

#### **DIGITAL PRESS CONFERENCE**

Health Update

Dr K Cloete

22 December 2020



#### Overview

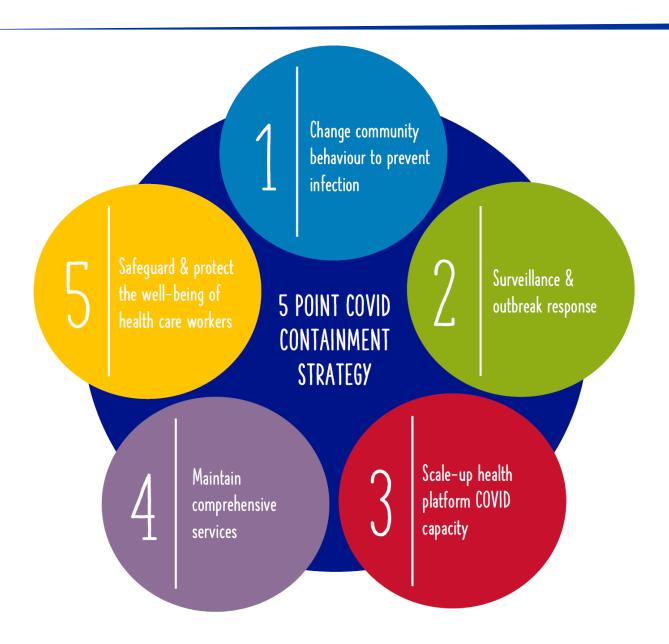
- 1. 5-point COVID Resurgence Strategy
- 2. Surveillance & Response Update
- 3. Scaling up health platform COVID capacity
- 4. Scaling down non-COVID capacity
- 5. Safe-guarding well-being of health care workers
- 6. Vaccine strategy
- 7. Festive season messages
- 8. Conclusions



# 5-point COVID Resurgence Strategy



## **5-point COVID Containment Strategy**





#### **5-point COVID Containment Strategy**

#### 1. Change community behaviours to prevent infections:

- a) Ongoing strong, bold central public messaging and targeted local messaging
- b) Co-ordinated **Provincial**, **District and local JOC enforcement**, lead by Law Enforcement and EHPs

#### 2. Surveillance and outbreak response:

- a) The surveillance and outbreak containment strategy continues, with established community transmission
- b) The daily huddles continue to identify, track and contain potential local outbreaks

#### Scale up health platform COVID capacity:

- a) The PHC and hospital COVID capacity are being scaled up in each geographic area, as cases increase
- b) The local teams use trigger points for step-wise escalation of PHC, inter-mediate, acute and critical care access

#### 4. Scale down con-COVID services:

- a) Ensure a core quantum of essential non-COVID services be maintained, while scaling up COVID capacity
- b) Actively reducing non-COVID services to allow for COVID capacity, in the face of alcohol-related trauma

#### 5. Safe-guard and protect well-being of health care workers:

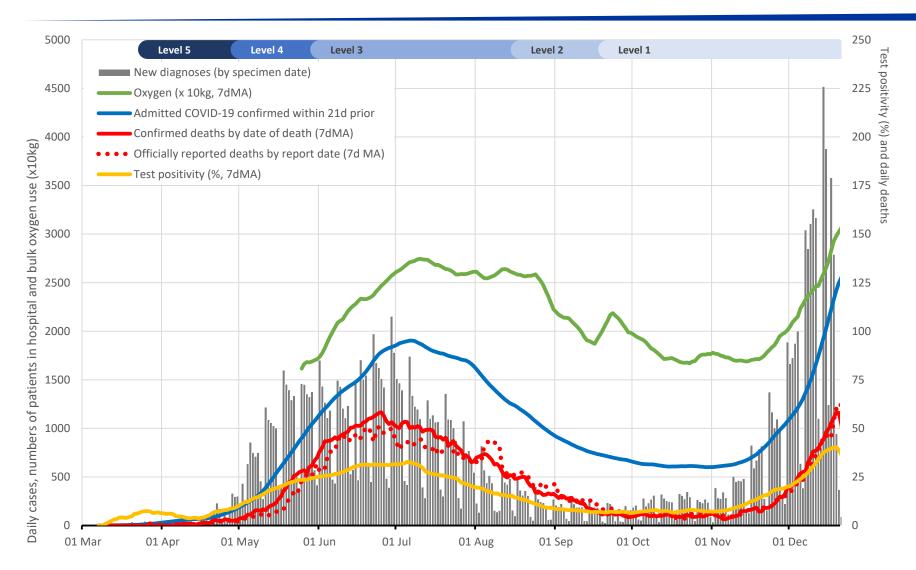
- a) Ensure **sufficient PPE supplies** to protect all front-line staff members
- b) Implementing OHS policy fully, including addressing mental well-being for staff

# Surveillance & Response Update

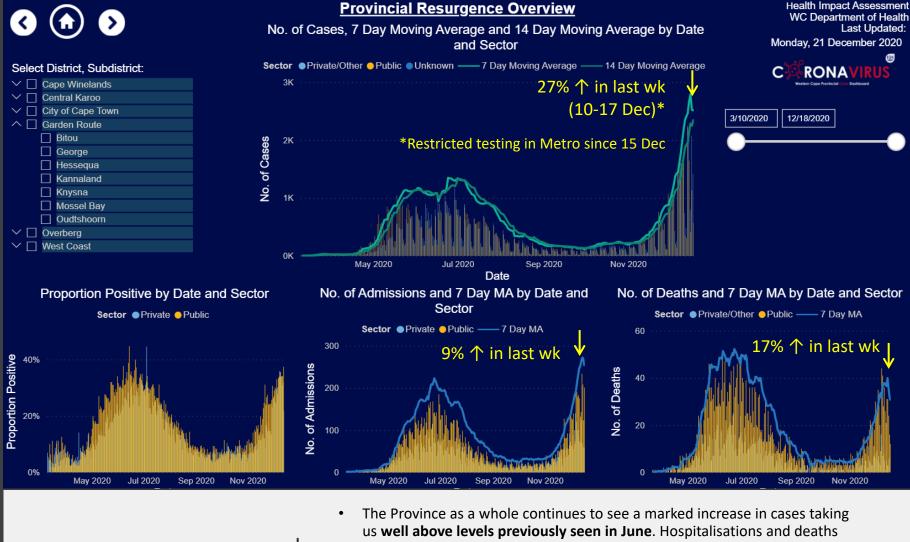


## Integrated testing, case, hospitalisation and mortality trends

(by event dates, until 20 December 2020)

