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National Narratives on COVID-19

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The ICAT National Narratives Workstream

Kate Dron FIA, FNZSA



National Narratives Workstream

- Comprised of more than 40 people covering 35 countries
- Compare and contrast the impact of COVID-19, and the response of society and governments, across the various countries
- Identified broad categories for analysis of international differences;
 - economic actions and effects
 - health actions and outcomes
 - socio-political effects
 - insurance industry impacts



National Narratives Comparison

- Collection of case studies in which local actuaries describe the ‘national narrative’ of their own country
 - Brazil - Kirsty Howitt
 - Ghana - John Abonongo
 - India - Rajeshwarie VS and Rishabh Gulati
 - Malawi - Dziwana Shawa
 - New Zealand - Kate Dron
 - Poland - Maciej Zabojski
 - Singapore - Alvin Fu
 - United Arab Emirates - Memona Ali
- Articles as at 30 November, currently being updated to 31 March





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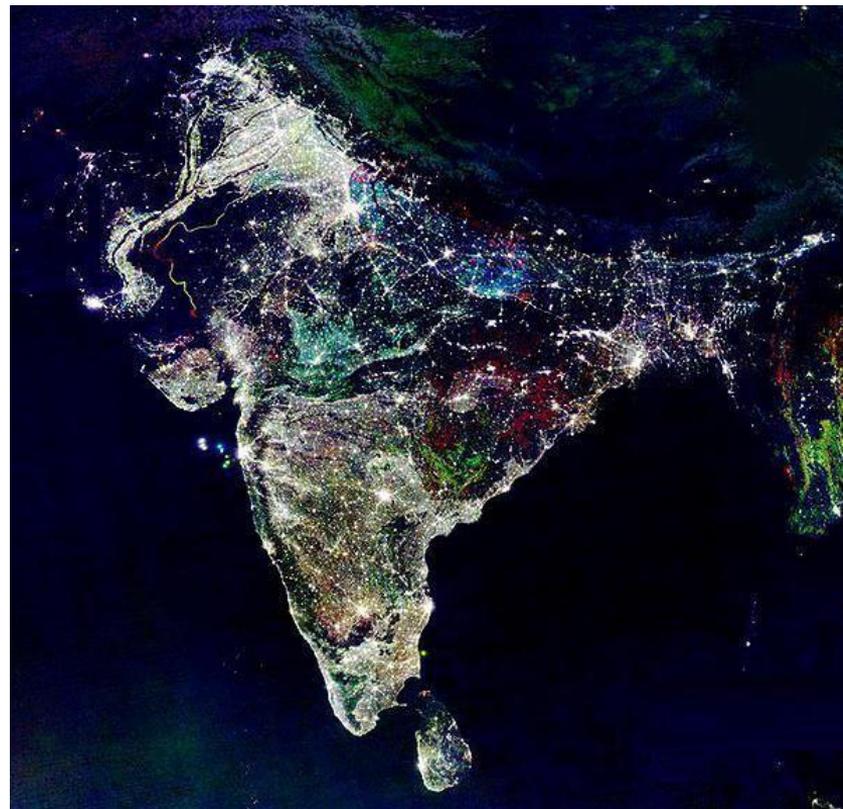
India – One Year of Covid-19

