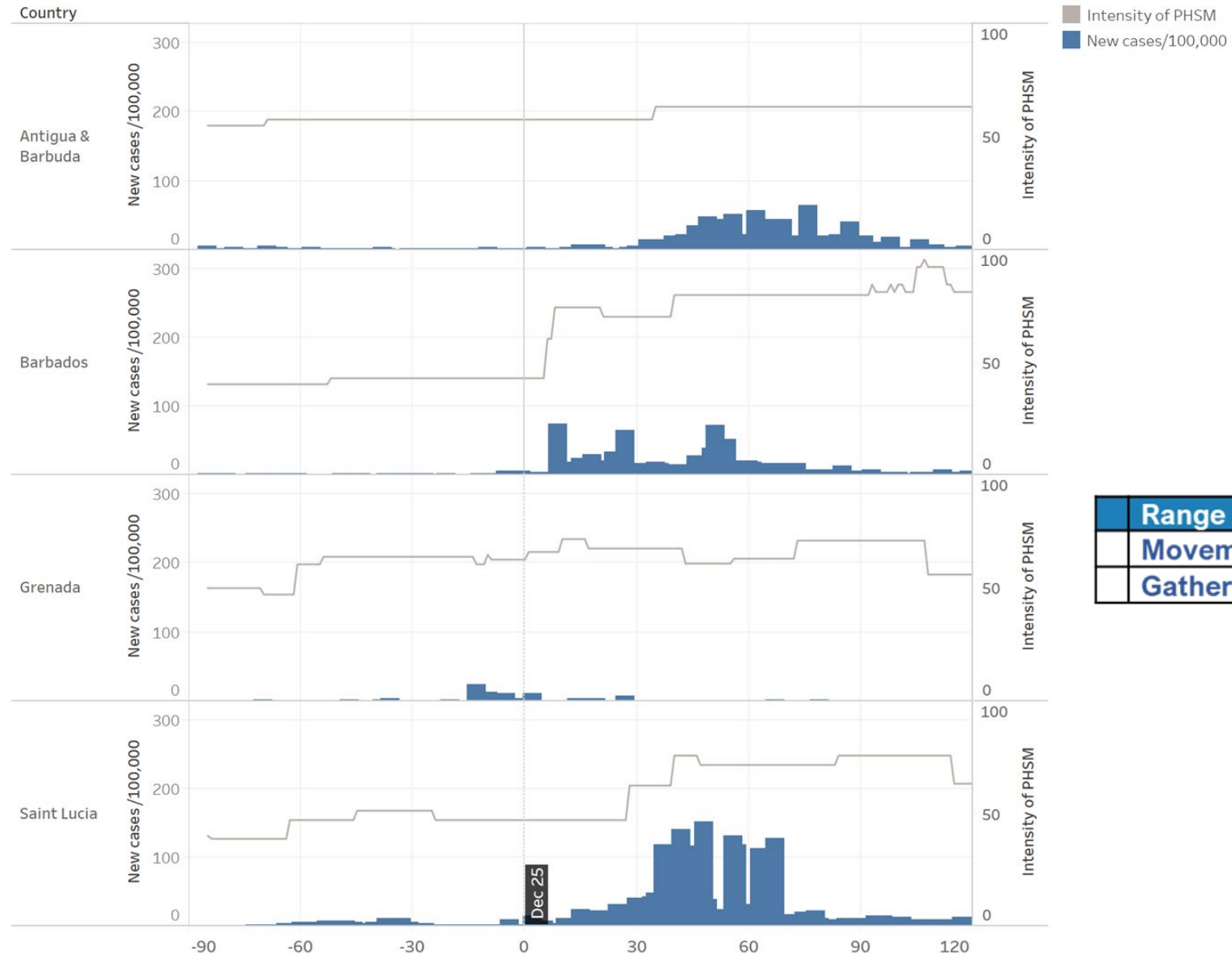
Top 6 PHSMs:

1. Small gathering cancellation
2. Closure of educational institutions
3. Border restrictions
4. Increase availability of PPE
5. Individual movement restrictions
6. National Lockdown