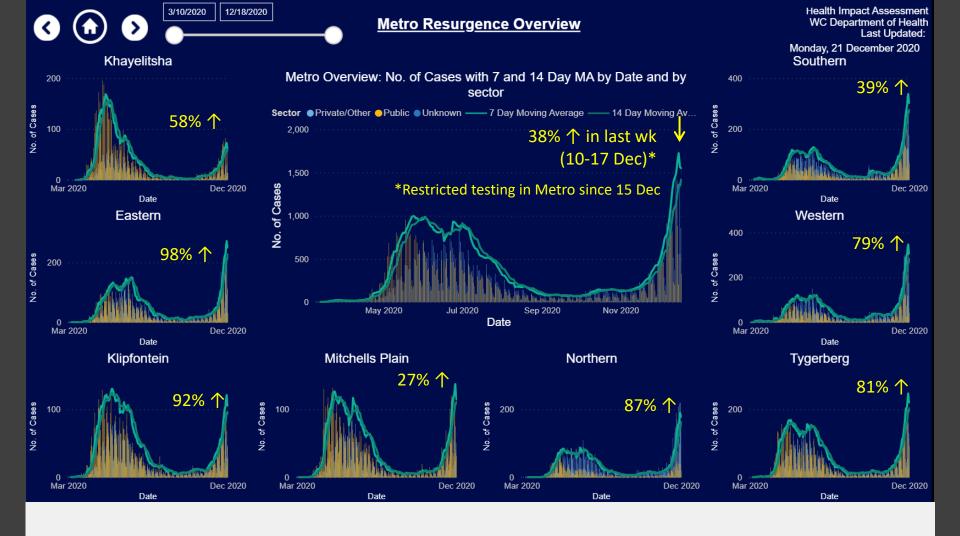






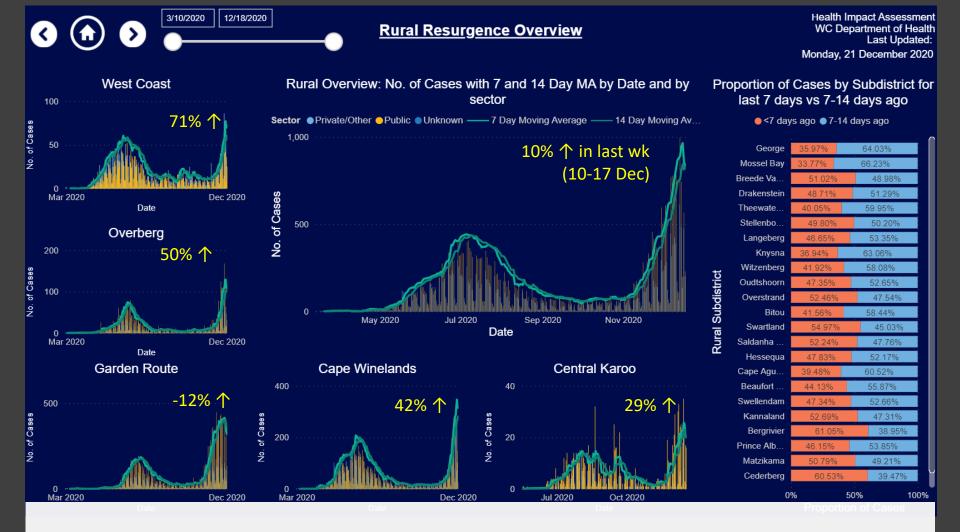
Provincial Overview

- continue to increase sharply since mid-November.
- The % proportion positive continues to rise and is now 40%, at the same level of our previous peak of 40%.
- The key message is that hospitalisations have exceeded the peak of the first wave and we do not have the protection of a lockdown or an alcohol ban. Deaths continue to rise steadily with a 17% increase in last week.



#### **Metro Overview**

- The Metro continues to see a sharp increase in cases and has exceeded case numbers from first peak.
- The patterns differ between subdistricts, but all areas show an increase in cases.
- All subdistricts have exceeded their first peak except Klipfontein (almost equal first peak) and Khayelitsha.



#### **Rural Overview**

- All rural districts have exceeded maximum daily case numbers of first peak.
- The Garden Route continues to show signs of stabilizing but absolute case numbers remain high.

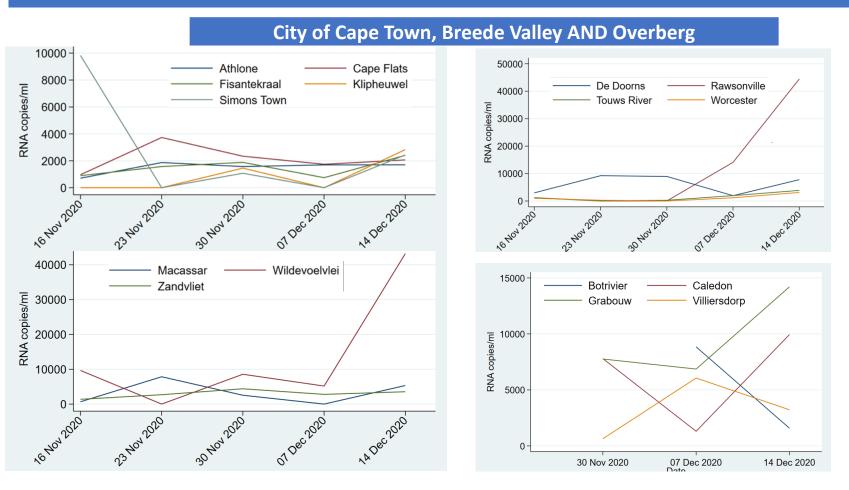
#### Triangulating with wastewater





#### SAMRC COVID- 19 AND WASTEWATER EARLY WARNING SYSTEM

WEEK 51 update



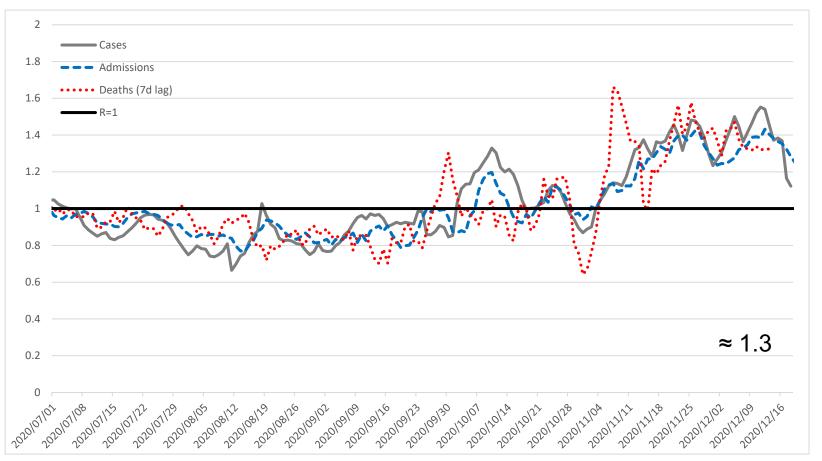
Metro: Noticeable spikes in SARS CoV-2 RNA signal at several sites; SARS-CoV-2 copies/ml increases of 82 to 734%

Breede Valley: Ongoing increase in Rawsonville; All other WWTPs increased as well

