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Global Pandemic Response



IMMUNISATION COALITION

Agenda

- Global epidemiological situation
- Pandemic responses
- Vaccines
- WHO Independent Panel



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Global cases and deaths



Reported week commencing

https://covid19.who.int/



January 31 2021

Case numbers adjusted for population

Cases / Million population			
Czechia	>80,000		
USA, Slovenia, Panama, Israel, Portugal, Lithuania, Georgia, Belgium,	60,000-80,000		
Switzerland, Bahrain, Croatia, Netherlands, Armenia, Sweden, UK, Qatar, France, Austria, Serbia, Slovakia, North Macedonia, Lebanon, Brazil, Argentina, Italy, Columbia	40,000-60,000		
Poland, Moldova, Ireland, Kuwait, Hungary, Romania, Costa Rica, Chile, Bosnia & Herzegovina, Latvia, Denmark, Peru, Estonia, Jordan, Bulgaria, Palestine, UAE, Turkey, Ukraine, Albania, Germany, Russia, Oman, Belarus, Cyprus, South Africa, Azerbaijan, Canada	20,000-40,000		
Dominican Republic, Paraguay, Bolivia, Tunisia, Libya, Iran, Iraq, Greece, Honduras, Mexico, Ecuador, Eswatini, Namibia, Kyrgyzstan, Morocco, Uruguay, Norway, Saudi Arabia, Singapore	10,000-20,000 World Average		
All others including Finland(7941), India(7725), Malaysia(6079), Philippines(4705), Indonesia(3772), Japan(2975), S.Korea(1509),Hong Kong(1370), Australia (1122), New Zealand(461), Thailand(244), China(62), Taiwan(38), Cambodia(27), Viet Nam(17)	<10,000		

Cases/ M pop

- Hints at speed to act
- Mixed by GDP

Case numbers adjusted for population

High Cases	h Cases / M pop Low Cases / M pop		High Deaths / M pop		Low Deaths / M pop		
Czechia	90,727	Laos	6	Belgium	1,806	Tanzania	0.3
USA	79,497	Tanzania	8	Slovenia	1,658	Taiwan	0.3
Slovenia	78,512	Vietnam	17	UK	1,515	Vietnam	0.4
Panama	72,766	Cambodia	27	Czechia	1,499	Mongolia	0.6
Israel	68,629	Taiwan	38	Italy	1,446	PNG	1
Portugal	67,330	China	62	Bosnia H.	1,425	Thailand	1
Lithuania	66,727	Yemen	70	Nth Macedonia	1,359	China	3
Georgia	64,806	PNG	94	USA	1,336	New Zealand	5
Belgium	60,457	Burundi	131	Bulgaria	1,297	Singapore	5
Switzerland	59,762	Niger	181	Hungary	1,274	Niger	6

High cases/ M pop

- Slow to act
- Mixed by GDP

Deaths / M pop

- Phase 1
- Mixed by healthcare resourcing (GDP)

Data: https://www.worldometers.info/coronavirus/

Current hot "spots" last 7 days



Europe/Americas 86% cases & 87% deaths

- Americas 52% cases 47% deaths
- Europe 34% cases 40% deaths
 - ROW 14% cases 13% deaths



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Slow low-tech public health response



Americas 3 000 000 50 000 Cases 45 000 Deaths 2 500 000 40 000 35 000 2 000 000 30 000 Sage 1 500 000 25 000 1 20 000 1 000 000 15 000 10 000 500 000 5 000 30-Dec 10-Feb 02-Mar 23-Mar ye'May 25-May 17-Aug 07-Sep 28-Sep 19-Oct VoN-00 30-Nov 20-Jan 13-Apr 15-Jun luL-90 27-Jul 21-Dec 11-Jan

Reported week commencing
Daily New Cases in the United States 26.6mill

Daily New Cases Data as of 0:00 CMT+0

https://covid19.who.int/

Balancing economy with outbreak control





Balancing economy with outbreak control



https://interactives.lowyinstitute.org/features/covid-performance/

Country rating

Ranking	Тор 10	Ranking	Bottom 10
1	New Zealand	89	Chile
2	Vietnam	90	Ukraine
3	Taiwan	91	Oman
4	Thailand	92	Panama
5	Cyprus	93	Bolivia
6	Rwanda	94	USA
7	Iceland	95	Iran
8	Australia	96	Columbia
9	Latvia	97	Mexico
10	Sri Lanka	98	Brazil

