

WHO Global Patient Safety Network Webinar: Patient safety implications during the COVID-19 pandemic Lessons learnt from Singapore

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1. Introduction
2. Current COVID-19 situation in Singapore
3. Medical Resource
4. Health Worker Safety
5. Communications
6. Clinical Safety
7. Support for Patients
8. Key Lessons Learnt

Patient Safety in COVID-19 crisis

- Holistic – extension of patient safety in healthcare institutions to staff safety, community safety, environment safety and safety & security of supply chains
- Multidisciplinary, multi-professional, and across continuum of care & whole of government approaches
- Dynamically Safe System - Proactive, Flexible and Adaptable in fast moving COVID environment

Global Patient Action Plans Theme 10

Patient safety in an era of UHC:

safety & quality across the continuum of care

1. Build on the existing knowledge base
2. Access, quality & safety – rivers to the ocean
3. Country context & realities – gives us a compass
4. Integration of patient safety but with visibility
5. Clear national direction is key
6. Continuum of care – quality & safety

Think care pathways

Look at all levels – community to specialist hospital - integration is key

Systems levers need to be considered along the continuum

Ensure levels are considered (primary, secondary, tertiary, etc.) within a systems approach

7. Build on the momentum of PHC approach

Principles of Patient Safety Activities

1. Adequate Preparedness for crisis
2. Proactive to deal with surge and unknowns
3. Flexible & Adaptable to evolving dynamic and fast changing environment (scaling up/down & changing paradigms)
4. Dynamic Risk Balance in Clinical Activities
5. Accelerate trials and innovations
6. Adopt Evidence Based Medicine
7. Flatten the epidemic curve to prevent overburden by surges and to buy time to avoid overwhelm in a short space of time

Reduce the spread of coronavirus disease by increasing the distance from possible exposure

Social Distancing – 2 arm lengths rule, Split Work Teams, Staggered Hours

Barrier Distancing – Masking & PPE

Hygiene Distancing – Hand Hygiene, Personal & Face Hygiene

Activity Distancing – Avoidance of Gatherings and Group Activities, Promotion of electronic and tele-activities & Work From Home

Environment Distancing – Safe Design, Layout and Environment Cleaning

2. COVID-19 CORONAVIRUS PANDEMIC – SELECTED COUNTRIES

	Country, Other	Total Cases	Total Deaths	Fatality Rate %	Serious, Critical	Tot Cases/ 1M pop	Deaths/ 1M pop	Total Tests	Tests/ 1M pop
	World	3,821,691	265,043	6.94	48,211	490	34		
1	USA	1,263,092	74,799	5.92	15,827	3,816	226	8,005,435	24,185
2	Spain	253,682	25,857	10.19	2,075	5,426	553	1,932,455	41,332
3	Italy	214,457	29,684	13.84	1,333	3,547	491	2,310,929	38,221
4	UK	201,101	30,076	14.96	1,559	2,962	443	1,448,010	21,330
5	France	174,191	25,809	14.82	3,147	2,669	395	1,100,228	16,856
6	Germany	168,162	7,275	4.33	1,884	2,007	87	2,755,770	32,891
7	Russia	165,929	1,537	0.93	2,300	1,137	11	4,633,731	31,752
8	Turkey	131,744	3,584	2.72	1,278	1,562	42	1,234,724	14,640
9	Brazil	126,611	8,588	6.78	8,318	596	40	339,552	1,597
10	Iran	101,650	6,418	6.31	2,735	1,210	76	531,275	6,325
14	India	52,987	1,785	3.37		38	1	1,276,781	925
15	Belgium	50,781	8,339	16.42	646	4,382	720	474,176	40,914
19	Switzerland	30,060	1,805	6.00	121	3,473	209	290,365	33,550
20	Mexico	27,634	2,704	9.79	378	214	21	105,664	820
22	Sweden	23,918	2,941	12.30	425	2,368	291	148,500	14,704
26	Singapore	20,198	20	0.10	23	3,452	3	175,604	30,016
28	Qatar	17,972	12	0.07	72	6,238	4	112,963	39,209
29	Israel	16,310	239	1.47	89	1,884	28	423,125	48,885
32	Japan	15,253	556	3.65	308	121	4	186,343	1,473
38	S. Korea	10,810	256	2.37	55	211	5	649,388	12,666

<https://www.worldometers.info/coronavirus/>

7 May 2020

COVID-19 Situation in Singapore - Early Mitigation/Containment Strategies

1. Have a plan and use it quickly - Multi-Ministry Taskforce on Coronavirus, Health advisory and temperature checks, Border controls, Stay Home Orders
2. Set up of a network of 900 health clinics Public Health Preparedness Clinics (PHPCs) with a National Centre for ID (NCID)
3. Test effectively and hospitalize or isolate in converted medical facilities people infected with the virus
4. Trace contacts rigorously
5. Make social messaging clear

1. Foreign Correspondent 31 March 2020 <https://www.abc.net.au/news/2020-03-31/coronavirus-singapore-how-it-fought-the-virus/12100072>
2. <https://www.channelnewsasia.com/news/singapore/coronavirus-covid19-moh-gp-phpc-clinics-subsidised-12435894>

Key Events

- 3 Jan: **Singapore MOH elevates screening for pneumonia from returned travelers from Wuhan**
- 21 Jan: MOH elevates screening for respiratory infection/ pneumonia from returned travelers from mainland China
- 23 Jan: **First imported case**
- 31 Jan: **First Singaporean case returning from Wuhan**
- 31 Jan: Singapore restricts travelers who have visited mainland China in the previous 14 days
- 4 Feb: **First Singapore human-human transmission** (4 out of 6 new cases)
- 4 Feb: Enhanced surveillance activated within 48 hr
- 6 Feb: 30 cases (22 NCID, 4 SGH, SKH 1, CGH 1, KKH 2)-7 locally acquired
- 6 Feb: **First Singapore case without epidemiologic links**

COVID-19 – Disease Outbreak Taskforce

MODIFIED DORSCON YELLOW Alert Levels (as of 23 January 2020)

YELLOW

Disease is severe and spreads easily from person to person but is occurring outside Singapore.

OR

Disease is spreading in Singapore but is (a) Typically mild i.e only slightly more severe than seasonal influenza. Could be severe in vulnerable groups. (e.g. H1N1 pandemic) **OR** (b) being contained



MODIFIED DORSCON Orange Alert Levels (as of 6 February 2020)

ORANGE

Disease is severe **AND** spreads easily from person to person, but disease has not spread widely in Singapore and is being contained (e.g. SARS experience in Singapore)

Doscon Yellow Checklist

Level of Alert	MODIFIED YELLOW
Temperature check	Healthcare Workers/Tenants and Outsourced partners returning from China for 14 days, 2 x per day
Personal Protective Equipment (PPE)	All inpatient areas CE/CSC/Delivery Suite/Isolated Diagnostic Centre Surgical Mask All patient training areas Surgical Mask
Fever and flu-like symptoms surveillance	i) Healthcare workers ii) Inpatients
Suspect cases	Admit to K10/K1 Ward All isolation room for relevant testing and management Refer to PnP Bed Plans if All is increasingly full
Probable/Confirmed cases	Discuss with GCMH
Contact tracing (for confirmed cases)	Yes
Staff Clinic activation	Healthcare Workers returning from China who feeling unwell or have a fever to proceed to SGH Staff Clinic
Influenza vaccination	Seasonal vaccine for HCWs
ANTI-VIRAL S:	
Treatment	NA
Prophylaxis	NA
Discharge of suspected/confirmed cases (*MOC depends on prevailing MOH directives)	Discharge when no symptoms, PCR negative, after MOH approval Home Quarantine Order pending MOH confirmation
Visitation guidelines for all wards	General Ward Penal, CCU, ITU, ICU Isolated ICU Penal and CCU to be updated for patients on Changpeng 11 or 12 (Confirmed patients, hospital visitors then confirmation for isolated patients) NA Penal, CCU, ICU, Isolation
Traffic/Access Control	Moderate restriction
Intra-hospital movement of HCWs and patients	No Restriction
Elective surgery list	No elective and postpone for 2 weeks of patients and all caregivers returning from China if the list is full
Elective SOC cases	No elective and postpone for 2 weeks of patients and all caregivers returning from China if the list is full. Emergency essential treatment allowed only

ENHANCED PREPAREDNESS

MOH–Multi-Ministry Taskforce



SingHealth Disease Outbreak Taskforce



Hospital Disease Outbreak Taskforce



Hospital Command Centre

Provide Daily update and report:

- Global & Local COVID Cases
- Hospital Bed Occupancy & Capacity (CE & Ward Load)
- Staff Safety – Temp surveillance, staff health and mental wellness
- Swab test – positive cases
- Critical supplies – daily stockpile
- Communication – patients/Visitors/Caregivers/Staff
- Update workflow change

Circuit Breaker Containment

Evidence of growing spread within the community and the risk of asymptomatic spread:

Singapore introduced a **much stricter set of containment measures** that would be implemented **from 7 April 2020, code named called “Circuit Breaker”**.

All non-essential workplaces, closed during this period. Schools move to home-based learning, and preschools close except to provide services for parents without alternative care arrangements.

All food establishments provide only take-away and delivery services.

Current COVID-19 Situation in Singapore - Circuit Breaker Containment/Suppression Restrictions

7 April – 4 May 2020



No dine-in at eateries, full home-based learning for schools

Singapore is stepping up measures to pre-empt the trend of rising Covid-19 local transmission.



Most workplaces to close (April 7-May 4)

- Only those providing essential services will be exempted
- These include govt services, markets and supermarkets, clinics and transport services



Eateries to allow only takeaway or delivery (April 7-May 4)

- Dine-in service will not be allowed in restaurants, hawker centres, coffeeshops, food courts and F&B outlets



Schools to shift to full home-based learning (April 8-May 4)

- Schools will shift to full home-based learning
- Pre-school and student care centres will suspend services
- Parents working in essential services can approach schools for help



Recreation venues, attractions to close (April 7-May 4)

- All attractions, theme parks, museums and casinos will be closed
- Sports facilities, such as public swimming pools and gyms, will be shut



Advice to public: Stay at home

- Social contact should be confined to immediate family members living in same household

Extension 5 May – 1 June 2020



Circuit breaker extended till June 1

Singapore will extend its Covid-19 circuit breaker by a month. Existing measures will also be tightened.



More workplaces will be shut from April 22

- Hairdressing and barber shops have to close.
- Standalone beverages outlets - such as bubble tea shops - packaged snacks, confectioneries or desserts also have to close.
- Optician shops must operate by appointment only.
- Pet supply stores and retail laundry services can provide only online sales and delivery.