Theewaterskloof: Only been sampling for 3 weeks, Caledon and Grabouw increasing

## Net reproductive number (Province)

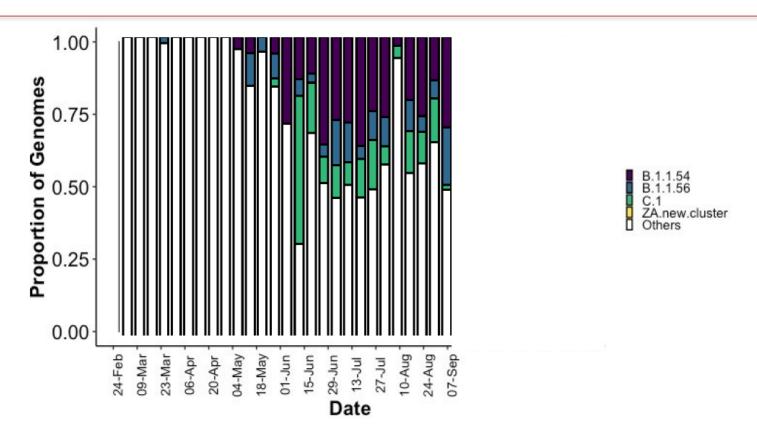
(based on cases, admissions and deaths by date of specimen/admission/death)



Based on EpiEstim



## Multiple lineages circulating in South Africa



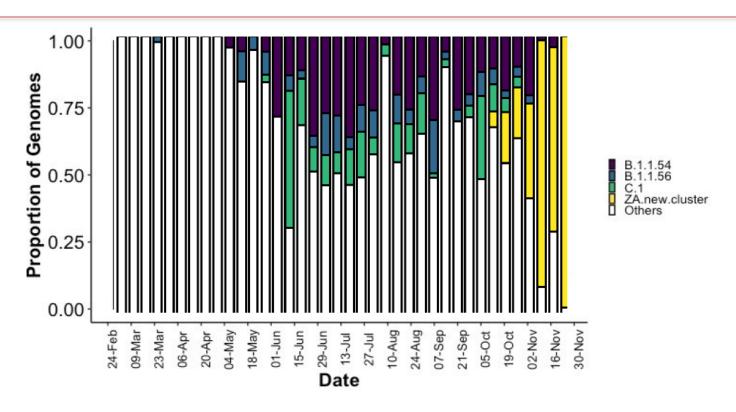
In the first wave, we had multiple lineages circulating (Three lineages responsible for 42% of infection)

# A NEW SARS-COV-2 LINEAGE WITH MULTIPLE SPIKE MUTATIONS HAS EMERGED & IS SPREADING FAST IN SA





#### New lineage rapidly become the dominant



Since early November, the new lineage has rapidly become the **dominant** lineage in the sampled locations

(>90% of sequences in week beginning 16 Nov) including 88% from "Cape Flats" clinic.

Mutations are in the "receptor binding domain" of the spike protein and may enhance binding to human cells and allow escape from antibodies – greater infectiousness??



Virus

#### What do & don't we know about the 501.V2 variant?

- 1. Unusual for a new variant to contain several mutations 3 in RBD incl. N501Y which alters ACE2 affinity & ?Ab effects
- 2. N501Y is being reported in other countries (0.2%) e.g. UK
- 3. Early signs that the new variant is spreading fast sometimes faster than 1<sup>st</sup> wave viruses
- 4. It is widespread probably across most of SA by now
- 1. Where did it come from & why did it form? Why NMB? we have a few hypotheses to investigate
- 2. Is it more severe? to early to tell
- 3. Is it re-infecting people who got infected in the 1st wave
- 4. Will the current vaccines work against this variant?
  - currently being studied by KRISP, AHRI, NICD & CAPRISA



# 21 December 2020

## Surveillance Huddle Report





- Increase in case numbers overwhelming contact tracing teams and hospitals
- Long lab TAT problematic in rural areas

#### NTSS

- · Increase in case numbers, hospital admissions still increasing
- Isolation site at Old Mutual 50% full
- Getting more cases of people testing two days apart at different labs and then don't want to isolate as they regard themselves as negative - we still advise to isolate

#### SWSS

- Public Health facilities taking strain: False Bay, WFH, Du Noon and Retreat all very high case numbers
- Prioritise public sector, recently diagnosed, older and non-hospitalised cases for case and contact tracing allocations, but several remain unallocated; this includes some hospitalized cases

#### Cape Winelands

- TAT for all sub-districts a real challenge and impact on hospital PUI's.
- Challenge with staff capacity due to Covid pos and PUI's.
- Pressure on acute services; Montagu, Robertson and Ceres hospital load. Less load on Stellenbosch as more capacity there
- BKH in process to receive patients from Sonstraal hospital
- Widespread community spread. No adherence to mask wearing in taxis and towns

#### Central Karoo

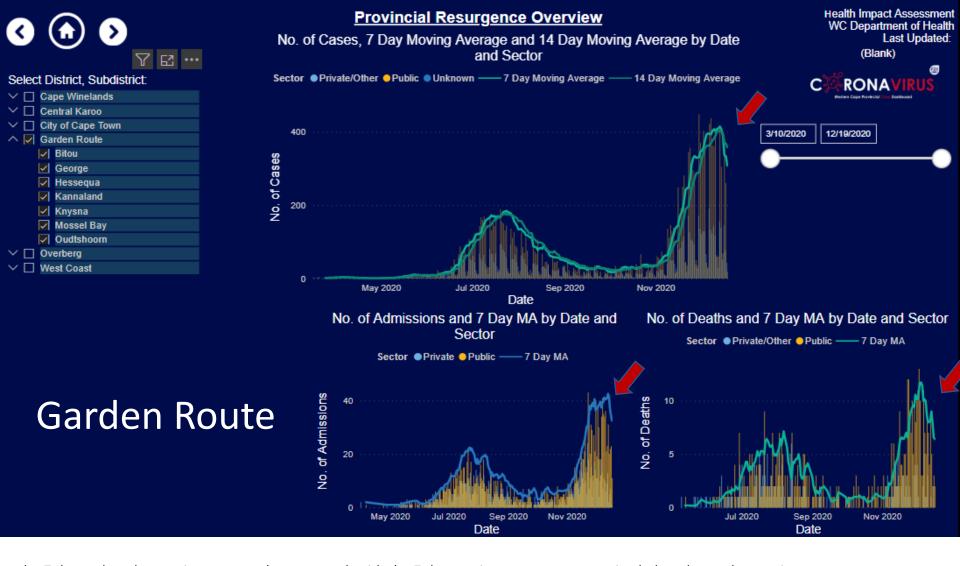
- 10 residents and 1 worker at old age home tested positive. Of concern is immobile residents that tested
  positive could be an indication of workers that are positive. Workers screened and those with
  symptoms were referred to Beaufort West Hospital for testing.
- Concerned about the relative high numbers in <u>Nelspoort</u>. It is a very small community.
- Q & I site in Beaufort West 14% full -18 beds available

#### Garden Route

- George Active cases now stabilizing at ± 1500 every day
- Knysna/Bitou Seeing a small turn for the better, many visitors from Joburg; testing at hospital and privately
- Not all oxygen cylinders received at Harry Comay Hospital today; awaiting rest.