Rajeshwarie V.S FIA, FIAI

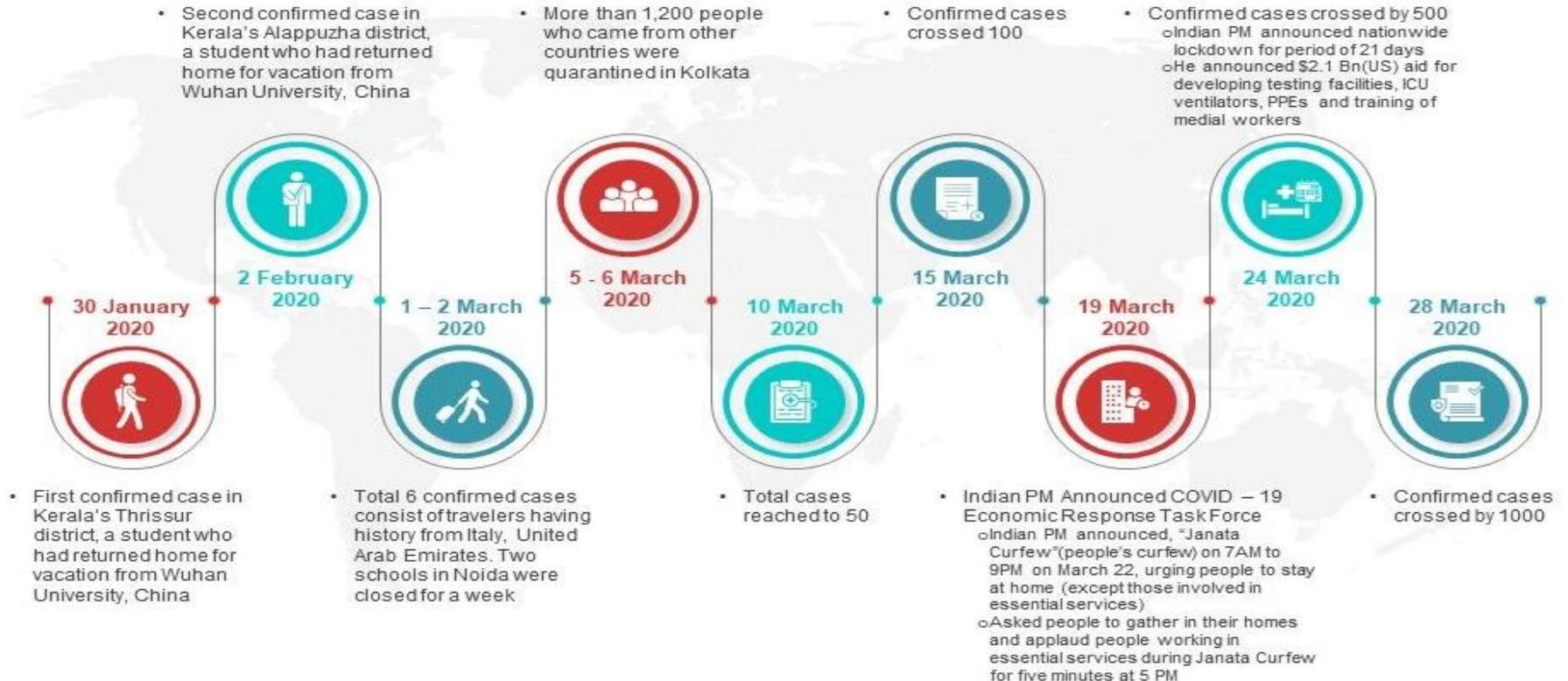


India Narrative

Population as at Mid 2020	1.38 bn
Population Density per Sq km	464
Cumulative Cases as at 31 March 2021	11.47 Mn
Vaccinations as at 31 March 2021	1.3 Mn
Recovery Rate	97.3 % mid-Feb to around 85%now
Case Fatality Ratio	1.14%



How It All Began

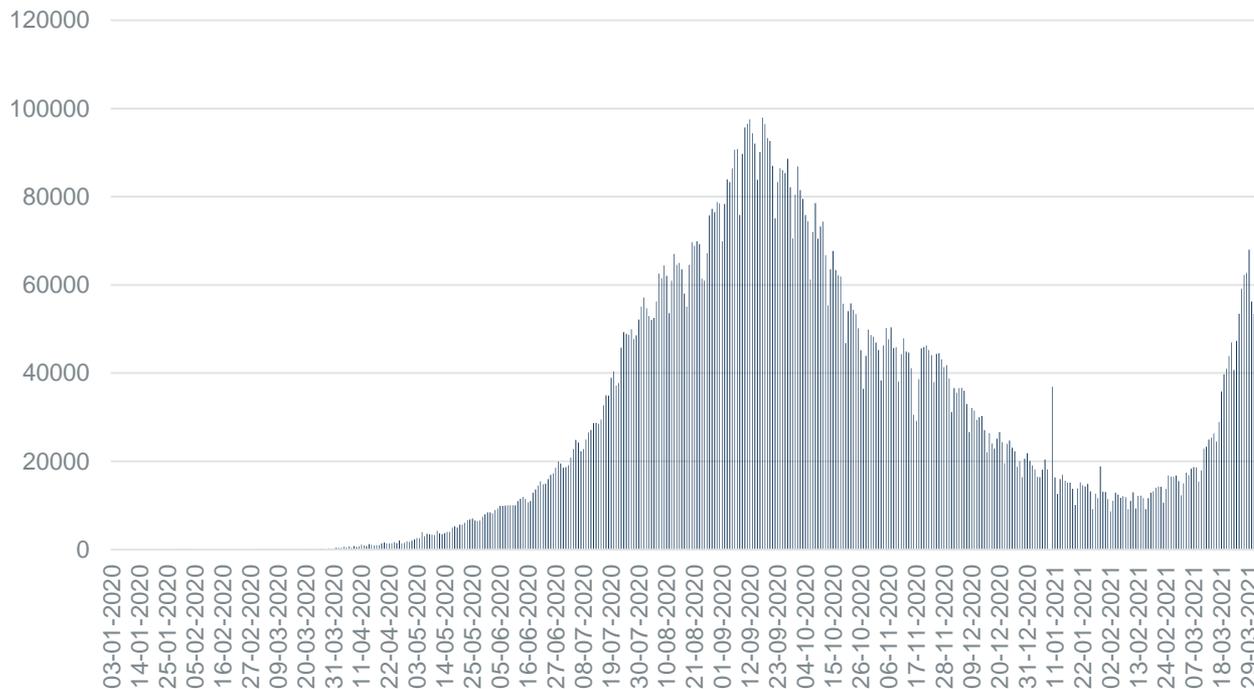


Where We Stand Today

As on 17-April-2021

Total Cases	14.8 Million
Reported today	261,394
7-Day Avg upto 17-Apr	204,171
Total Deaths	177 K

Daily Fresh Reported Cases



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Government Intervention

- Lockdown for several months and slow easing of restrictions
- Migrant worker crises
- Economic relief measures
 - Targeted relief for various segments – direct transfers in cash/ kind
 - Moratorium on loan payments for the period of no economic activity
 - Launch of new insurance products specifically for Covid-19
 - Additional spending on healthcare and infrastructure