Mid-year school holidays brought forward

- June school holidays will now start from May 5, and school will reopen on June 2.



Restricted wet market entry from April 22 to May 4

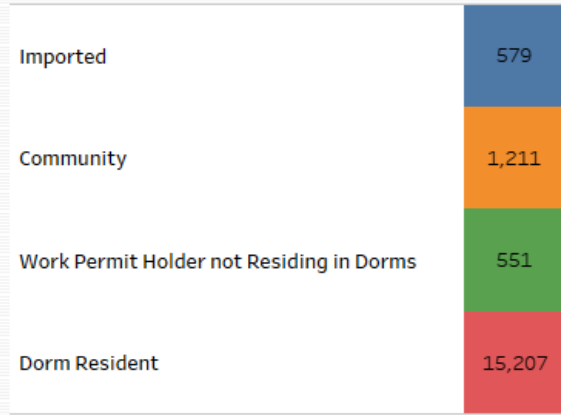
- Access will be restricted for 4 popular wet markets:
 - Geylang Serai Market
 - Chong Pang Market at Blk 104/105 Yishun Ring Rd
 - Market at Blk 20/21 Marsiling Lane
 - Market at Blk 505 Jurong West St 52
- Shoppers with even last digit on IC/FIN can enter on even dates, those with odd last digit can go on odd dates.



Wage support extended for another month

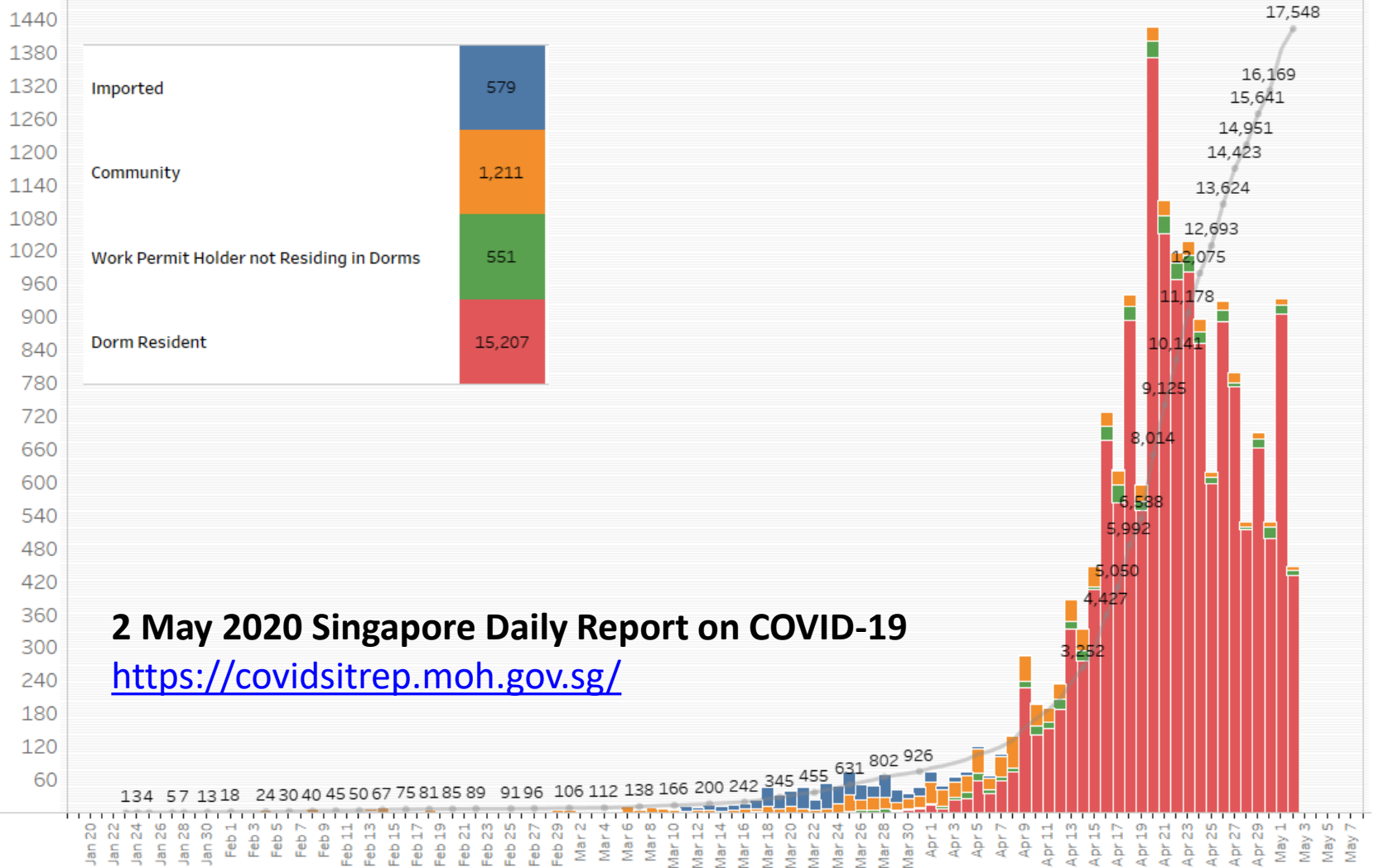
- Govt had announced it will subsidise 75% of the first \$4,600 of gross monthly wages for local workers for April. This will be extended to May.
- Foreign worker levies due in May to be waived. Another \$750 rebate given to employers for each foreign worker they hire.

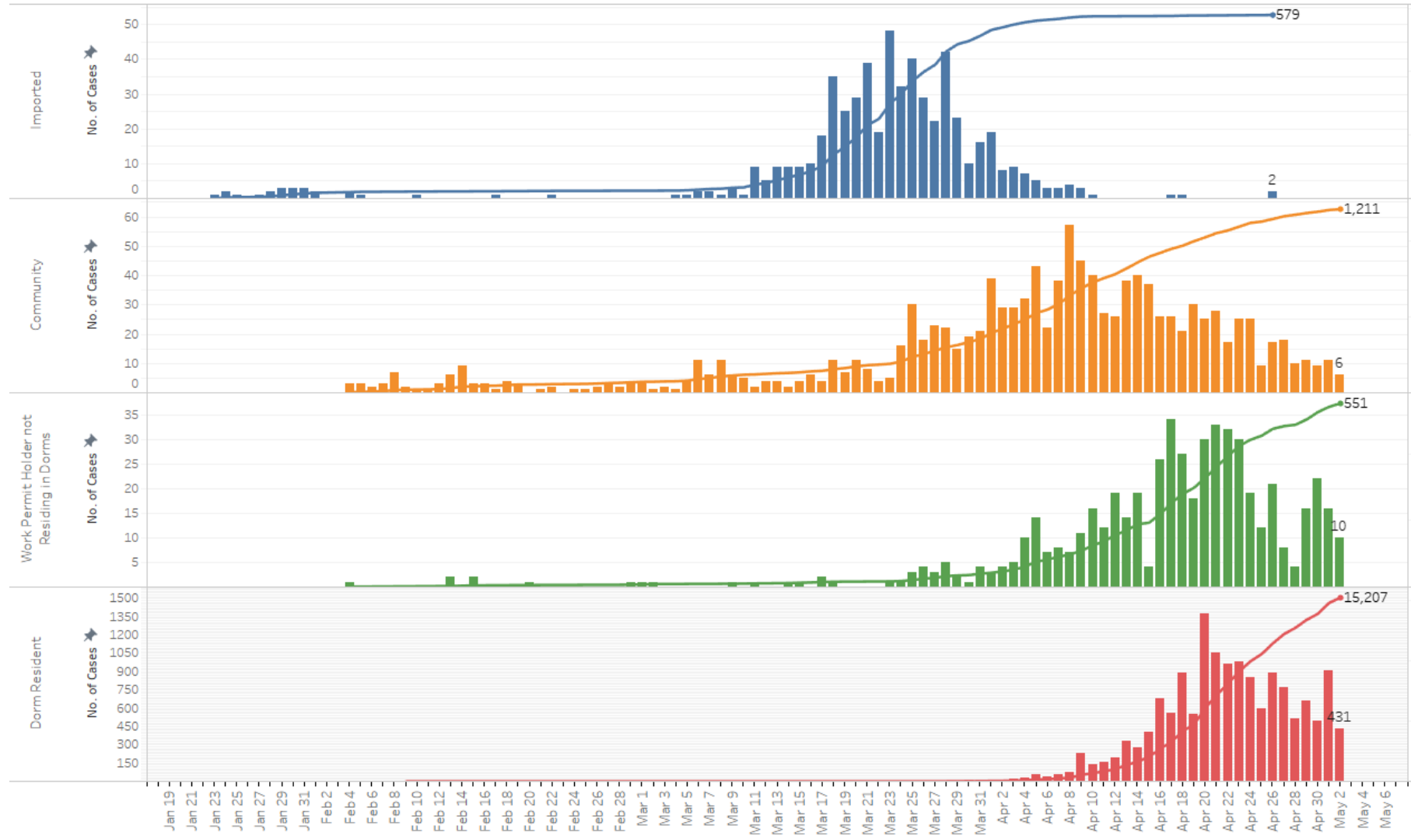
No. of Cases ★



2 May 2020 Singapore Daily Report on COVID-19

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





Serious outbreak amongst migrant workers in the dormitories. Transmission occurred not just in the dormitories, but also in common worksites and in places that they went to with their friends after work and on their rest days. Thus clusters outside of the dormitories too – amongst construction workers living in shop-houses and private apartments.

To determine the extent of the spread, extensive testing amongst these workers undertaken. Many of the workers have very mild symptoms. Testing include not just the workers who report sick, but also those that are asymptomatic and well. Intensive testing explains the large numbers picked up amongst migrant workers in the dormitories.

To minimise the risks of spread to the wider community, the movement of workers in and out of all dormitories stopped, and the construction workers living outside the dormitories put on a stay-home requirement. Comprehensive set of support measures to look after the health, well-being and welfare of these workers are taken

Improving migrant workers' welfare

On-site remittance services, medical posts at recreation centres and free access to Tamil and Hindi movies - these are part of efforts by an inter-agency task force to improve the welfare of foreign workers in dormitories, who have been hard hit by the coronavirus. **Lim Min Zhang** details some of these measures.

TAKING CARE OF BASIC NEEDS

More than
10 million

meals catered for dorm residents in the past four weeks. Taste tests done with workers from different countries, and chef visits conducted to better understand their preferences.

Residents can make online orders to mini-mart operators in dorms.