#### Overberg

- TAT up to 6 days
- People from neighbouring countries need a negative result before they can board a taxi streaming to our facilities to be tested
- · Reports of people returning from Eastern Cape test positive



The 7 day and 14 day moving averages have crossed, with the 7 day moving average now moving below the 14 day moving average.

These are positive signs in the Garden Route, but this trend may be reversed by super spreader events.

The Garden Route is currently showing an increase in incidence of cases in Hessequa, Kannaland, Mossel Bay and Oudtshoorn but these are smaller subdistricts within the district.

Data show that both hospitalisations and deaths in the Garden Route are decreasing.

# Scaling up health platform COVID capacity



#### Scaling up COVID capacity – general comments

#### 1. PHC capacity:

- a) The PHC facilities facing increasing demand for COVID testing, and providing triage for confirmed cases.
- b) Systematic de-escalation of non-COVID PHC services.

#### 2. Hospital capacity:

- a) 5 244 total acute public sector beds (excluding Mat/Neo/Paed & Psych) and 135 total critical care public sector beds.
- b) 613 additional inter-mediate care beds in Metro (336 Brackengate and 90 at Lentegeur currently) plus additional 187 at Lentegeur.

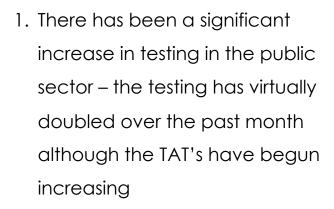
#### 3. Fatalities management capacity:

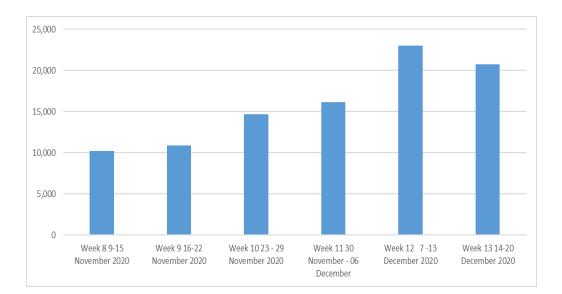
- a) Mass fatality centre in the Metro with capacity for **240 bodies**
- b) Mass fatality work group co-ordinating capacity across province



#### **Update on Public Sector Testing**

TOTAL NUMBER OF TESTS DONE			
Week	Total		
Week 8 9-15 November 2020	10,229		
Week 9 16-22 November 2020	10,909		
Week 10 23 - 29 November 2020	14,706		
Week 11 30 November - 06 December	16,131		
Week 12 7-13 December 2020	22,981		
Week 13 14-20 December 2020	20,733		





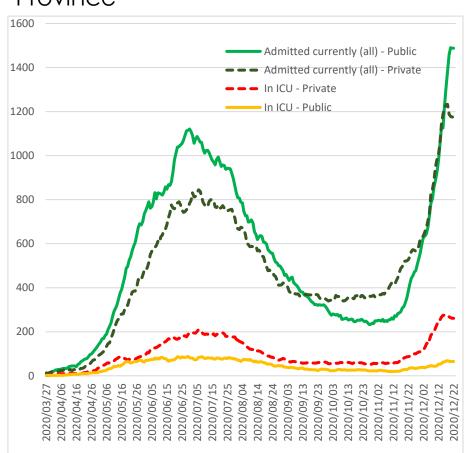
- NHLS successfully using the antigen testing in the Garden Route and Metro and starting in hospitals
- The testing criteria have been updated based on available testing capacity.



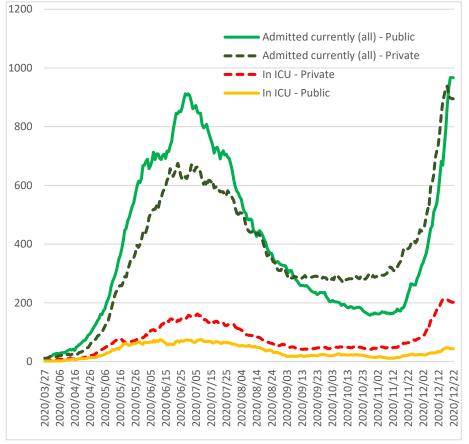
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# Hospitalisation – currently admitted with SARS-CoV-2 (Excluding PUIs)

#### Province

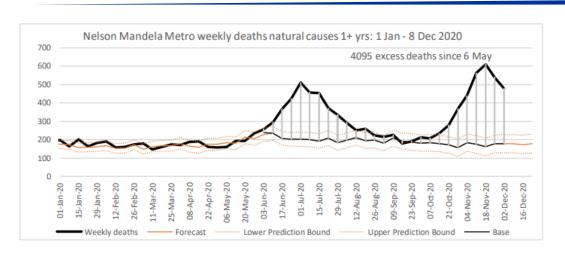


#### Cape Town

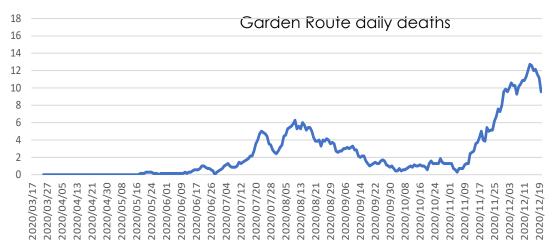




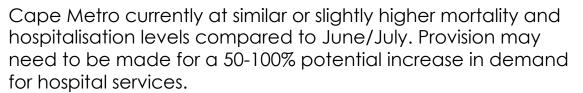
#### Anticipating acute hospitalisation needs in the Metro



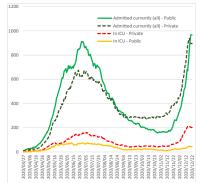
Excess deaths in NMB were 37% higher now compared to earlier in the year, even though first wave there was shorter than in Cape Town.



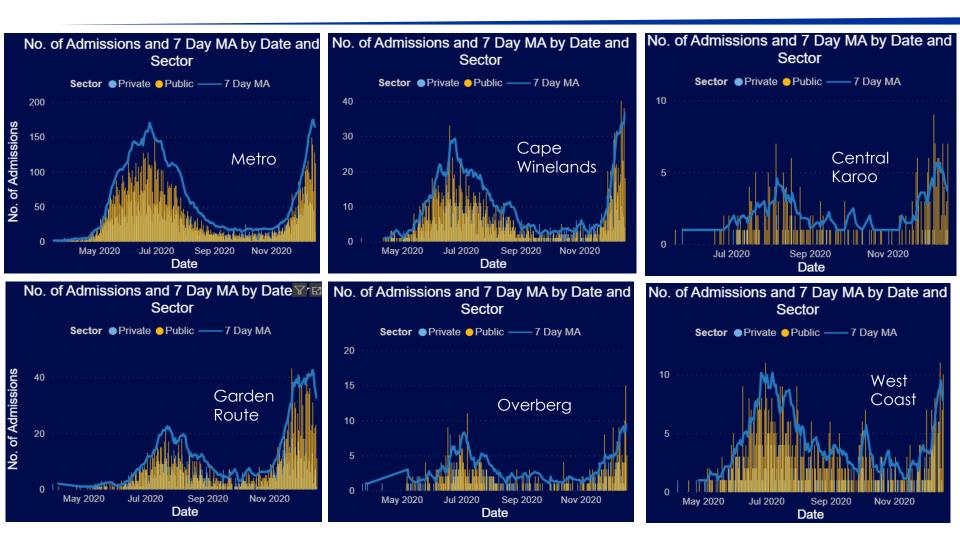
Daily deaths in the Garden Route were double now compared to earlier in the year







## **Hospital Admissions By Health District**



Hospitalisations continue to increase across all districts, except for Garden Route which is stablising. **New admissions are greater than in first peak in all districts except? West Coast.** 



The concern with hospitalisations is that unlike during the first wave, the health department now has to contend with **a high trauma load**.