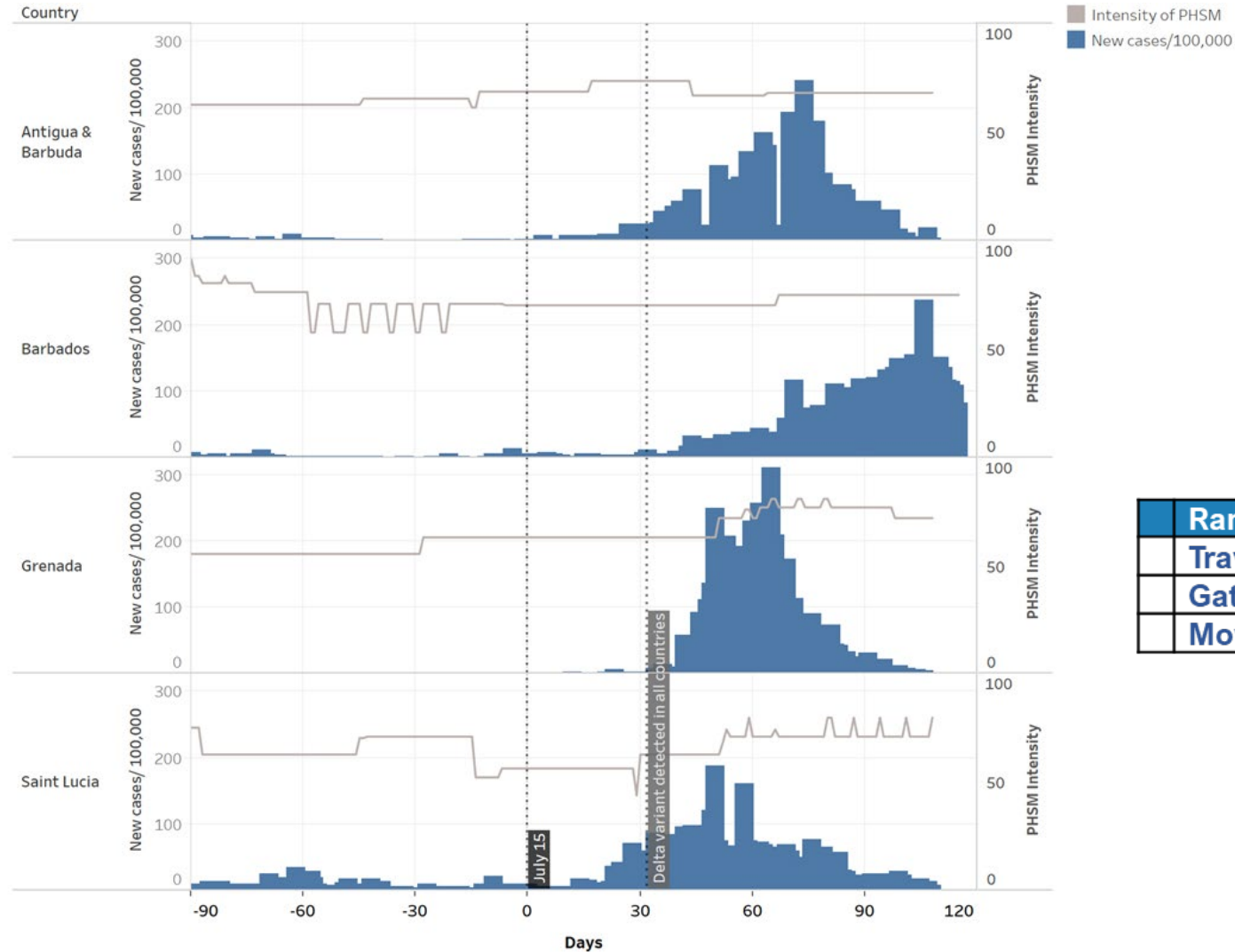
Trends in COVID-19 cases and PHSM Intensity in select ECTs (March 2020- October 31, 2021)