Vaccination Drive

- Clinical trials for two vaccines Oxford-AstraZeneca and the indigenous Covaxin began in July – August 2020
- By mid January 2021, the first phase of vaccination began for Healthcare and Frontline workers
- Phase 2 of the drive on 1-Mar-2021 for the 60+ and 45+ with comorbidities
- Currently Phase 3 is underway for all those above 45 years
- Vaccination is set to open for all above 18 years from 1-May-2021
- The Government set up a portal Co-Win and also created an app for eligible citizens to register and get to the nearest vaccination centres

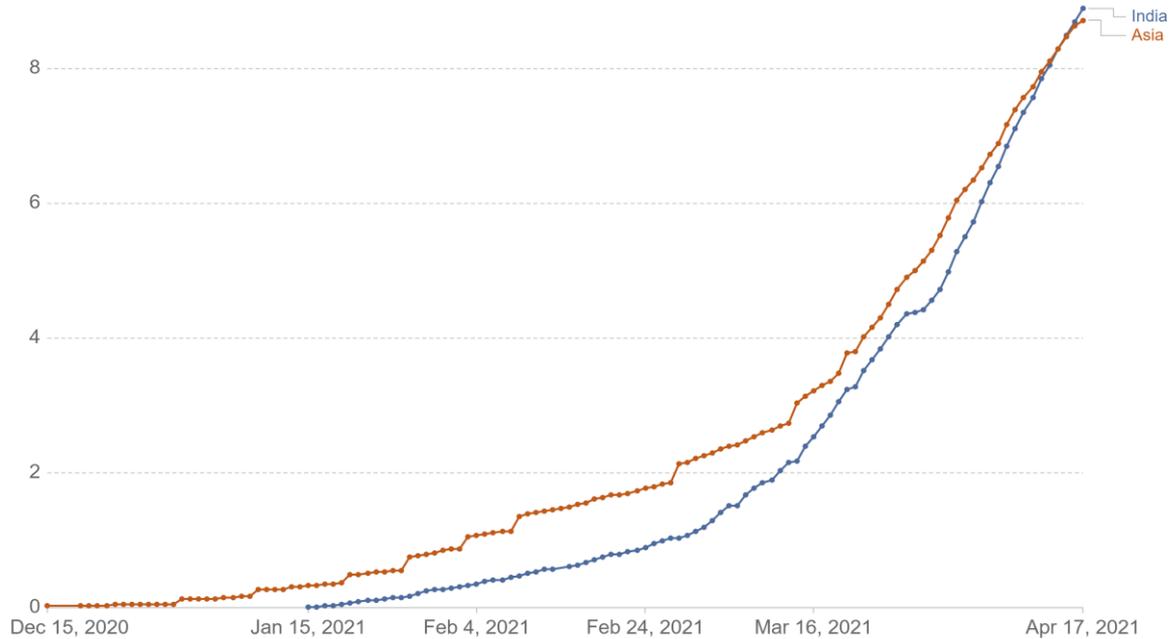


Vaccination rate per 100 people

COVID-19 vaccine doses administered per 100 people

Total number of vaccination doses administered per 100 people in the total population. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).

Our World
in Data



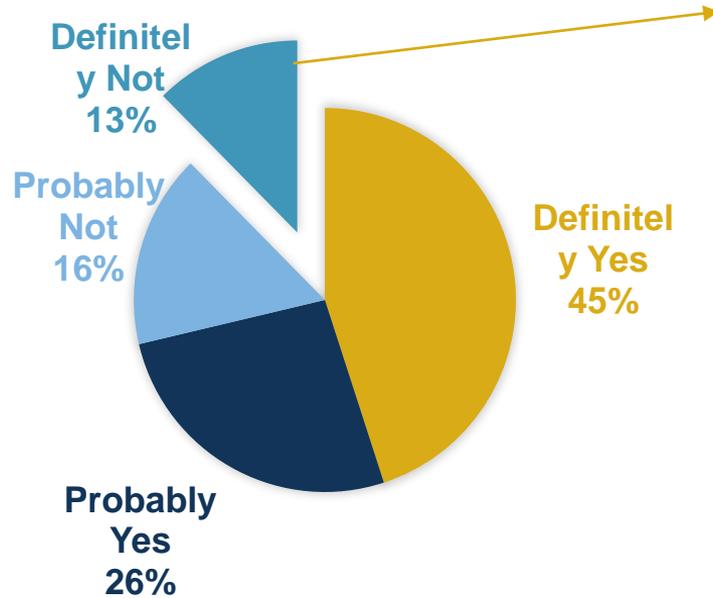
Source: Official data collated by Our World in Data

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Vaccine Hesitancy



Reasons for hesitation

- Wait and See
- Others need it more than me
- Possible side effects
- Don't know if it works
- Don't like vaccines
- Cost
- Religious Beliefs



The Second Wave

- Numbers are terrifying – close to 300,000 cases in a day
- Nearly 1500 deaths per day
- No likelihood of a total lockdown
- Only localised curfews and restrictions
- Mass gatherings have become super - spreader events
- New variants – rumours of mutations
- Nationally it's the second wave – the capital has had about 4!