Method

Time period 36 weeks from 100th confirmed case to 9 January 2021

14 day rolling averages of new daily cases calculated for

- Confirmed cases
- Confirmed deaths
- Confirmed cases per million people
- Confirmed deaths per million people
- Confirmed cases as proportion of tests
- Tests per thousand people



https://interactives.lowyinstitute.org/features/covid-performance/

GDP by case/million

Should have acted faster

- Later outbreak
- Middle GDP
- High cases/mill pop

Could have acted faster

- Later uptick in cases
- Mostly High GDP
- High cases/mill pop

Appropriate

- Earlier Outbreaks
- Higher GPD
- Low cases/mill pop



Variant of Concern UK B.1.1.7

Countries/territories/areas reporting VOC 202012/01 variant (situation as of 25 January 2021)



SGTF has rapidly become predominant across the country

World Health

Organization



VOC faster expansion across multiple regions in UK

Transmission advantage 42%-68%

https://www.imperial.ac.uk/media/imperialcollege/medicine/mrc-gida/2020-12-31-COVID19-Report-42-Preprint-VOC.pdf

Variant of Concern South Africa 501Y.V2

Countries/territories/areas reporting 501Y.V2 variant (situation as of 25 January 2021)



Emergence of 501Y.V2 (B.1.351)

World Health Organization



Presented by Tulio de Oliveira, NGS-SA 28/1/21



Variant of Concern Brazil B.1.1.33 and B.1.1.28

Countries/territories/areas reporting P.1 variant (situation as of 25 January 2021)



B.1.	1.33 F	req. 19	t Detection E	3.1.1.28	Freq.	1st Detection
al 9	63	1		716	1	
	1	0.00	13th May	0	0.00	
	7	0.01	April	30	0.04	15th March
3	31).03	12th March	48	0.07	15th April
1	.6).02	26th March	10	0.01	21st March
5	8	0.06	7th March	12	0.02	30th March
8	50).88	1st March	616	0.86	5th March
1 6	87 ().71 :	9th March	606	0.85	5th March
	3 1 5 8 1 6	31 (16 (58 (850 (1687 (31 0.03 16 16 0.02 16 58 0.06 850 850 0.88 0.71	31 0.03 12th March 16 0.02 26th March 58 0.06 7th March 850 0.88 1st March 16 687 0.71 9th March	31 0.03 12th March 48 16 0.02 26th March 10 58 0.06 7th March 12 850 0.88 11 March 616 1 687 0.71 9th March 606	31 0.03 12th March 48 0.07 16 0.02 26th March 10 0.01 58 0.06 7th March 12 0.02 850 0.88 1st March 616 0.85 687 0.71 9th March 606 0.85

World Health Organization



Marilda Siqueira & Paola Resende, FIOCRUZ Genomic Network MoH 28/1/21



Agenda

Global epidemiological situationPandemic responses

Vaccines

•WHO Independent Panel



Vaccine rollouts



As of Week ending February 3

 Average injections daily

 Pop
 9m
 Israel
 172,143

 Pop
 332m
 USA
 1,617,666

 Pop
 68m
 UK
 404,056

Injections per we	ek
Israel	1,205,000
USA	6,470,665
UK	2,424,334

ions
4,658,000
31,123,299
9,468,382

382

Vaccine inequality



Source: The Economist Intelligence Unit, January 2021.

Source: Second report on progress from the Independent Panel for Pandemic Preparedness and Response, January 2021

Globally no one is safe while slow vaccination in low GDP countries

Circulating VOC = high case numbers = continued epidemic

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Independent Panel for Pandemic Preparedness & Response

Second Report Key Messages

- · World was not prepared & must do better
- Low tech public health measures must be applied comprehensively
- Pandemic has deepened inequalities
- World Health Organization has been underpowered to do the job expected of it
- Global pandemic alert system (IHR 2005) not fit for purpose
- Global leaders failed to take seriously already known existential risks posed by pandemic threat
- COVID-19 pandemic must be catalyst for fundamental and systemic change in preparedness from the local community to highest international levels

Source: Second report on progress from the Independent Panel for Pandemic Preparedness and Response, January 2021



Final thoughts

- World wasn't ready for COVID-19 after SARS, pandemic influenza & September 2019 warning
- Most counties failed global citizens we are all interconnected
- Reset leadership to respond to PHEIC
- COVID-19 will not be the last pandemic



Relevant background & experience

- Member World Health Organization Health Emergencies Program Experts Advisory Panel for Infection Prevention and Control Preparedness, Readiness and Response to COVID-19
- World Health Organization Advisor to China and Malaysia surveillance
- Reviewed outbreak response by Beijing and infection control in Hong Kong designated hospital for **SARS outbreak**
- Reviewed infection control evidence of Australian Pandemic Influenza Infection Control Guidelines
- Honorary Advisor to the NSW Clinical Excellence Commission
- Professor Epidemiology, Hospital Infection and Infectious Diseases Control