More employers now pay salaries electronically, with 10 per cent increase in bank account applications from pre-circuit breaker period.

Remittance services arranged for residents, including temporary manned remittance booths and self-service kiosks, and guidance on using e-remittance in workers' native languages.

More than
200,000

SIM cards distributed, with Wi-Fi access enabled across dorms.

Free access to more than

300 Tamil and Hindi movie channels.

More than
410,000

care packs - containing items like thermometers, hand sanitisers, and masks - distributed.



Residents of Westlite Papan doing groceries shopping at a shop located within the dorm.

MORE MEDICAL SUPPORT AND TESTING

More than
25,000

foreign workers tested so far, with focus on essential workers, those who have symptoms, and close contacts of confirmed cases.

Sampling tests being done in areas with lower numbers to determine infection rates.

Medical posts set up at Kranji and Tuas South recreation centres to support the healthcare needs of workers living in factory-converted dorms.



Residents of Westlite Papan dormitory getting swab tests on April 21.

The medical posts set up at Kranji and Tuas South recreation centres have seen more than

750

patients since mid-April. Two more - at Woodlands and Kaki Bukit recreation centres - will be set up next week.

The four posts will together serve

760 factory-converted dorms, housing around

65,000 workers.

12 mobile medical teams, made up of more than 50 medical personnel, deployed to factory-converted dorms with more cases.

Free transport soon for workers in factory-converted dorms to visit medical posts, public health preparedness clinics, or polyclinics.

HOUSING INFECTED AND RECOVERED WORKERS

Community care facilities to be set up within the dorms, to house patients who are clinically well or have mild symptoms.

The patients will be transferred to these places quickly after diagnosis, instead of an off-site facility.

Similarly, on-site community recovery facilities will be set up for patients who are transferred out of community care facilities and are no longer infectious.

Specific blocks in dorms will be designated for workers who have recovered. These will be disinfected before they move in.

Workers there will have to follow strict safe distancing measures, and will not be allowed to interact with residents of other blocks.

Short-term accommodation being arranged for those who have recovered, such as in cruise ships and sports halls. New dorms will also be built for them.



Communal living at Sungei Tengah Lodge.

www.elsevier.com/locate/bsc

A pet dog, with its head shielded with netting, and its owner in Too Payoh on Monday. All 14 Covid-19 deaths in Singapore involved people aged 64 to 95, showing just how vulnerable older people are to the disease.
ST PHOTO
GAVIN FOO



S'pore's Covid-19 death rate low, but seniors vulnerable

Among those 80 and older who tested positive, about one in five has not survived infection

Shivraj Rajendran

Singapore's Covid-19 death rate is among the world's lowest, with only about 0.1 per cent of patients succumbing to the illness here.

But the figure turns grim when it comes to older patients.

For those who are 80 and older here who tested positive, about one in five has not survived the virus infection.

than half of the 14 deaths that Singapore has suffered so far.

In addition, all 14 deaths involved people aged 64 to 95, showing just how vulnerable older people are to the disease.

Dr Siroh Yih Yuen, a geriatrician at Age-Link Specialist Clinic for Older Persons, said that seniors are at risk because they have a higher chance of developing severe complications from the virus.

This risk stems from several factors, including a weaker immune system, and a higher prevalence of multiple medical conditions such

as heart disease, diabetes, hypertension and chronic obstructive lung disease, he pointed out.

"Older persons tend to have diminished physiological reserves, meaning they are less able to accommodate stresses to the body and, hence, succumb more easily," he explained.

In recent weeks, cases among older persons have emerged from nursing homes and homes for the destitute, where residents are even more vulnerable because they live in groups.

On Monday, the Ministry of So-

cial and Family Development announced a new cluster of infections at Acacia Home, a welfare home for the destitute in Admiralty.

Fifteen cases are now linked to the cluster, which comprises 13 residents and two staff.

While the vast majority of the more than 14,000 infected in the country are workers living in dormitories, these individuals are generally young and healthy, with very few needing oxygen or intensive care.

In addition, through extensive contact tracing and ring-fencing ef-

Covid-19 death rates

SINGAPORE COMPARED WITH THE REST OF THE WORLD

Country	Fatality rate (Death rate from infection) (%)	Deaths per 100,000 people in the population
Singapore	0.1	0.25
Malaysia	1.7	0.31
South Korea	2.3	0.47
Japan	2.8	0.29
China	5.5	0.33
United States	5.7	16.77
Indonesia	8.4	0.28
Spain	10.2	49.63
United Kingdom	13.5	31.27
Italy	13.5	44.09
Belgium	15.4	62.11

SINGAPORE'S DEATH RATE BY DEMOGRAPHIC**

Demographic	Number of cases	Fatality rate (%)
Total number of cases	14,423	0.1
Cases not from dormitories (Imported cases, cases in the community, and cases among work-permit holders not living in dormitories)	2,240	0.63
Cases from dormitories	12,183	0

SINGAPORE'S DEATH RATE AMONG SENIORS

Age group	Number of cases***	Number of deaths*	Fatality rate (%)
60-69	211	3	1.4
70-79	72	3	4.2
80 and above	39	8	20.5

NOTE: *Information is as of April 28. ** Information is as of April 27.

*** Information is as of April 19. Since April 20, the Ministry of Health has stopped releasing individual case data. As such, the number of cases per age group cannot be computed beyond April 19.

SOURCES: JOHN HOPKINS UNIVERSITY CORONAVIRUS RESOURCE CENTRE; MOH SITUATION REPORT, ST CORONAVIRUS DATABASE STRAITS TIMES GRAPHICS

Elderly and those with chronic morbidities are vulnerable

STRAITS
TIMES
APR 29,
2020

3. Medical Resource

1. Good Preparedness with Institutional Memories of SARS and H1N1
2. Sufficient Stockpiling of PPE & Training of Staff
3. Appropriate & Prudent Use of PPE
4. Pre-emptive Conversion of Facilities and Early Restriction of non-essential activities
5. Started Local Production of Masks



National Centre for
Infectious Diseases

NCID

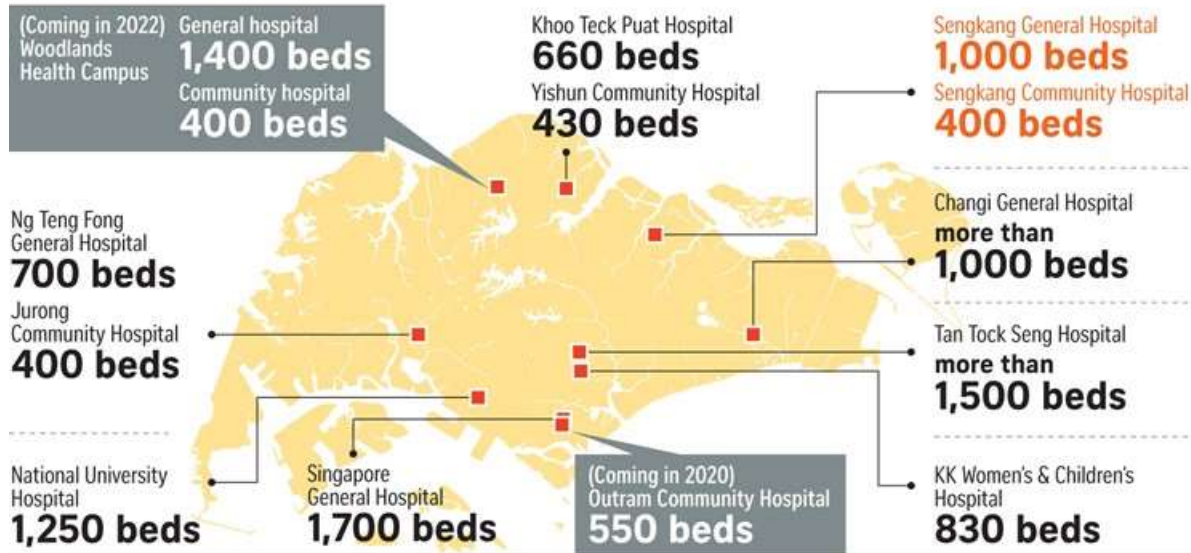
The NCID building is specially designed to ensure the safety of patients, staff and the community and to shoulder the outbreak response for Singapore.

330 Beds - (scaled up to 500 during outbreaks)
with High-level Isolation Unit for treating high-risk pathogens



Boosting number of hospital beds

The upcoming opening of Sengkang General Hospital and Sengkang Community Hospital will add 1,400 beds to the public hospital network. The Outram Community Hospital and Woodlands Health Campus will add another 2,350 beds.



SUNDAY TIMES GRAPHICS

Singapore had a total of **11,321 acute hospital beds**, of which 9,400 are in the public sector

Total critical care beds: 1,100

Covid-19 patients who need intensive care has remained relatively low, - 23 currently listed as critically ill.

Singapore's strategy to increase healthcare capacity



Tan Tock Seng Hospital



Changi Exhibition Centre



Jurong Camp II

HOSPITALS

- All non-urgent procedures postponed
- Teleconsultations for follow-up sessions with patients
- Hospital spaces repurposed to serve as intensive care units and isolation wards

- As of last year, there were about

9,404

beds in public acute hospitals

974

beds in public community hospitals

- More medical equipment secured by hospitals
- Collaborations between public and private healthcare institutions

HEALTHCARE MANPOWER >>

- The Government is looking to include more healthcare professionals as well as non-healthcare professionals

- Since April 7, about

3,000

healthcare professionals – such as former and non-practising staff – have signed up

- All are welcome and will be matched to jobs based on their skillset and the needs on the ground

COMMUNITY CARE FACILITIES

- These are for those with mild symptoms and lower risk factors
- Three facilities now – Singapore Expo (Halls 1-6), D'Resort NTUC, Changi Exhibition Centre (above)

- Currently

10,000

bed spaces

- By end-June

20,000

bed spaces

COMMUNITY RECOVERY FACILITIES

- These are for patients who are well after two weeks of testing positive and are waiting to see if they can be discharged

- Currently

2,000

bed spaces in unused Singapore Armed Forces camps

- By end-June

10,000

bed spaces



Healthcare workers from Singapore General Hospital



Civil Service Club @ Layan

SWAB ISOLATION FACILITIES

- These are for those waiting for the results of their swab tests:

- Currently, more than

4,000

beds, including in hotels and government chalets

- Another

3,000

beds are in the pipeline

PHOTOS:
KHA CHEE SONG,
NEO KHAORIN,
DESPOND FOO,
LIM YANJUL MENEF
SOURCE: MOH

TEXT: CLEMENT YONG
STRAITS TIMES GRAPHICS



- This can deliver the same or better outcomes with less time and effort
- Round-the-clock care in community care facilities through teleconsultations and medical kiosks
- Devices such as pulse oximeters and health apps are used to monitor patient well-being

Current COVID-19 Situation in the Country- Covid-19 care facility beyond hospital setting

A large facility being set up at Tanjong Pagar Terminal could house up to 15,000 Covid-19 patients or foreign workers as the number of coronavirus cases in Singapore continues to increase.