Challenges and the Way Ahead

Challenges

- Cold Chain Infrastructure – storage and transportation
- Number of doses required and across vast distances
- Vaccine wastage

The Way Forward

- Prevent localised clusters and Break the Chain!
- Vaccinate as fast as possible
- Step up health infrastructure





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UAE – Managing the Pandemic

Memona Ali FIA



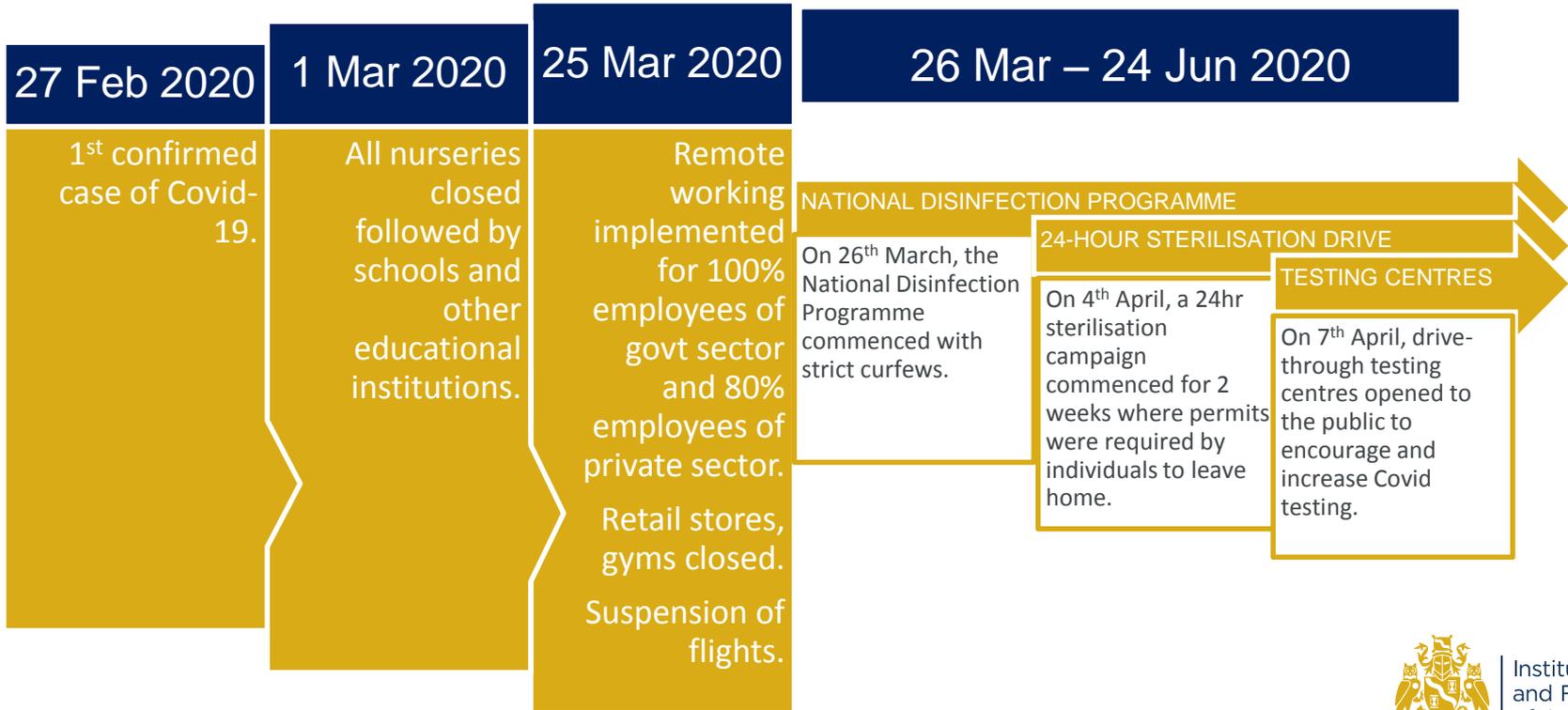
United Arab Emirates

Covid-19 Update as at 31 March 2021

Tests Performed	38m	
Positive Cases	461k	1.2%
Currently Active	14.5k	
Deaths	1.5k	
Recovery Rate	98%	
Case Fatality Rate	0.3%	



Rapid Initial Response



Intensive Testing

Mandatory Testing

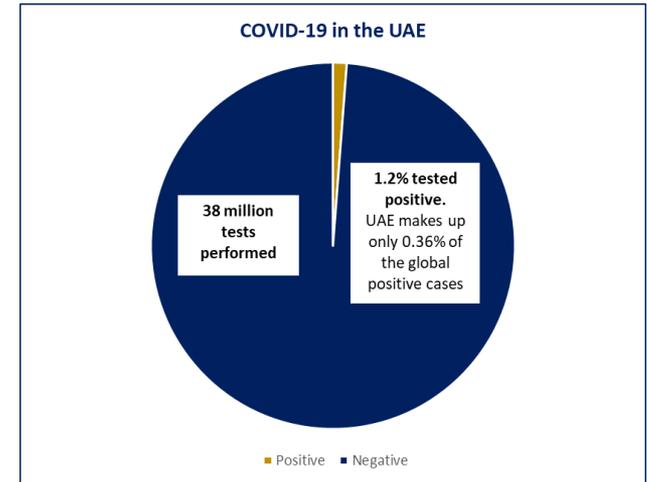
Availability

Employees
(healthcare,
schools,
construction)

Travel (to,
from and
within the
country)

Drive-thru
testing
centres and
walk-in clinics

Testing was intensified after the National Disinfection Programme ended. This led to quicker identification of Covid cases and reduced the spread.