#### Acute service platform – general comments

- 1. Currently 2691 Covid patients in our acute hospitals (1581 in public hospitals & 1110 in private hospitals). This excludes PUIs and cases in specialised hospital settings.
- 2. COVID hospitalisations have increased sharply whilst we are experiencing significant trauma and psychiatric pressures.
- 3. The Metro hospitals are running at an average occupancy rate of 105%; George drainage area hospitals at 90%; Paarl drainage area hospitals at 93% & Worcester Drainage Area hospitals at 87%.
- 4. COVID & PUI cases currently make up more than 30% of all available acute hospital capacity in both Metro and Rural Regional Hospital drainage areas.
- 5. The **Hospital of Hope** (Brackengate) currently has **282** patients (1705 cumulative admissions), effectively at maximum capacity as more patients admitted last night; **Sonstraal** currently has **20 COVID patients** and (27 TB patients).
- 6. The **oxygen utilisation** running at **58.5%** of available daily capacity and the mass fatality centre has admitted 585 bodies to date (**currently 53 bodies**).



## Metro Acute Care Availability & Utilisation



WCG Health: Metro Acute Care Availability and Utilisation (Covid and Non Covid cases) at 21/12/2020 @ 06:00am

Service Cluster	HospitalName	Operational Beds	Filled Beds	BUR %
	Tygerberg Hospital	1380	1352	98%
hospitals	Groote Schuur Hospital	977	948	97%
	Mitchells Plain Hospital	425	488	115%
	New Somerset Hospital	352	469	133%
	Khayelitsha Hospital	340	475	140%
	Brackengate Intermediate Care	336	278	83%
	Karl Bremer Hospital	314	286	91%
	Victoria Hospital	204	196	96%
	Eerste River Hospital	181	191	106%
	Helderberg Hospital	171	212	124%
False Bay Hospital	76	98	129%	
	Wesfleur Hospital	53	47	89%
	Total	4809	5040	105%
Total		4809	5040	105%

Source: Clinicom

Excluding Red Cross Hospital and Mowbray Maternity Hospital
Operational Beds = Beds that are Equipped and Staffed



#### George Drainage Area Acute Care Availability & Utilisation



WCG Health: George Drainage Area Acute Care Availability and Utilisation (Covid and Non Covid cases) at 21/12/2020 @ 06:00am

Source: Clinicom

HospitalName	Operational Beds	Filled Beds	BUR %
George Hospital	280	300	107%
Oudtshoorn Hospital	130	140	108%
Mossel Bay Hospital	108	67	62%
Harry Comay TB Hospital	101	49	49%
Knysna Hospital	90	123	137%
Beaufort West Hospital	83	62	75%
Riversdale Hospital	50	78	156%
Alan Blyth Hospital	30	9	30%
Prince Albert Hospital	30	5	17%
Laingsburg Hospital	21	7	33%
Murraysburg Hospital	16	7	44%
Uniondale Hospital	13	9	69%
Total	952	856	90%

Operational Beds = Beds that are Equipped and Staffed



## Paarl Drainage Area Acute Care Availability & Utilisation



WCG Health: Paarl Drainage Area Acute Care Availability and Utilisation (Covid and Non Covid cases) at 21/12/2020 @ 06:00am

HospitalName	Operational Beds	Filled Beds	BUR %
Paarl Hospital	352	439	125%
Vredenburg Hospital	124	77	62%
Stellenbosch Hospital	93	83	89%
Vredendal Hospital	87	79	91%
Swartland Hospital	72	65	90%
Clanwilliam Hospital	64	54	84%
Sonstraal TB Hospital	59	27	46%
Citrusdal Hospital	40	18	45%
Radie Kotze Hospital	34	27	79%
LAPA Munnik Hospital	15	8	53%
Total	940	877	93%

Operational Beds = Beds that are Equipped and Staffed



Source: Clinicom

## Worcester Drainage Area Acute Care Availability & Utilisation



WCG Health: Worcester Drainage Area Acute Care Availability and Utilisation (Covid and Non Covid cases) at 21/12/2020 @ 06:00am

HospitalName	Operational Beds	Filled Beds	BUR %
Worcester Hospital	275	247	90%
Hermanus Hospital	103	59	57%
Ceres Hospital	100	99	99%
Swellendam Hospital	76	56	74%
Robertson Hospital	55	37	67%
Otto Du Plessis Hospital	51	33	65%
Caledon Hospital	50	85	170%
Montagu Hospital	26	27	104%
Total	736	643	87%

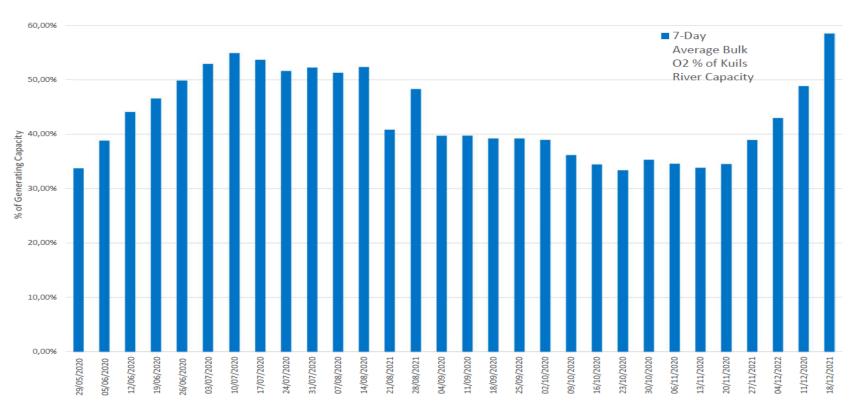
Operational Beds = Beds that are Equipped and Staffed