Other Facilities	Capacity
Singapore Expo	950
D'Resort	500
Changi Exhibition Centre (CEC)	2,800
Singapore Armed Forces camps, Home Team Academy and Civil Defence Academy dormitory blocks and many others	

S'pore's healthcare capacity can be expanded for Covid-19 needs: Gan

Linette Lai
Political Correspondent

Hospitals have rapidly increased the number of isolation beds in response to the Covid-19 pandemic, and will do the same for intensive care beds if necessary, said Health Minister Gan Kim Yong yesterday.

Thousands of beds have also been set up outside hospitals for patients who are only mildly ill, to ensure Singapore retains the capacity to care for the most critical coronavirus cases in hospitals.

"We have planned ahead, created and ramped up many different types of healthcare facilities to support the specific needs of Covid-19 patients," Mr Gan told Parliament in a ministerial statement.

"In addition, our healthcare system has the flexibility to stretch our capacity to respond to increasing demand."

There are nearly 1,500 isolation beds available in hospitals today, up from about 550 in January.

The National Centre for Infectious Diseases has also increased its capacity from around 100 negative pressure isolation beds to more than 500 in the same period.

In addition, public hospitals have postponed non-urgent elective procedures and moved medically stable "long-stayer" patients to step-down care facilities.

Singapore also has around 150 vacant intensive care beds and can quickly bring another 300 on board, Mr Gan added.

At present, 25 of the more than 18,000 Covid-19 patients are in intensive care.

"But we are not taking any chances as we must preserve our buffer capacity," he told the House.

Public hospitals have put in place



BUFFER CAPACITY

We have planned ahead, created and ramped up many different types of healthcare facilities to support the specific needs of Covid-19 patients. In addition, our healthcare system has the flexibility to stretch our capacity to respond to increasing demand."



HEALTH MINISTER GAN KIM YONG

plans to ensure that their infrastructure, equipment, medications and manpower are in place to add another 450 intensive care unit beds by the middle of this month if necessary, he added.

Singapore has also ensured that it has enough ventilators and other medical equipment to support the care of such patients.

More than 10,000 beds have

been set up in community care facilities such as the Singapore Expo, and this number is set to double, the minister said.

These facilities typically house patients who have only mild symptoms and do not need extensive medical support.

Bed spaces in community recovery facilities, for patients who are past the 14th day of their illness but still need to be isolated, are also being ramped up.

There are currently around 2,000 community recovery facility beds – some in dormitories and others in army camps. This will go up to more than 10,000 beds by the end of next month.

"As our community recovery facilities increase, we can also free up spaces at the community care facilities," Mr Gan said.

In other countries, healthcare systems have been overwhelmed and death rates among coronavirus patients have soared.

Nominated MP Irene Quay asked if Singapore has an ethical framework to allocate healthcare resources in such a situation.

"We are working hard to avoid getting to this point," Mr Gan replied.

He added that Singaporeans should not be complacent despite the progress made over the past few weeks, as there are still unlinked cases in the community.

Places which report low daily infection numbers, such as China, Hong Kong, South Korea and New Zealand, remain alert for a new wave of infections.

"Hence we must continue to do what we can to keep our cases low, to keep the lid tight, even as we gradually roll back some of our circuit breaker measures," Mr Gan said.

linettel@sph.com.sg

8,000

Daily virus testing capacity now, up from 2,900 a day early last month. Plans are in place to increase capacity to up to 40,000 a day.

1,500

Nearly this number of isolation beds now, up from about 550 in January.

150

Number of vacant intensive care unit beds, with the ability to quickly add another 300.

10,000

More than this number of beds in community care facilities, with another 10,000 being set up.

2,000

Around this number of beds in community recovery facilities. This will go up to more than 10,000 by the end of next month.

11,000

More than this number of sign-ups with SG Healthcare Corps, with 800 matched to needs on the ground.

50

Number of contact tracing teams now, up from 20 in March.

Daily virus testing 2,900 to 8,000

Isolation Beds 550 to 1500

Vacant ICU Beds 150 + 300

Community Care Beds 10,000 + 10,000

Community Recovery Beds 2,000 to 10,000

Healthcare Corps 11,000 signed up

Contact Tracing Teams 20 to 50

Current COVID-19 Situation in the Country- SCALING UP OF COVID-19 TESTING

The Multi-Ministry Taskforce has been steadily building up national capacity to conduct tests for COVID-19.

Testing for Diagnosis and Surveillance

1. for diagnosis in order to provide the appropriate treatment early for persons who are unwell.
2. for active case finding in order to identify infected individuals early and isolate them.
3. for surveillance purposes, groups at higher risk of contracting or transmitting the disease.

An average of 2,900 tests per day in early April, we are now **able to conduct more than 8,000 tests per day.**

To date, Singapore has tested over 30,000 per million persons.

Guide on the safe and prudent use of N95 Masks

Masks are a priority for healthcare workers.

Staff Safety – Mask Up at all times



Guide on Safe Preservation Mask for the Day (only for low risk area where staff preserve their mask for the shift)



Healthcare workers the most important resource in battle



Lim Yan Liang
Assistant Political Editor

Healthcare workers are the most important resource in the country's fight against Covid-19, said Health Minister Gan Kim Yong, who paid tribute to them over the Labour Day weekend.

Mr Gan told *The Sunday Times* that healthcare staff have been working tirelessly to ensure patients – whether with Covid-19 or otherwise – are well taken care of.

"They have contributed their expertise and time in many areas, from the front line to the backend."

"I thank each and every one of them for their commitment and contribution."

While the healthcare system has been preparing to deal with new emerging infectious diseases, little was known about Covid-19 when it emerged, said Mr Gan, who is co-chairman of the multi-ministry task force for Covid-19.

As more facts about the virus

were discovered, Singapore adjusted its strategy to slow down transmission, take care of patients and prevent the healthcare system from being overwhelmed.

Public hospitals have expanded isolation ward capacity and intensive care units to prepare for a possible surge in cases.

They have also established partnerships with private sector healthcare providers to secure additional capacity and to help care for existing patients with chronic medical conditions, said Mr Gan.

Singapore has also beefed up manpower by mobilising "the entire healthcare workforce and beyond – whether public or private, in-service healthcare workers or volunteers" through the SG Healthcare Corps launched last month, he added.

Making up essentially a medical reserve force, about 3,000 current and former medical professionals have stepped up to be on standby, ready to be activated if confirmed



Foreign workers undergoing medical examination at Toh Guan Dormitory yesterday. A medical reserve force stands ready to be activated to support healthcare workers, if needed. ST PHOTO: CHONG JUN LIANG

"Our battle with Covid-19 is likely to be a long journey, and I am glad that Singaporeans have rallied to support our healthcare profes-

sionals," said Mr Gan.

"I am deeply appreciative of our healthcare workers, who have adapted to the rapid changes and

have risen to the challenges they face every day on the front line."

vanliann@nh.com.sg

WORKING TIRELESSLY

They have contributed their expertise and time in many areas, from the front line to the backend, thank each and every one of them for their commitment and contribution.



HEALTH MINISTER GAN KIM YONG

Strengthen Healthcare Team

1. Have mandatory PPE Training and Mask Fitting
2. Implement clear protocols relating to infection control and procedures
3. Introduce a buddy system and PPE champion to supervise donning and doffing
4. Remind rules of social distancing and hand hygiene outside work - evidence in Singapore shows infected doctors seem to catch it outside line of work
5. Promote self care and mental health
6. Encourage discipline/audit: temperature recording , emphasis on reporting sick and staying away from work if unwell even if just anosmia
7. Introduce working in smaller teams which do not meet or mix
8. Have clear protocols and conduct simulation exercises inter-professionally and with multidisciplinary teams

Staff record temperature twice daily or any issues in the Staff Health Surveillance System (S3) via Infopedia or online through e-Form or app, to monitor any trends or potential clusters amongst staff.

09:04 96%



SingHealth
Defining Tomorrow's Medicine

SingHealth
Temperature
Declaration

⌚ 3 mins estimated time to complete

Instructions

Temperature declarations are recorded according to submission time.

Temperature Declaration

III O <

09:04 96%

1. **NRIC**

Enter NRIC or FIN

2. **Temperature**

Please enter a range between 34.0 to 44.0 degrees.

3. **Remarks** (optional)

4. **Email** (optional)

For users experiencing issues with records flowing to S3: Enter your email address to receive a copy of your submission.

me@example.com

SUBMIT

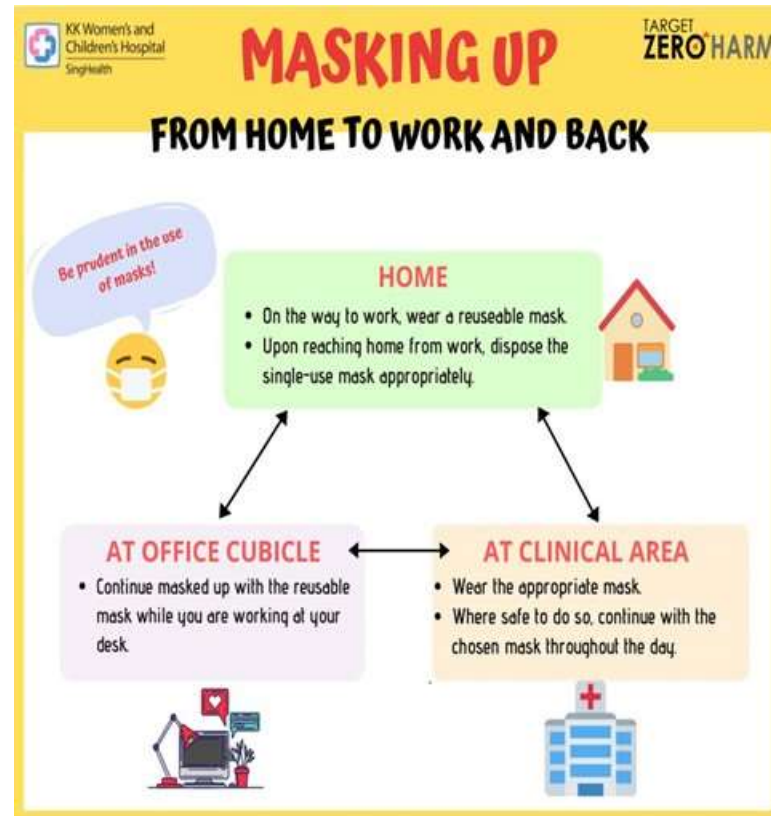
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Staff Safety –Workplace Safe Distancing



GUIDING CONSIDERATIONS ON WORKPLACE SAFE DISTANCING MEASURES

1. The guidelines below are provided in considering the implementation of the following safe distancing measures within SingHealth:
 - a) Split Team Arrangements
 - b) Staggered Working Hours
 - c) Enhanced Shift Arrangements
 - d) Work from Home



Staff Safety – Keeping Safe Distancing at Work Place



PLEASE NOTE BEFORE ENTERING:



TARGET ZERO HARM



- 1

SANITISE & MASK UP
Sanitise your hands and mask up for the meeting.
- 2

LIMIT PARTICIPANTS AND DURATION

 - Do not exceed meeting room capacity.
 - Maximum of 10 pax.
 - Minimise duration.
- 3

PRACTISE SAFE DISTANCING
Ensure participants are seated at least 1 metre away from each other.
- 4

BE RESPONSIBLE
Where possible, open windows for ventilation.
Ensure windows are closed before leaving.