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Economic Recovery

Dubai Focus

- Flights resumed in summer 2020
- Retail stores, gyms and tourist attractions re-opened
- Schools and educational facilities re-opened for the beginning of term in September 2020
- Return to work at 100% capacity
- Rules maintained on social distancing and face masks
- Economic stimulus provided by the UAE Government

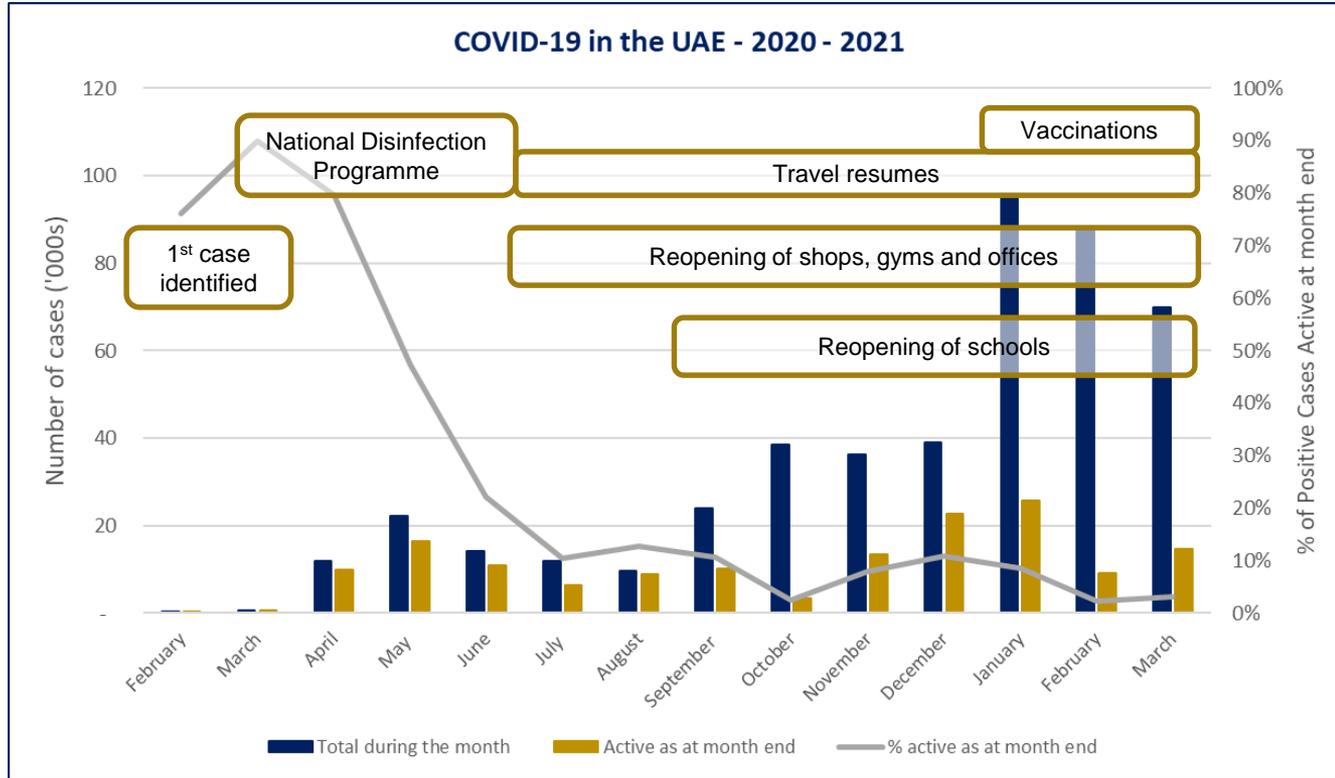


Covid Vaccinations

- Vaccinations started on 5th January. The vaccine by Sinopharm was the first to be approved by the UAE.
- Within the next month, other vaccinations such as Pfizer and Sputnik V became available.
- Vaccinations were made available to all adults, except those with health issues.
- As of yesterday, over 10.3 million doses of the vaccination have been given in the UAE, that's 1.04 doses per person residing in the UAE.



Covid-19 Development



- 38 million tests performed
- 461k (1.2%) confirmed cases
- 1.5k (0.3%) deaths



Where are we now?

- The number of confirmed cases and deaths have remained relatively stable since the beginning of this year.
- Travel restrictions to and from the country and largely lifted, although testing remains mandatory when flying and travelling to Abu Dhabi by road.
- Face masks remain mandatory, as is social distancing.
- Schools remain open for face-to-face learning with the option of distance learning.
- The UAE is now manufacturing a locally produced inactivated Covid-19 vaccine, called Hayat-Vax.