Source: Clinicom



#### Provincial oxygen consumption at 58.5% of total capacity

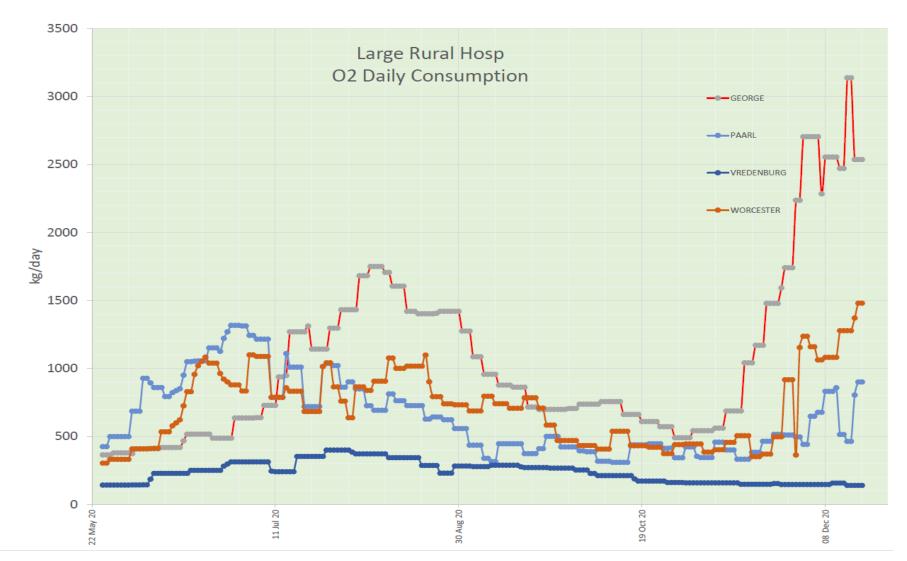
WCGH: Total Bulk O<sub>2</sub> Consumption Expressed as % of Kuils River Plant Capacity





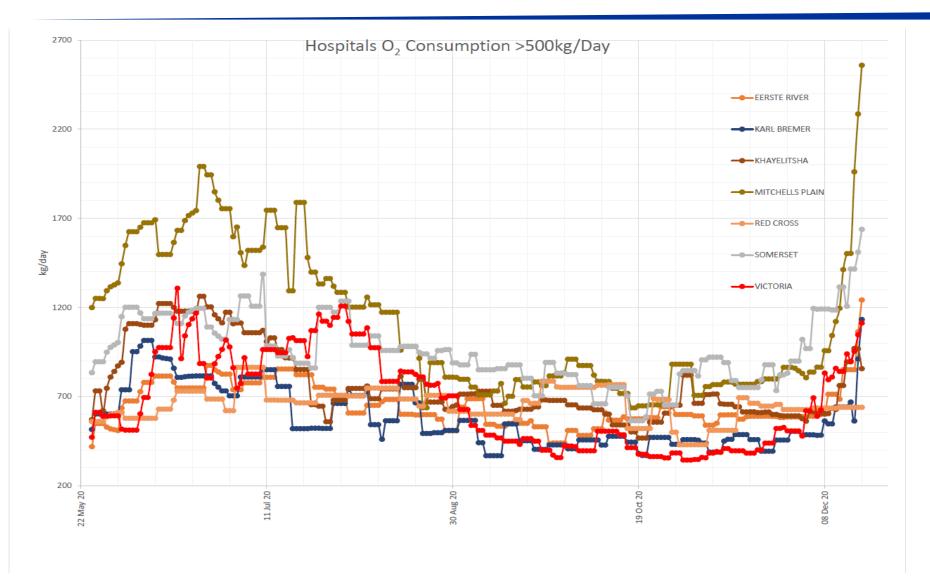
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## **Large Rural Hospital Daily Consumption**



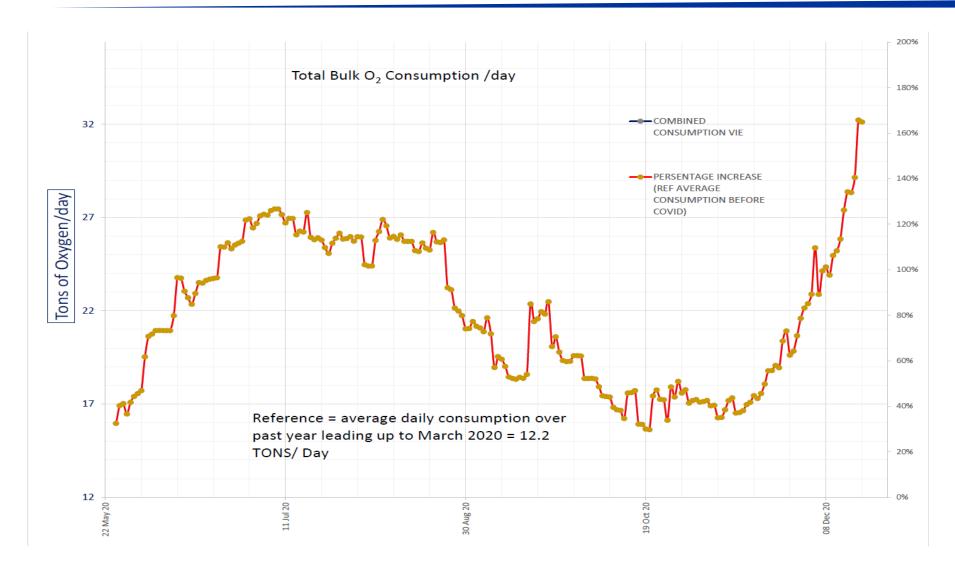


## Metro hospitals oxygen consumption/day





## Total bulk oxygen consumption/day





# Scaling down non- COVID capacity



#### Scaling down non-COVID capacity – general comments

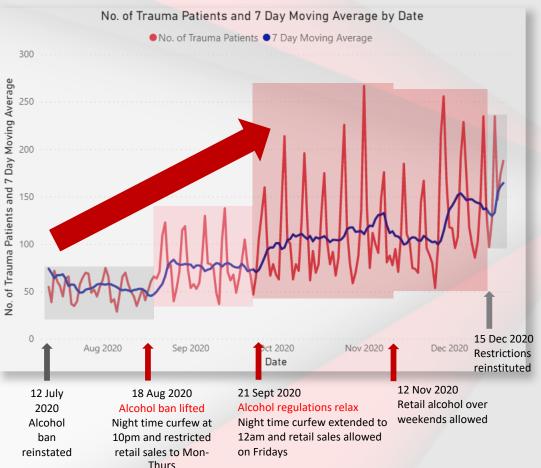
- 1. The biggest challenge remains the **impact of alcohol-related trauma**, especially in the **emergency centres** and in **critical care**.
- 2. The **impact** of the **new alcohol restrictions** and the **targeted law** enforcement efforts will be monitored over the coming weeks.
- 3. The **psychiatric pressures** have also resulted in the need to bring on line additional capacity to cope with **increasing case numbers**.
- 4. The **de-escalation** of all other **non-COVID PHC and hospital care activities** are being managed actively across all hospitals on the service platform.

Overview of the impact of recent alcohol regulation changes on trauma presentations (13 Jul - 21 Dec 2020)

The data clearly shows that with every relaxation of alcohol regulation, we see trauma numbers consistently increase in response to the regulation introduced.