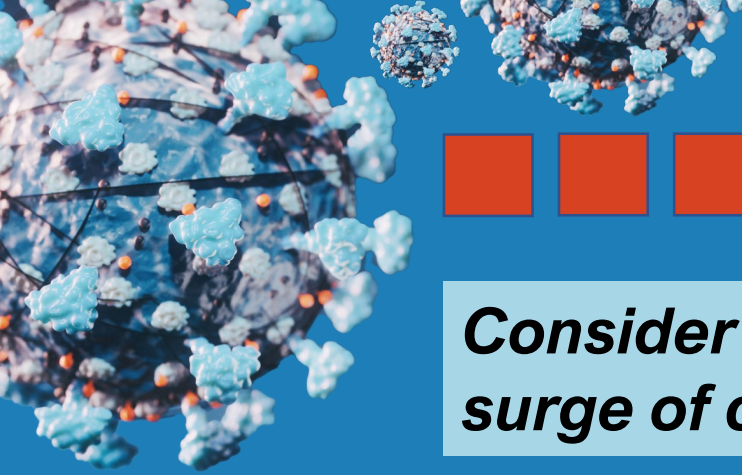
Trends in COVID-19 cases and PHSM Intensity in select ECTs (September 2020- April 2021)



Trends in COVID-19 cases and PHSM Intensity in select ECTs (April 2021 – October 2021)



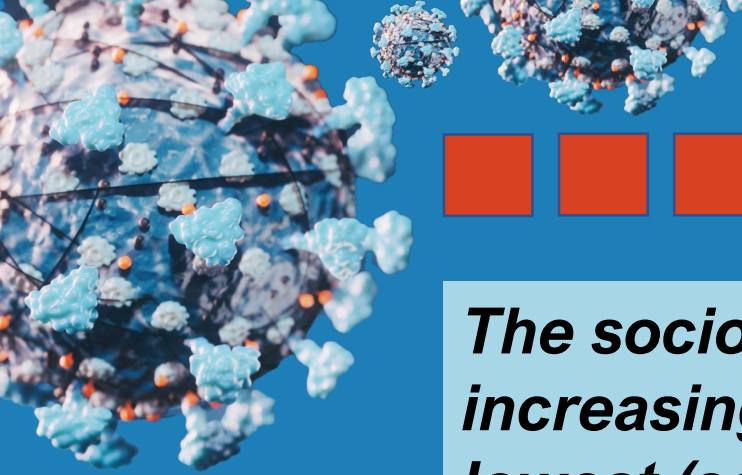
Range of PHSM Intensity	
Travel	33 – 50
Gatherings:	50 -75
Movement	60 -100



Considerations for Adjusting PHSMs

Consider the readiness of the health system to respond a surge of cases before PHSM are relaxed. Specifically:

- The capacity to detect cases and return results for SARS-COV2 PCR tests within 24 hours
- The readiness of the system to conduct field investigations and provide quarantine facilities
- The ability to provide health services for an increase in cases (facility-based care and home isolation)

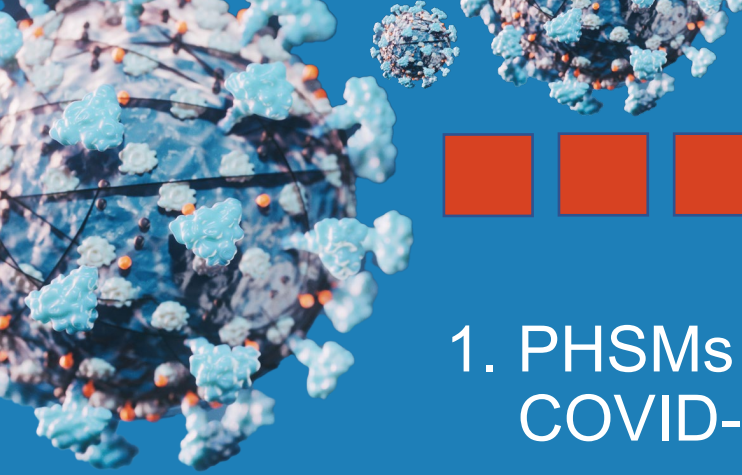


Considerations for Adjusting PHSMs

The socio-economic cost is a major consideration when increasing the stringency of policies. What is effective at the lowest (socio-economic) cost?