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Singapore's Story on COVID-19

Alvin Fu FIA, FSAS



About Singapore



Population as at Mid 2020	5,685,800
Population Density per Sq km	7,810
First Official Case	23-Jan-20
Cumulative Cases as at 31 March 2021	60,347
Recovery Rate	99%
Case Fatality Ratio	0.05%

Epidemic Curve



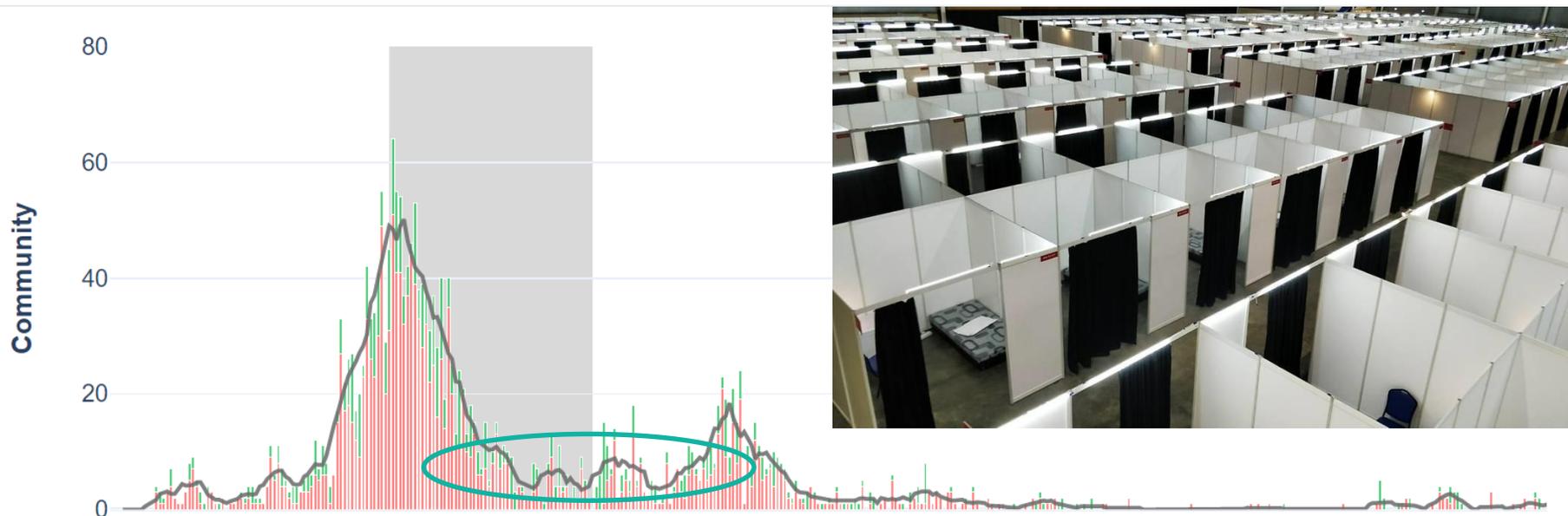
Source: <https://covidsitrep.moh.gov.sg/>



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Epidemic Curve – Community Cases

Leading to Circuit Breaker 7 April 2020 to 1 June 2020



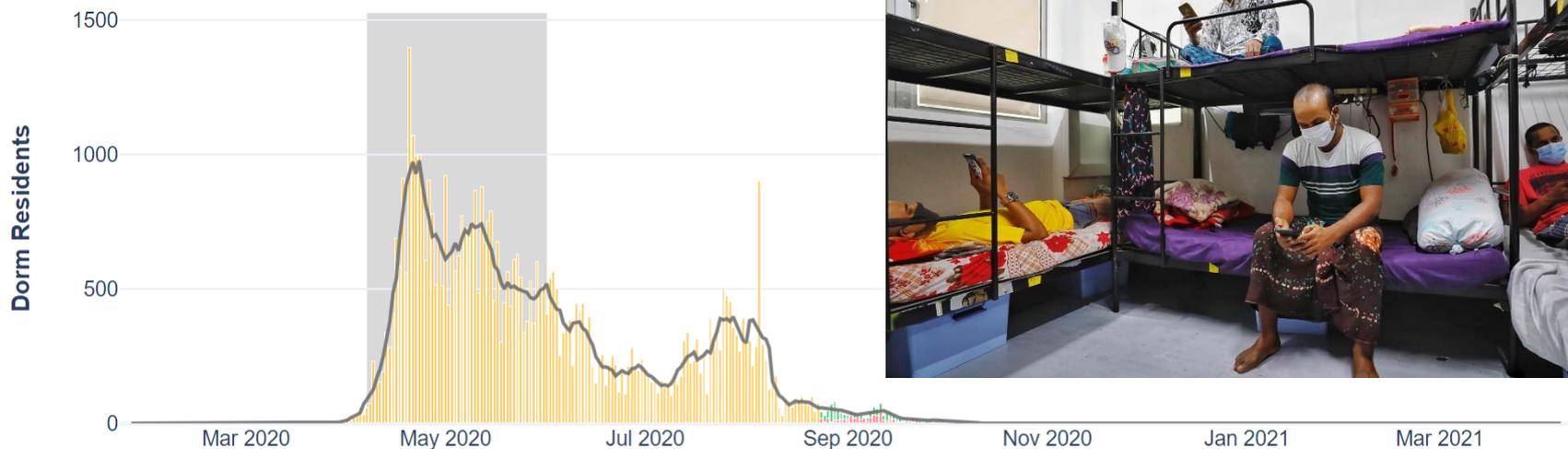
The Circuit Breaker was successful in flattening the community cases. Increased supply of hospital beds at Singapore Expo, Resort facilities.