#### Sentinel Trauma Report

This report shows a sample of hospital emergency centres and their trauma patient numbers over time



We usually expect to see increased trauma during this period of the year and the recent alcohol restrictions seems to have levelled that impact but has not reduced it.

13/07/2020 20/12/2020

Source: HECIS

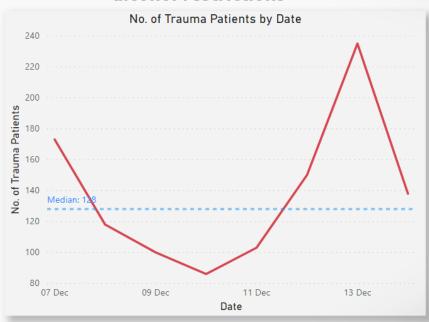
When comparing the week before and the week after the recent alcohol restrictions we see an average (median) week on week increase of 25.7% in trauma presentations. This is likely impacted by the increased trauma and availability of alcohol on the public holiday.

#### Sentinel Trauma Report

This report shows a sample of hospital emergency centres and their trauma patient numbers over time

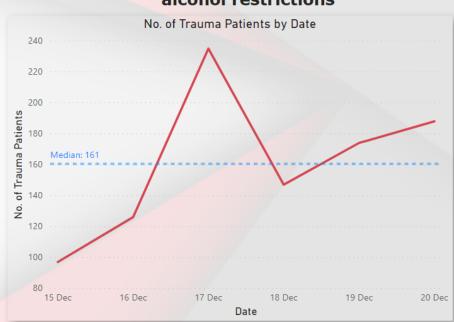
Importantly, the weekend trauma presentation peak (week on week) has decreased by 20%, further supporting the link between alcohol availability and trauma.

## 1 week BEFORE reinstitution of alcohol restrictions



# 25.7% increase week on week

## 1 week AFTER reinstitution of alcohol restrictions



Source: HECIS

# Safe-guarding well-being of health care workers

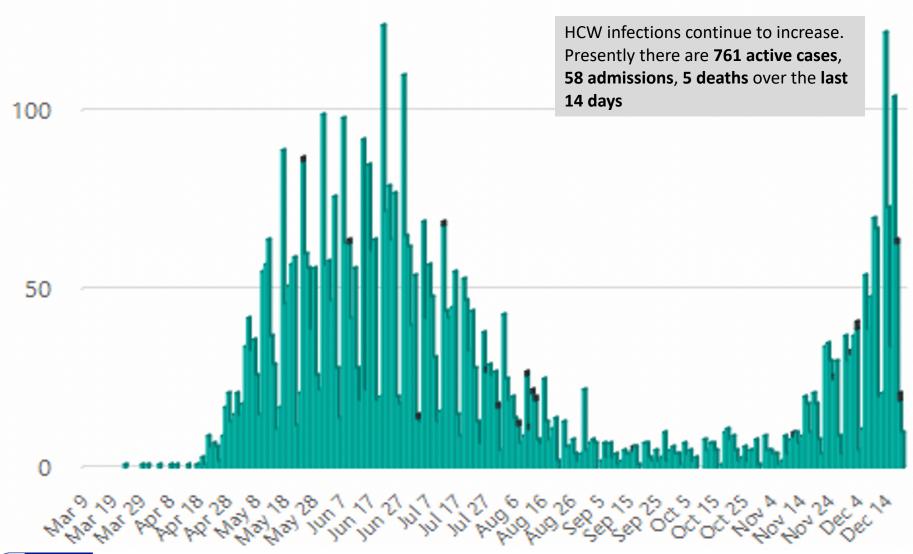


# Safe-guarding health care workers – general comments

- The biggest challenge is the increasing COVID infection rate amongst health care workers, and the impact on staff member isolation and quarantine.
- 2. The **availability** of additional staff members for **contract work** and **via agencies** is also a significant challenge.
- 3. The number of people willing to **volunteer their services** has also **decreased significantly**.
- 4. There is **sufficient PPEs across all the health facilities**, and in central storage, with additional orders being placed in recent weeks.
- 5. The system to support frontline staff in terms of mental well-being is being scaled-up.

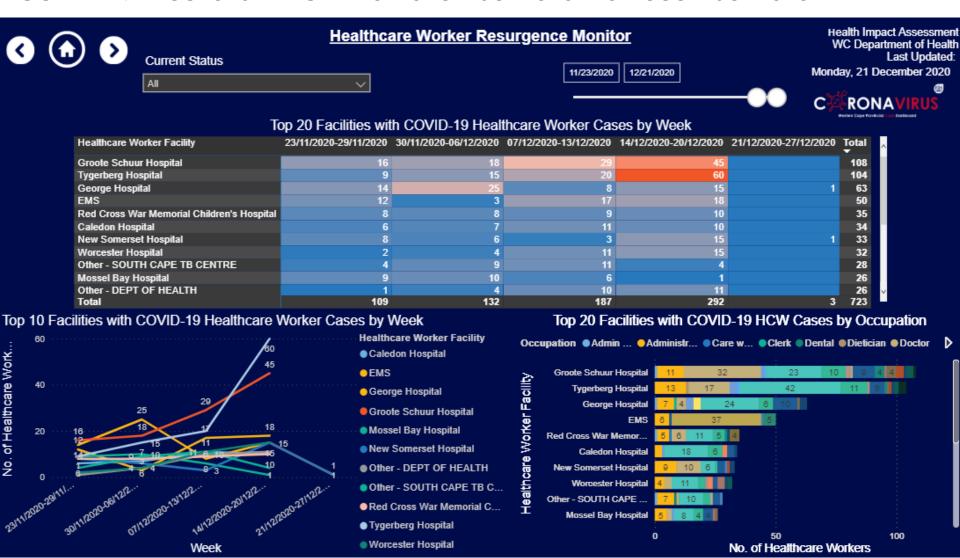


## WCG: Health, Health Worker COVID-19 Infections





#### COVID-19 infections in HCW- 23 November 2020- 20 December 2020

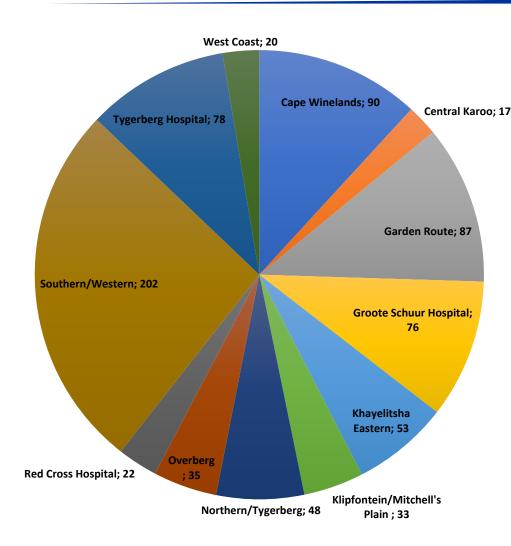


We continue to see an increase in HCW infections week on week.