With high compliance, personal protective and physical distancing measures can be effective

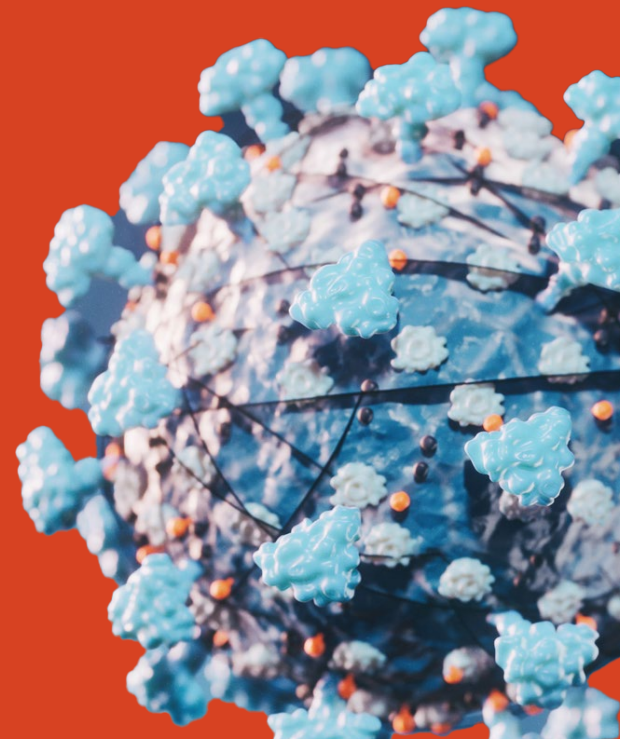
- 1) Mask Policies:** 100% mask policy for all non- household interactions and for caregivers of the elderly or vulnerable persons (including household or family members)
- 2) Limiting Social Gatherings:** Limiting social gatherings and strict physical distancing in all public settings
- 3) Incremental Relaxation:** could involve setting specific policies based on vaccination status and or recent test results
- 4) Early testing:** Reinforce messages of early testing for persons with respiratory symptoms (and known exposures)



Key Messages

1. PHSMs remain an important component of our response to COVID-19
2. Effectiveness of measures will depend on timing, stringency of policies and adherence levels
3. Limiting social gatherings and supporting adherence to personal protective measures can be useful strategies with comparatively low socio-economic impacts

Questions & Answers

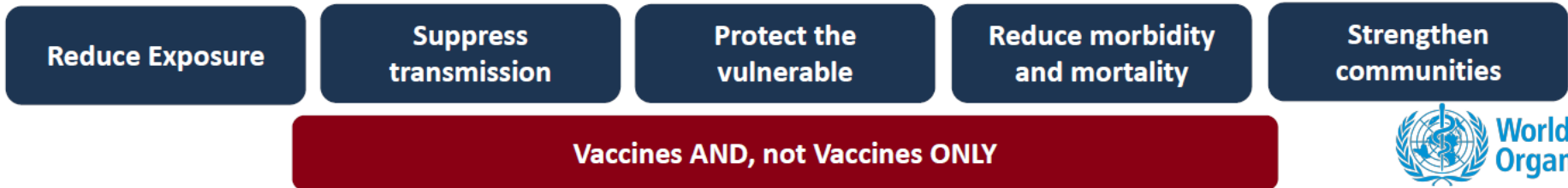




Advice for all countries

- **Advice for all countries**
 - All countries should regularly reassess and revise national plans based on current situation and national capacities
 - Accelerate vaccine coverage in at risk populations – identify those populations who are missed and target vaccination to those most vulnerable in country
 - Intensify efforts to drive down/keep down transmission – strengthen PHSM
 - Strengthen surveillance, share data and samples, surge capacities
 - Need collective approach to better assess Omicron
- **What countries should expect in the short term**
 - Increase incidence of infection with Delta expected where PHSMs are being relaxed, regardless of vaccination rollout: need to prepare for ongoing circulation of SARS-CoV-2 and prepare for surges
 - There will be more variants, yet the impact of Omicron is not yet clear

We need to optimize our response for Delta which will benefit any future variants, including Omicron





Year of Health and Care Workers 2021

Recognize and commemorate all health and care workers who have lost their lives during the pandemic.

We all have a role to play to ensure that our health and care workforces are supported, protected, motivated and equipped to deliver safe health care at all times, not only during COVID-19.

PAHO



Pan American
Health
Organization



REGIONAL OFFICE FOR THE

World Health
Organization
Americas

**WE
GOT
YOUR
BACK**