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Epidemic Curve – Dormitory Cases

Dormitory Residents

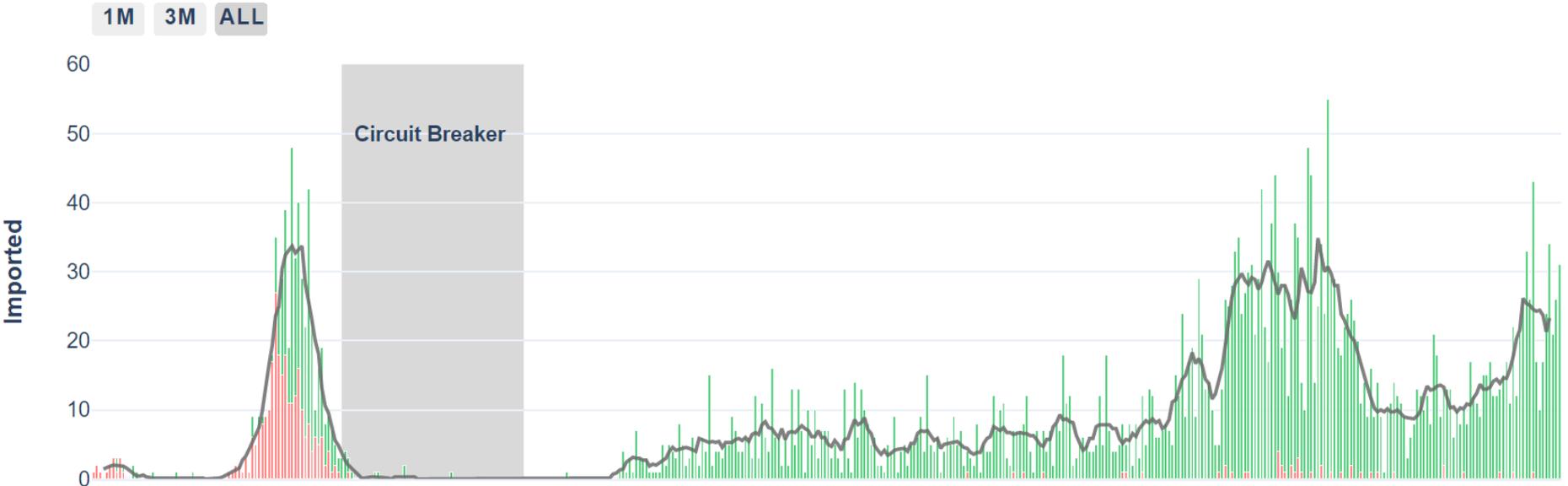


Workers staying in dormitories subject to routine 14 days testing.



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Epidemic Curve – Imported Cases



Vaccination Drive Since 30 Dec 2020

- First shipment of Pfizer-BioNTech on 14 Dec 2020.
- Moderna vaccine introduced from 14 March 2021.
- 24 March 2021 started vaccinating 45-59 years old.

Singapore's Covid-19 vaccinations ramped up

With more vaccines arriving in the country, those aged 60 to 69 will be getting their Covid-19 shots earlier. Jabs will also be offered to more groups, including teachers and postal staff. Timothy Goh looks at who has been vaccinated so far, and who is next.

THE JOURNEY SO FAR



Dec 30, 2020

The first vaccine shot here is given to a senior staff nurse at the National Centre for Infectious Diseases. Other NCID staff receive their jabs as well.

Jan 8, 2021

Staff from healthcare institutions get their first dose.



Jan 11

Home Team officers get their first jabs. The vaccination drive for eldercare workers also begins.



Jan 13

The vaccination exercise for Singapore Airlines staff, believed to be the first of its kind in the world, kicks off.



Jan 14

The first batch of Singapore Armed Forces soldiers receives jabs.



Jan 18

Front-line workers in the aviation and marine sectors receive their first doses.

Jan 27

Vaccination pilots start for seniors aged 70 and above, living in Ang Mo Kio and Tanjong Pagar.

Feb 10

Over 250,000 people have received their first dose of the vaccine. At this point, most front-line and essential workers have been vaccinated.



Feb 22

Seniors aged 70 years and above across the island begin receiving their jabs.



Feb 23

Taxi and private-hire car drivers start getting their vaccinations.

Vaccination Drive

Since 30 Dec 2020

Vaccination Data (as of 18 Apr 2021)

Received First Dose
1,364,124

Completed Full Vaccination Regimen
849,764

Total Doses Administered
2,213,888

- 15% of population vaccinated as at 18 April 2021.
- Majority of adult above 45 years old population would be vaccinated by June 2021.
- The rest of adult population to be completed by 2021.

Source: [MOH | Updates on COVID-19 \(Coronavirus Disease 2019\) Local Situation](#)



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Singapore's Report Card

As at 24 April 2021

Total Cases

60966

▲23

Active Cases

307

▲7

ICU

1

-

General Ward

87

▲8

In Isolation

219

▼1

Discharged (Hosp)