Stay away from each other to reduce the risk of COVID-19. Try to meet virtually.

KKH CONNECT
Staff e-Newsletter | COVID-19 EDITION

Hand Hygiene is Key in Reducing Environmental Contamination from COVID-19



PROTECT YOURSELF AND PEOPLE AROUND YOU FROM COVID-19



Maintain Safe Distancing During Meal Break



KK Women's and Children's Hospital
SingHealth

TARGET
ZERO HARM

TAKING A BREAK?

These locations are for you!

- STAFF LOUNGE @ 3
- LECTURE THEATRE
- AUDITORIUM FOYER
- CONFERENCE ROOMS

Practise these safe measures to protect yourself and others!



Wash or sanitize your hands before and after eating



Wear a mask and comply with safe distancing measures at all times



Give priority to patients and those are in need when using the lifts



Clean up the place after your meals

April 2021



SG SAFE & SHIELD to keep our healthcare workers safe during COVID-19 swab tests

A throat swab done with SG SAFE, a transparent booth system that protects healthcare workers from being infected with Covid-19. SG SAFE was deployed to the foreign worker dormitories .



A throat swab done with SG Shield, a single-use polycarbonate shield. The shields give our healthcare workers the confidence to carry out swab tests where there is no space for a booth system like SG SAFE



WHO warns against neglecting vaccinations during pandemic

COPENHAGEN • The World Health Organisation's (WHO) European office warned yesterday that to keep other infectious diseases in check, vaccination programmes must remain a priority, even during the coronavirus pandemic.

The warning came as the United Nations body noted that while the spread of the coronavirus seemed to be "plateauing in Western Europe, the gradient of the epi curve steepens as we look east".

"Immunisation services are essential. If they have been interrupted, catch-up measures must be taken as quickly as possible," Dr Hans Kluge, WHO's regional director for Europe, told reporters.

"We cannot allow the impact of Covid-19 to be amplified by neglecting other vital health protection measures."

WHO's European branch was par-

ticularly concerned about a resurgence of measles, which affected 6,000 people on the continent in the first two months of this year.

Dr Siddhartha Datta, the programme manager for vaccine-preventable diseases and immunisation at WHO Europe, said: "Immunisation has never been more important. Measles and other infectious diseases are very much here among us, and the time to prevent them is now."

To this end, countries need to ensure their health systems are set up to be able to work in parallel with those dedicated to the care of coronavirus patients.

Dr Kluge said: "Dual-track health systems can offer the flexibility and resilience needed to manage repeated waves of coronavirus infections and the increasing demand for other services."



MINISTRY OF HEALTH
SINGAPORE

MH 34.03

30 April 2020

All Registered Medical Practitioners

MOH Circular No. 108/2020

SEASONAL INFLUENZA VACCINATION FOR THE 2020 SOUTHERN HEMISPHERE INFLUENZA SEASON

1. This circular informs all medical practitioners on the recommendations for the use of the 2020 southern hemisphere (SH) seasonal influenza vaccine.

Recommendations on the use of seasonal influenza vaccine

(A) Recommended groups

2. The MOH's Expert Committee on Immunisation (ECI) recommends that the following groups be vaccinated against influenza:

- Persons at increased risk of influenza-related complications;
- Persons receiving intermediate and long term care (ILTC) services in institutional settings; and
- All healthcare workers and staff in healthcare institutions and establishments.

66 healthcare workers infected but none likely in the course of work

There have been 66 confirmed cases of Covid-19 among healthcare workers in Singapore as of April 26, and evidence suggests they were not infected through their work, Health Minister Gan Kim Yong said yesterday.

He told Parliament in a ministerial statement on the coronavirus pandemic that 46 of the infected healthcare personnel worked directly with patients.

Aside from one case of a doctor in a private healthcare institution where a possible link to a Covid-19 patient could not be ruled out, Mr Gan said there is no established evidence to suggest that any of the healthcare workers were infected in the course of their work, and that they likely caught it elsewhere.

"Our healthcare workers have taken an extra level of care at their workplaces to protect themselves

and their families," Mr Gan said.

He noted that a recent study by the National Centre for Infectious Diseases (NCID) also did not detect any past infection among a sample of healthcare workers across various public healthcare institutions.

"Nevertheless, we cannot be complacent. We have reminded our healthcare workers constantly that they should take adequate precaution during their work to protect themselves, their patients as well as their family members," he said.

"In the event that our healthcare workers fall ill, we will ensure that they are well taken care of and our healthcare institutions will provide them with the necessary support."

Taking care of healthcare workers' mental well-being is also important, said Mr Gan.

He noted that the healthcare clusters had mental health support mea-

sures in place even before the Covid-19 pandemic, such as counselling clinics, helplines and peer support programmes.

These efforts have since been stepped up, said Mr Gan.

"For example, our institutions have rostered breaks and staff rotations to ensure that healthcare workers have sufficient rest periods in between work days," he said.

Mr Gan added that the healthcare clusters have also been actively working with the Healthcare Services Employees' Union on various initiatives such as the distribution of care packages.

Monetary compensation is another important area, Mr Gan said, though he acknowledged compensation alone is not enough.

He said: "We recognise the invaluable contributions of our workers, and will ensure that they receive due recognition for stepping up during this challenging period."

He said public healthcare workers working on the front line will receive a special bonus, as announced previously by Deputy Prime Minister Heng Swee Keat, and healthcare workers taking on longer or additional shifts during the outbreak are also paid allowances.

66 (0.48%) of the 13624 infected are health care workers

Straits Times 5 May 2020

Rei Kurohi

Together, We Can Safeguard Against COVID-19!

SingHealth Staff Care Support Centre

Within the SingHealth family, we strive to keep our spirits up while the battle wages on. For those who need a listening ear, the SingHealth Staff Care Support Centre (S2C2), providing peer support and counselling services, is just a phone call away.



1. S2C2 is a critical component of the SingHealth Staff Health Framework.
2. The scope of S2C2 aims at enabling cluster-wide access to Staff Peer Support and Counselling Services.
3. We strive to enhance staff health wellbeing by providing these sources of support.

Useful Resources by IPSQ ([link](#))

1. Meditation Tracks

Audio recordings developed by IPSQ iTHRIVE Programme Faculty, Ms Jennifer Davis, Duke-NUS Medical School

2. e-Modules

e-Modules were developed for SingHealth Residency by IPSQ iTHRIVE Programme Convenor & Faculty, Dr Kinjal Doshi, Singapore General Hospital.

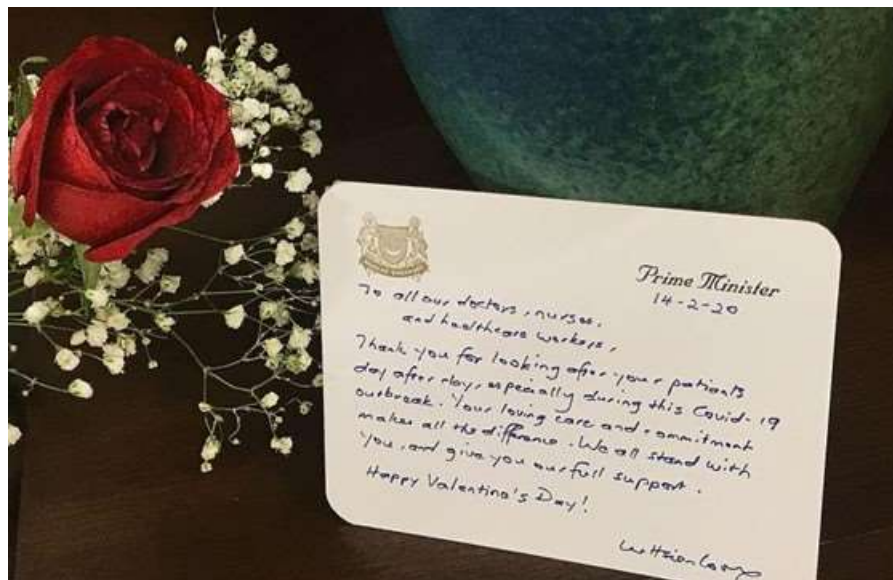
3. iTHRIVE

Weekly tele-mindfulness sessions which allow you to recognize how you are feeling physically, mentally, and emotionally and will help you re-centre yourself in the present moment.

4. Mindcare for #SGHealthcare (application by Mindfi)

"Mindcare for #SGHealthcare" is a community initiative by local certified mindfulness teachers and MindFi.

HANDWRITTEN & DRAWINGS TO THANK THEM FOR THEIR SERVICE



Prime Minister Lee Hsien Loong's Valentine's Day note to healthcare workers, expressing support and appreciation for them. PHOTO: LEE HSIEN LOONG/FACEBOOK



Together, We Can Safeguard Against COVID-19!

Deployed to Primary Healthcare

Circuit Breaker Deployment to support SingHealth Institutions in screening, social distancing and mask inspection



Staff Communications

CEO KKH Leadership Video #1 [Thank you for your vigilance and dedication]

– Sat 15 Feb 2020, 11.19am



1,838 views

CMB KKH Leadership Video #2 [Together, we can keep ourselves and our patients safe]

– Tue 10 Mar 2020, 10:08am



1,118 views

CMB KKH Leadership Video #1 [Stay alert and stay healthy]

– Thu 20 Feb 2020, 11.45am



1,371 views

CEO KKH Leadership Video #3 [Everyone has an important part to play]

– Wed 18 Mar 2020, 3.02pm



1,406 views

CEO KKH Leadership Video #2 [Stand united as one KKH family]

– Thu 27 Feb 2020, 9.20pm



1,302 views

CEO KKH Leadership Video #4 [Together we will win this fight]

– Thurs 16 Apr 2020, 3.03pm



827 views

Patient Safety Bulletin
May - June 2020

TARGET ZERO HARM

**Staff Safety During COVID-19:
Always wear your mask**

Show your care. Don on a mask and keep a safe distance.

Wearing a mask is MANDATORY.

Wear a mask as soon as you leave your home:

- when you are going to and coming from work
- continue to wear your mask while at work

Remember: We all have a part to play in keeping everyone safe from COVID-19. Wear your masks and be socially responsible.

MASKING UP

FROM HOME TO WORK AND BACK

Please refer to KKH Hospital's DORSCOM Orange PPE advice on the type of mask to be worn in your respective areas - see Infopedia for the latest version.

HAND WASH

SOCIAL DISTANCING

Protect yourself, your loved ones and your colleagues.

KKH COVID-19 Checklist

1. Be on heightened alert.
2. Practice 100% hand hygiene.
3. Adhere to PPE recommendations.
4. Perform twice daily self-temperature monitoring.
5. Be socially responsible and maintain safe distancing.
6. Speak up for patient and staff safety.

Stay safe. Together, we will win this fight.

KKH.Patient.Safety@kkh.com.sg

Staff Communications



← Training simulation video by Dr Mok Yi Hui and team on special considerations for highly infectious respiratory pathogens during emergency codes.

↓ (KKH YouTube channel)



Research paper by Dr Yung Chee Fu and team on environmental contamination and potential for transmission from an infant infected with COVID-19



Together, We Can Safeguard Against COVID-19!

IPSQ COVID-19 Comics

IPSQ created Series of comic strips to provide lessons & encouragement in a lighthearted way during this challenging times



[IPSQ website](https://www.ipsq.sg/)

Together, We Can Safeguard Against COVID-19!

IPSQ Bulletin (COVID-19 Issues)

To help healthcare professionals and teams cope and thrive during COVID-19

Self-compassion during COVID-19

TARGET ZERO HARM
Art of Self Compassion in Challenging Times
PATIENT SAFETY AND QUALITY BULLETIN

SingHealth DukeNUS Institute for Patient Safety and Quality IPSQ, Singapore

March 2020
Volume 2
Issue 1

Practise self-compassion during COVID-19
Kristin Doshi



Brought to you by:
SingHealth DukeNUS Institute for Patient Safety and Quality

3 Elements to Self-Compassion
(adapted from Kristin Neff)

- "This is okay". Self-compassion requires us to be understanding towards ourselves in a kind and warm manner, especially when we feel

Facing hard times together during COVID-19

TARGET ZERO HARM
Creating the Conditions for Teams to Thrive
PATIENT SAFETY AND QUALITY BULLETIN

SingHealth DukeNUS Institute for Patient Safety and Quality IPSQ, Singapore

April 2020
Volume 2
Issue 2

It's Easier To Face Hard Things, Together!

Creating the Conditions for Teams to Thrive
during COVID-19
Jennifer Davis



Brought to you by:
SingHealth DukeNUS Institute for Patient Safety and Quality

The art and science of healthcare has always depended on highly effective teams – and this rings true now more than ever as we face this pandemic. Today's healthcare teams are being challenged in unprecedented ways as we encounter change in every dimension of life and the need to adapt is constant - and likely will be for the foreseeable future. Now, more than ever, we

Team Pulse: Knowing how your team is showing up today will help you to be more supportive and strategic about how you move forward together.

- Have a regular check-in to get a pulse on how each other is coping. If you're worried about not having enough time, ask each person to share one word that

Together, We Can Safeguard Against COVID-19!

Healthcare Professionals' Wellness

Self-care Mindfulness Calendar



TeamThrive™ Calendar



Meditation Tracks specially developed for healthcare professionals to get a headstart on some meditation techniques, anytime and anywhere.

-Awareness of Breathing -Kindness and Compassion -Body Scan

6. Clinical Safety

Balancing Safety Risks for Clinical Activities –

1. Infection Risks – COVID infection risk,
2. Resource Constraints
3. Distancing and Activities Constraints
4. Patient & Social Factors
5. New Protocols Risks



GENERAL GUIDANCE FOR MANAGEMENT

Patients are screened or triaged as management are based on their symptoms and infection status

Identify patients who are clearly or likely infected by the virus and those who are (supposedly) not infected, keeping in mind that there is increasing evidence that a large proportion of infected people may have no symptoms

It is important to **appropriately screen for symptoms and risk factors** based on travel, occupation, contact and cluster before treatment or consultation. Screen (via a questionnaire) for COVID-19.

Symptomatic patients to be assessed and, if necessary, tested for their infection status even before physically entering the consultation or treatment room. Management can be deferred till after a safe period, whether tested or not.

Example - Change in Movement Protocol to enhance infection control safety in operating theatre/room

A. Intubation / Extubation Protocol:

1. Intubation to be performed only with Anaesthetist, One Surgical MO / doctor and AU nurse present in the OT.
(Note: Surgeon to wear N95 if assisting in intubation)
2. All personnel in the OT during intubation should be in N95 and eye protection.
(Note: do not wear surgical mask over N95 mask)
3. Surgical team complete "Sign-in" then vacate OT, only Anaesthetic team to remain in OT during Intubation / Aerosol Generating Procedure (AGP).
4. Anaesthetist to announce "Clear OT, Intubation now" to vacate personnel out of OT during intubation.
5. No vendors allowed in OT till support is required.
6. For all Non-Laparoscopic surgeries: The surgical team must wait 5mins after intubation to allow clean scrub of air
(Note: The OT performs 25 cycles of air exchange per hour, 100% clean air will be circulated in OT within 2.5mins, the 5mins allowance will ensure 2 cycles of air exchange performed). Operation to proceed with surgical masks.
7. Extubation to be done only with Anaesthetist team in OT.
8. Anaesthetist to announce "Clear OT, Extubation now" to initiate extubation. The rest of the surgical team to vacate the OT.
9. Anaesthetist to announce "Extubation complete" after patient fully extubated.
Start Timer. Rest of the surgical team members to wait 5mins after extubation prior to returning into OT.

Example - Change in Management Protocol to reduce infection and to support social distancing

Table 2 Modification of routine sonographic examinations in women with preexisting or emerging comorbidities, according to whether they are asymptomatic for COVID-19 infection or symptomatic and/or screen-positive for TOCC risk factors

Scan	Asymptomatic	Symptomatic and/or screen-positive for TOCC
11 + 0 to 13 + 6 weeks (also for dating)	<ul style="list-style-type: none">• Combined test• Offer NIPT	<ul style="list-style-type: none">• Reschedule combined test in 2 weeks if still within gestational-age window* (unless local protocols differ)• Offer NIPT/serum screening and detailed scan in 3–4 weeks after quarantine
18 + 0 to 23 + 0 weeks	<ul style="list-style-type: none">• Anatomical scan	<ul style="list-style-type: none">• Reschedule after quarantine in 2–3 weeks†
Fetal growth scan in third trimester	<ul style="list-style-type: none">• Reduce frequency to minimum necessary	<ul style="list-style-type: none">• Reschedule as necessary‡

*The scan at 11–13 weeks is not advisable unless gestational age allows for it to be performed after 2 weeks. †In countries in which there is a legal gestational-age limit for termination of pregnancy, the time limit and its implications must be explicitly explained to the patients prior to rescheduling the appointment. If a patient presents close to the gestational-age legal limit, consider offering a scan using appropriate personal protective equipment or defer for 2–3 weeks. ‡Only reschedule if last scan is normal. If there is fetal growth restriction, schedule scan as per standard protocol.



The mainstay for serious COVID-19 patients is supportive ICU and ventilator support for those with severe disease.

Explore how repurposed drugs and new therapies can be used to treat the disease. These include antiviral drugs, anti-inflammatory drugs, humoral therapies such as convalescent plasma and biologics, and vaccines.

COVID-19 SPECIAL

Coronavirus: More NCID patients being placed in prone position to help them breathe better



Dr Nikhil Gautam, a resident physician at Ng Teng Fong General Hospital, assisting a Covid-19 patient into prone position. ST PHOTO: KEVIN LIM

Medication Delivery Service

As more patients are opting for their medication to be delivered to their homes, SGH Pharmacy has been transformed to enhance the capacity for the Medication Delivery Service (MDS).

Reduce **dwelt time in the pharmacy and the risk of transmission for outpatients during this period.** The service is handling more than 500 deliveries per day and numbers are increasing daily

Protocol for the safe continuation of prescription supply of chronic medication without consultation

...or collect them from selected bluPort lockers across the island or at Prescription in a Locker Box (Pilbox) locker stations at SingHealth Polyclinics.



Single use vial to multi dosing - Guide for use in safe way e.g. Antibiotics and Anaesthetic Agents

DRUG	BRAND	STABILITY AFTER RECONSTITUTION	CONSERVATION STRATEGIES
Meropenem 500mg Injection	Kabi	12 hours under refrigeration (2 - 8°C)	For doses ≤ 250mg: <ul style="list-style-type: none">Save vial for the next dose in the SAME patientMaximum 2 doses to be drawn from the same vial
Piperacillin- Tazobactam 4.5g Injection	Tazpen	24 hours under refrigeration (2 - 8°C)	For doses ≤ 2.25g (2000mg piperacillin component): <ul style="list-style-type: none">Save vial for the next dose in the SAME patientMaximum 2 doses to be drawn from the same vial
Vancomycin 500mg Injection	Kulje Pharma	24 hours under refrigeration (2 - 8°C)	For doses ≤ 250mg: <ul style="list-style-type: none">Save vial for the next dose in the SAME patientMaximum 2 doses to be drawn from the same vial

Propofol 1%



1. Upon breaking the first ampoule (20mL), draw out the required amount for the 1st patient e.g. 12 mL.
2. The balance (8mL) is then syringed out into another syringe and capped. To clearly label the syringe with [content, volume, expiry date and time (stability 6 hours from opening)].
3. For the 2nd patient who requires 10mL for example, use the 8mL from the labelled syringe, and then break a new ampoule to withdraw 2mL. The balance from the 2nd ampoule (18mL) will be syringed out into a new syringe and labelled for next use.