3273

▲6

Completed Isolation

57356

▲10

Demised

30

-

Source: <https://www.moh.gov.sg/covid-19/situation-report>



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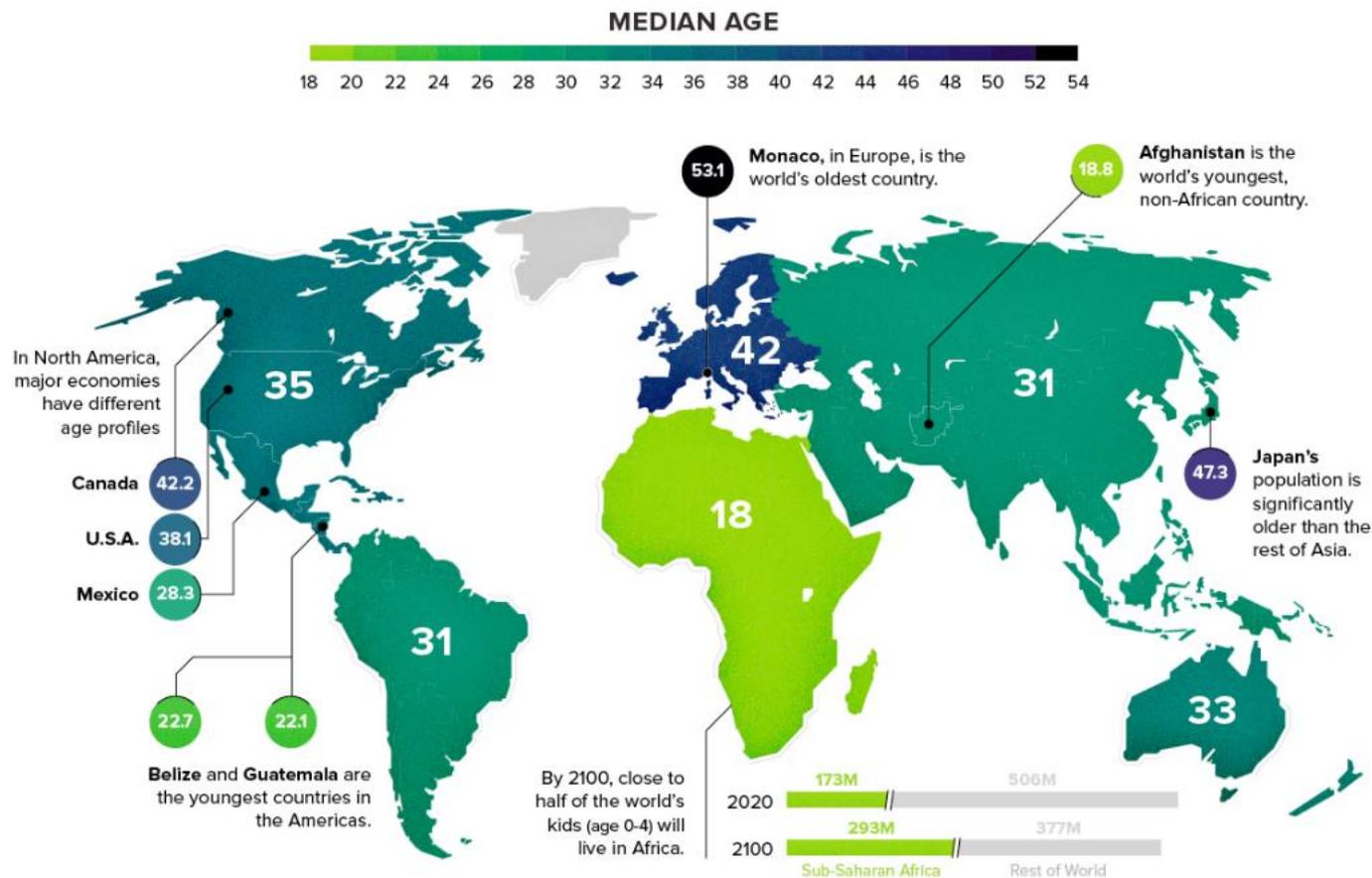
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COVID-19: What has Driven Experience?

Randall Wright FSA

THE MEDIAN AGE OF CONTINENTS

Africa has the world's youngest population, with a median age in the teens



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Median Age

- | | | | |
|----------|------|---------------|------|
| • Brazil | 30.3 | • New Zealand | 37.0 |
| • Ghana | 20.6 | • Poland | 38.8 |
| • India | 26.4 | • Singapore | 38.1 |
| • Malawi | 17.2 | • UAE | 30.0 |



The luck of the environment

- Geographic isolation – New Zealand vs Europe
- Population density – Canada 4/km² vs Singapore 7,916/km²
- Population uniformity – India vs Singapore
- Weather – Winter outbreaks
- Homogeneity and Cooperation
- Infrastructure



The Oxford Stringency Index of Government Response

• Brazil	70.83	• New Zealand	22.22
• Ghana	47.22	• Poland	78.70
• India	69.91	• Singapore	50.93
• Malawi	50.93	• UAE	53.70



Tactics

- Lockdown
- Border control / travel restrictions
- Mask mandates
- Testing (Early vs Late)
- Track and trace
- Income support
- Herd immunity



Political structure and strategy

- Strong central action vs Diffuse regional action
- Go hard early vs Delayed action
- Stay home vs Get out
- Mandatory vs Voluntary



Outcomes

- Keeping it at bay – New Zealand, Singapore, UAE, China
- Early success, late surge – Poland, India
- Series of surges – US, UK
- Steadily increasing – Brazil



Vaccinations per Hundred of Population

• Brazil	17.46	• New Zealand	3.80
• Ghana	2.71	• Poland	26.61
• India	10.03	• Singapore	37.84
• Malawi	1.40	• UAE	103.07



Vaccination

- Vaccinate aggressively at peak surge – Israel, US, UK
- Vaccinate aggressively out of caution – UAE, Singapore
- Vaccinate slowly and maintain restrictions – New Zealand
- Vaccinate slowly and rely on youth – Africa
- Vaccinate slowly, not going well – Brazil, India



Questions

Comments

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