Supply Shortage - Single Use Consumables


Conservative Strategies

e.g MDI Holder – Reprocess by Central Sterilisation to be reused by another patient

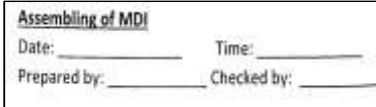

MDI Canister (Wipe Down)

Step 1: Remove canister from the holder		
Step 2: Wipe down of the canister using the mikrozid wipe		
Step 3: Leave to air dry in clean plastic bag (at least 2 minutes)		
	Step 1	Step 2

MDI Plastic Holder + Cap (CE → CSSD)

Step A: Collate all dirty MDI plastic holder + cap into a single plastic bag (**NOTE: Ventolin and Atrovent in separate bag)	
Step B: Double bag the plastic bag with a Biohard bag	
Step C: Handover to CSSD staff during collection	
	Step B

MDI Plastic Holder + Cap (CSSD → CE)

Step I: Inspect MDI holder + cap for visible cracks		
Step II: Assemble clean canister to correct holder with a counter-checker		
Step III: Fill up all information in MDI sticker		
Step IV: Place assembled MDIs into the clean plastic bag and label bag with completed MDI sticker accordingly		
	Step III	Step IV

Together, We Can Safeguard Against COVID-19!

Support for Patients and Families



Shin Min Daily News
26 April 2020
Page 10

Reducing the transmission risk of diseases in the operating theatre; at least six local hospitals are restricting husbands to accompany their wife undergoing caesarean section

By Brenda Kang

This report was about local hospitals restricting access into the operating theatres as a measure to reduce the transmission risk of disease amidst the global situation of the COVID-19 pandemic. It was noted in the article that currently, a minimum of five private hospitals and one public hospital have put in place a new protocol where husbands are not allowed to accompany their wife while undergoing a caesarean section in the operating theatre.

Putting in place strict precautionary measures

Ms Julie Tay, Assistant Director of Nursing, Delivery Suite, KK Women's and Children's Hospital, shared that the hospital continues to encourage a husband or partner to accompany his labouring wife or partner in the Delivery Suite to provide support. However, the husband or partner will not be allowed to accompany the patient if she needs any procedure done in the operating theatre.

The hospital's spokesperson also shared that, to prevent the spread of COVID-19, the hospital has employed stringent measures. These measures include adhering to infection control procedures such as wearing a mask at all times while in the Delivery Suite and adhering to hand hygiene protocols. In addition, patients, visitors or caregivers are required to declare their health status, travel history and contact history before they can access the hospital.

Hospital balances
psychological needs and
support by partner/family with
social distancing requirements

降低病毒在手术房传播的风险

本地至少六医院 禁夫陪妻剖腹产

江欣如 报道 brendak@sph.com.sg
24小时新闻热线: 1800-822728/91918727
Wechat/WhatsApp传照片: 91918727

为降低病毒在手术房传播的风险,本地目前至少五家私人医院和一家公立医院已实施新规定,在疫情期间不允许丈夫进入手术房,陪伴孕妻剖腹产。

本地对疫情升温,我国实施阻断措施,本地公共急症医院和私立医院从本月7日起进一步收紧探病规定,除年幼、重病、特需等类别病人可指定亲友探病外,其他普通病房一律谢绝访客。

受措施影响也包括待产的孕妇,除了规定产妇在住院期间也只能有一个看护者陪伴以外,也不允许丈夫陪同产妇进入手术房进行剖腹产。据了解,至少五家私人医院和一家公立医院已实施新规定。

鹰阁医院妇产专科兼泌尿专科顾问医生钟耀伦受访时说,手术室是医院的关键设施,因此确保手术室的无菌环境至关重要,而限制丈夫陪同将有助降低感染风险。



他补充,如果一个人受到感染,可以蔓延到很多的地方包括整个手术房,这会影响到所有动手术的病人。



COVID-19 Situation in the Singapore-Enhanced Use of Telemedicine for Patients

Telemedicine for COVID-19

- Each discipline may have multiple use cases across Tele-treatment/ support/ collaboration domains.

	Medical discipline	Tele-treatment/ Tele-support	Tele-collaboration		Medical discipline	Tele-treatment/ Tele-support	Tele-collaboration
1	Anaesthesia	WIP (KKH)		11	Paediatrics	KIV (KKH)	
2	Dermatology	WIP (KKH)		12	Palliative medicine		
3	Endocrinology	WIP (SGH, KKH paed)	KIV (KTPH AdMC)	13	Primary care		
4	Geriatrics		✓ (TTSH)	14	Renal medicine		
5	Infectious diseases			15	Respiratory medicine		
6	Mental health		WIP (IMH comm. co-consult, A&E patient transfer)	16	Surgery		
7	Neurology		✓ (NUH, NNI) WIP (NNI, community)	17	Urgent care		
8	O&G			18	Wound	✓ (NHGP)	
9	Oncology		KIV (KKH, NUH tumour board)	19	General		✓ (IMH med board)
10	Ophthalmology		WIP (SNEC, NUH, TTSH Comm. Eye Clinics)	Additional security settings			

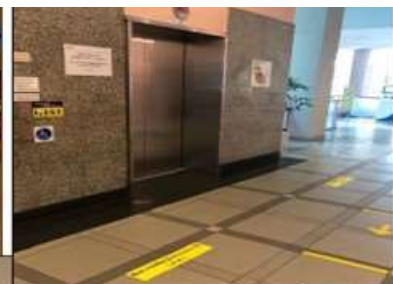
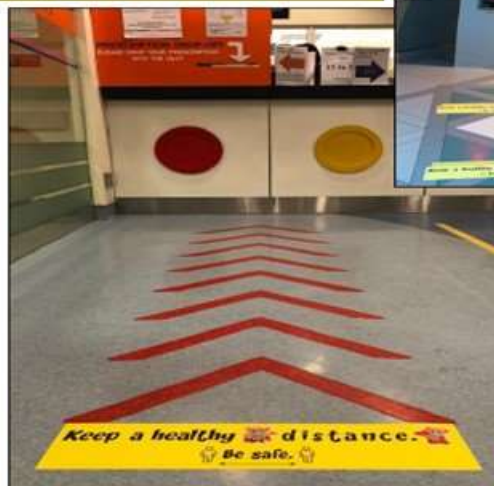
Patient, Caregiver & Visitor communications



Clear Signages and Instructions in Health Care Facilities &
Clear Advisories in a fast changing confusing COVID environment


Patient, Caregiver & Visitor communications

Advisories – updated screening criteria with reference to MOH circular dated 9 March 2020.




Patient, Caregiver & Visitor communications

A COVID-19 Care Resources page created on the KKH website to house helpful references for patients and caregivers during this COVID-19 period.



KK Women's and
Children's Hospital
SingHealth



Appointment

Find a Condition
or Treatment

Health Buddy App

About KKH

Patient Care

Research & Innovation

Education & Training



Careers







Giving

Home > COVID 19 Care Resources

COVID-19 Care Resources

Hospital Website



Resources	Download
Hospital pack list for patients admitted to isolation room	 PDF 130kb
Covibook - by Manuela Molina Cruz	 PDF 1.5mb
FACE COVID - by Dr Russ Harris	 PDF 500kb
Coping Calendar	 PDF 1.9mb
Special Care Kit - Resources to support special needs individuals for COVID-19	 Visit Website
Schedule Board (template)	 DOC 56kb
Activity Flyer - Engage and Relax Through Games, Stories, Music and more...!	 PDF 400kb
Tips for Parents of Preschoolers: <ul style="list-style-type: none">Coping with the COVID-19 pandemicKeeping our children meaningfully occupied during the COVID-19 pandemicPreventing and managing misbehaviour	 PDF 700kb

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Walking in their shoes and communicate in their language



The SingHealth Patient Advocacy Network (SPAN)

help recruit volunteers from the public to act as translators for our affected migrant workers .

SPAN had hundreds of sign-ups in just one weekend – a figure much higher than anticipated!



INSIDE THE GOVERNMENT

We still see we effort to contain the situation and keep our people safe. This has been our priority from the start of this global pandemic, and will remain so.

THE GOVERNMENT'S RESPONSE TO THE COVID-19 PANDEMIC

THE GOVERNMENT'S RESPONSE TO THE COVID-19 PANDEMIC

In a crisis like this, we have to deal with top-of-mind decision making.

THE GOVERNMENT'S RESPONSE TO THE COVID-19 PANDEMIC

Right: Deputy Prime Minister Wong (left) gave a press conference to announce the government's decision to lift the stay-at-home order for the public. He also announced the government's decision to lift the stay-at-home order for the public.



Pulling out all the stops to save lives, and the economy

The Covid-19 pandemic has required a coordinated response from the Government to tackle the health, social and economic aspects of the outbreak.



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IN THIS TOGETHER

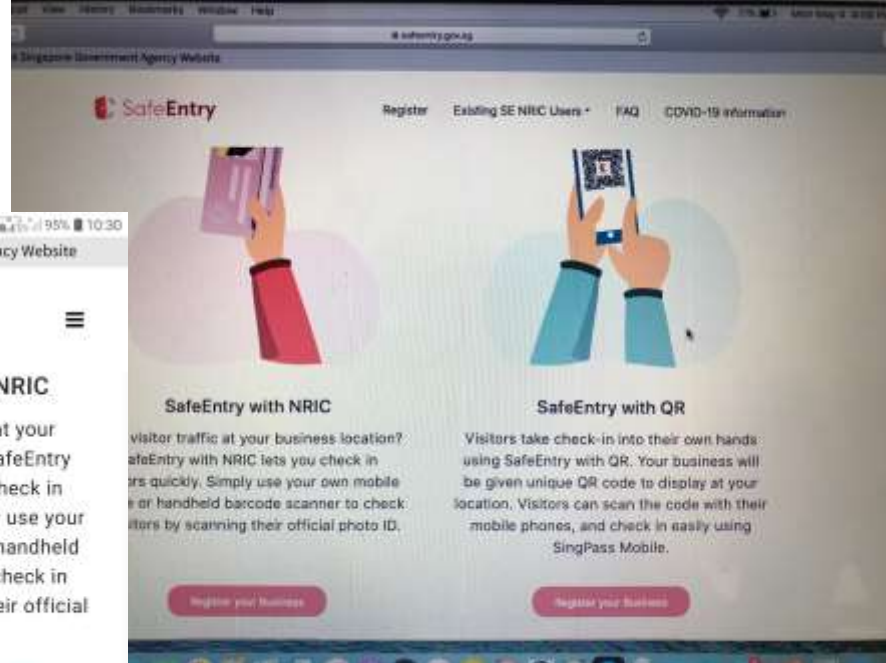
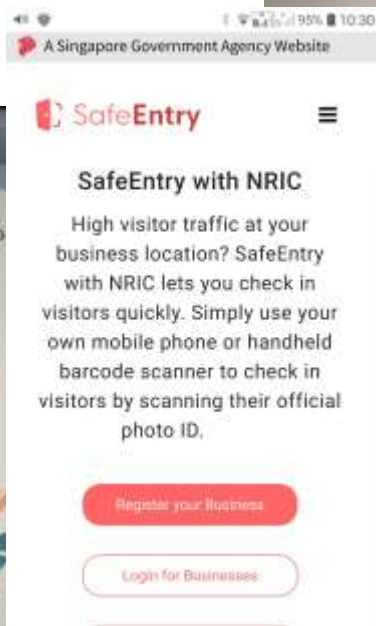
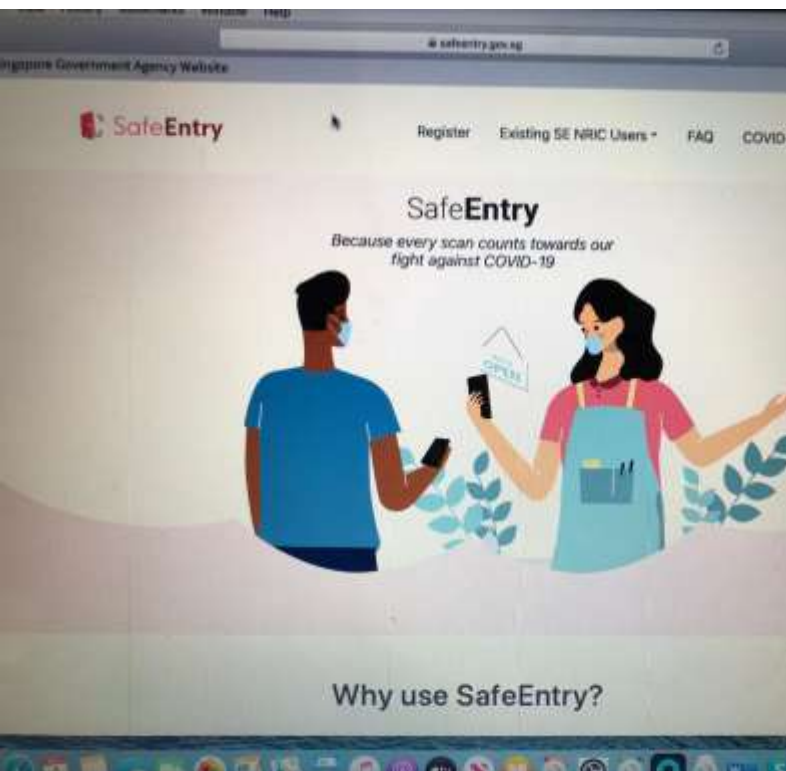
Let's work together to fight COVID-19



As the new coronavirus spreads, we must work together to fight COVID-19. The government has taken many steps to contain the virus, including closing schools and businesses, and implementing strict travel restrictions. We must continue to work together to keep our people safe and our economy moving forward.

Whole of Government Approach

The Whole of Government Approach is a coordinated effort between all government agencies to address the challenges posed by the COVID-19 pandemic. This approach ensures that all government resources are mobilized to support the public and the economy during this difficult time.



SENIORS SHOULD STAY HOME

Avoid
visiting markets
get others to help

No dining
outside
of home

Don't gather
in groups,
at home
or outside,
e.g. at void decks
or neighbourhood
centres

Don't go
near seniors
if you are sick

Help seniors
with their
essential needs
e.g. buying food
and groceries
for them

❗ It is an offence to disobey
safe distancing measures.

The health of all depends on each one of us.

All must wear a mask when outside their homes

If you are sick

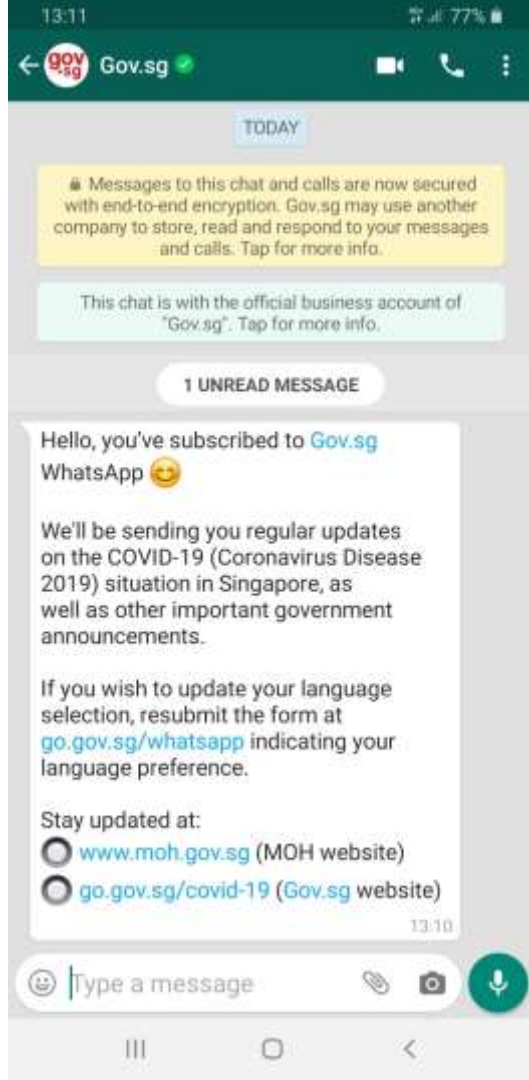
- Wear a surgical mask
- See a doctor
- Stay at home
- DON'T doctor-hop



Do not spread rumours.

Get the latest on COVID-19
by signing up for the Gov.sg WhatsApp channel
(www.gov.sg/whatsapp)

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COVID-19 Resources

A collection of useful sources, posters and videos on COVID-19 (Coronavirus Disease 2019)

12 min read | Published on 25 Apr 2020

Patient Care Ambassadors

70 new Patient Care Ambassadors from [Singapore Airlines](#), [SilkAir](#) and [FlyScoot](#) on board at [Changi General Hospital](#)



800 SIA cabin crew deployed in Singapore's fight against Covid-19 in alternative roles



Mohamed Rasbi Mohamed Rasbi (right) has been deployed as a care ambassador at Ng Teng Fong General Hospital (PHOTO: SINGAPORE)

General Public & Patients: From No Need for Masks to Mandatory Masking in Public

Precautionary measures updated as new findings emerge: Lawrence Wong

Fabian Koh

With more information emerging about the coronavirus, the Government has been implementing and updating precautionary measures as and when new medical findings are made. National Development

Minister Lawrence Wong told The Sunday Times in an interview marking the 100-day mark of the outbreak here.

"We are dealing with a new virus. Scientists around the world are discovering new things about the virus and so we have to update our measures based on the latest

evidence," he said.

Mr Wong, co-chair of the multi-ministry task force tackling the outbreak here, cited the advisory on masks as an example of a precautionary measure that changed over time.

At the start of the outbreak, he explained, the medical advice and the recommendation from the World

Health Organisation was that masks should generally be worn by those who are sick.

"Later, there was evidence that people without symptoms or with very mild symptoms could be spreading the virus. Hence, we updated our guidance on masks and made it a requirement for everyone to wear masks when they go out," he said.

The Government had announced on Jan 30 that all 1.37 million households in Singapore would be given four surgical masks each, while reiterating that only people who were unwell should wear them.

On April 3, it was announced that

the Government would no longer discourage people who are well from wearing masks, following evidence of people who were infected but showed no symptoms. All households also received reusable masks.

On April 14, Mr Wong announced that it was mandatory for everyone to wear a mask in public, except under certain conditions. Those who do not comply risk a \$300 fine for the first offence.

He said the task force communicates daily via e-mail and phone calls and receives regular updates about developments on the pandemic.

He added that Singapore will be

able to look back and learn from this experience when it is over.

"For now, let us stay focused on the mission. There are still many issues to tackle, not least the critical issue of how we can exit from the circuit breaker and resume activities safely, while keeping the virus under control," he said.

He acknowledged the efforts of Singaporeans who have observed the circuit breaker measures, which have brought the local transmission numbers down in recent days, and also saluted the sacrifices of those on the front line.

fabkoh@sph.com.sg

Straits Time 3 May 2020

8. Key Lessons

High Preparedness for unexpected (e.g. pandemic)

Learn, adapt & innovate quickly in this changing environment

Holistic approach - Systems and Whole of Govt Approach

Identify & Manage vulnerable groups as priority

Balancing Safety Risks Optimally in Dynamic Situation – Current Protocols vs Infection Risks, Resource Constraints, Distancing and Activities Constraints, Patient & Social Factors. New Protocols Risks

Covid-19 exit strategy must take into account the weakest link

Many countries have been contemplating what an exit strategy for the Covid-19 pandemic would look like. But many seem to have missed the bigger picture.

It is tough for countries to be thinking beyond their borders when most are so overwhelmed with managing the crisis at home.

Yet, it is precisely what is needed if the world is to have any hope of emerging from this shared calamity.

Dr Ben Rolfe, former senior health adviser at Australia's Department of Foreign Affairs and Trade, recently served up a sobering word of caution – that until every country has a funded response, the world will not be out of the woods.

Specifically, he highlighted the need to start looking out for the four billion people in the developing world who lack access to healthcare.

This brings to mind the mass

transmission of the coronavirus in foreign workers' dormitories here.

If Singapore's contact tracing is lauded as the gold standard, its weakest link should serve as a warning to the world.

Perhaps the silver lining in the crisis is that unlike diseases such as

Covid-19 is a battle that must be won globally before it can be truly subdued. Each society needs to look out for the disadvantaged in its community and developed nations should extend aid to those with exceedingly limited resources.



malaria which largely afflict certain regions of the world, Covid-19 puts more focus on marginalised populations, such that we cannot turn a blind eye to them, because their problem is also everyone else's.

A great divide has always existed between the haves and the have-nots. While most people are able to hunker down, what about those who are homeless, for whom the basic measure of staying at home is as much a problem as food security?

Covid-19 is a battle that must be won globally before it can be truly subdued. Each society needs to look out for the disadvantaged in its community and developed nations should extend aid to those with exceedingly limited resources.

It is in understanding that we are only as strong as our weakest link that we may finally acknowledge the voices that are left out of the conversation.

Lily Ong

STRAITS
TIMES
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Acknowledgements: Straits Times articles April to May 2020