Groote Schuur Hospital is now the hospital with the most infections in the last calendar month, reflecting the increase of cases in the Metro, and in the Southern sub-district in particular.

40

#### **Current Health Care Worker Infections**



- Currently, **761** Health Care
  Workers across **94 institutions** are
  infected with COVID-19 which
  equates to **2.30%** of a total staff
  complement of **33 062**.
- Cumulative total of 7 215 staff
  members took COVID related
  leave, to date (from March '20).
- A total of 36 287 days were taken over the period which relates to an average of 5 days per case.



# **COVID Response – Staffing Strategy**

Source-and-Supply of Nursing Staff

### Existing Capacity with Comm Services and Currently In Service (44% to be retained)

- Offering Short-Term Contracts
- Filling of Vacancies (on reserve)

#### **Proactive Recruitment**

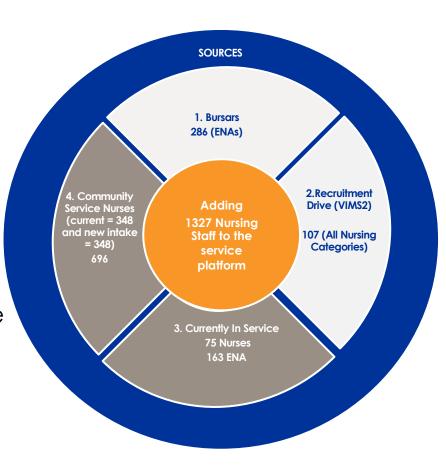
(56% to be on-boarded)

- Appointment via Recruitment Drive
- Early commencement of New Intake Com Serve
- Placement of Bursaries



 SA Military request for specific staff in specific hospitals





# **Vaccine Strategy**



# **Vaccine Strategy**

- Pro-active strategy to access SAHPRA approved vaccines in Western Cape – National Minister will be officially engaged.
- 2. Technical experts advising on a formal option appraisal of all available candidate vaccines, i.t.o. efficacy, safety, affordability, etc.

#### 3. Prioritisation:

- a) Health Care workers and other essential workers
- b) Vulnerable groups elderly and people with co-morbidities

### 4. Demand forecast and costing:

- a) Estimated numbers of vaccines required per prioritised category
- b) Cost estimates and confirmation of budget
- 5. Next **concrete steps and timelines** include SAHPRA approval, sourcing and distribution strategy to **providing vaccines early in 2021**.



# Festive season messages



### Coronavirus is in the AIR!

#### Previously we thought ...

Hands and surfaces important in spread.

\_\_\_\_\_

#### Now we know ...

Air droplets cause most COVID-19 spread.

We are breathing in small droplets containing virus.



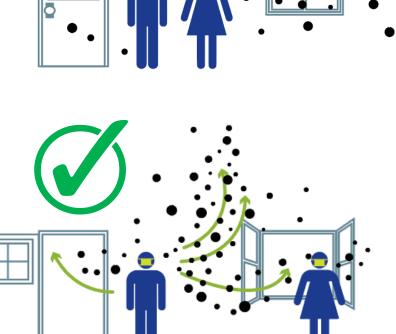
The virus can

spread from an infected person's mouth or nose in small liquid particles when the person coughs, sneezes, sings, breathes heavily or talks.

Interim guidance 1 Dec 2020

#### What can we do...

- Be careful about sharing your "air space"
- Keep your distance
- Ensure good ventilation
- Wear a mask



1,5 metres



# Coronavirus spreads where people GATHER

#### Previously...

Gatherings of people were limited by lockdown which flattened the Wave 1 curve.

#### Now we know ...

Social gatherings can contribute substantially to spread

#### What can we do...

- Avoid gatherings
- Limit size (more people = more risk)
- Keep them short (longer = more risk)
- Go outdoors (indoor = more risk)
- Practise distancing, ventilation, mask wearing and respiratory hygiene at work.

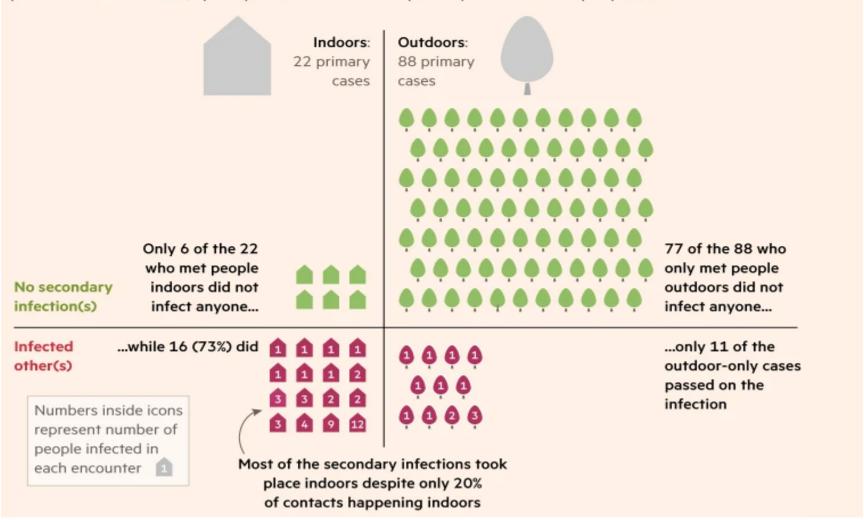






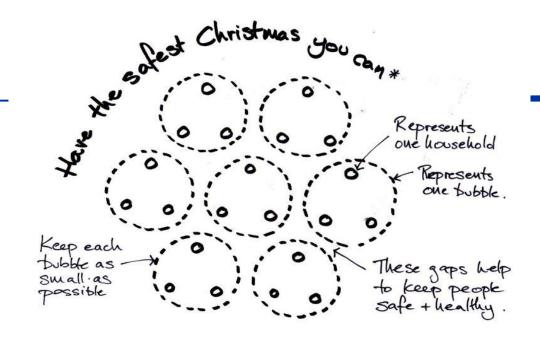
# Studies suggest Covid-19 transmission is much less likely in outdoor spaces than indoor settings

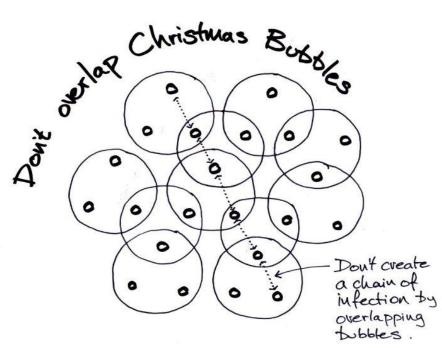
Researchers traced the contacts of 110 people with Covid-19, and recorded when the virus was passed on to a contact, split by whether or not the primary case had met people indoors

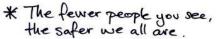


Transmission ~18 x more likely in indoor settings

## Safe Bubbles









# Conclusions



### **Concluding remarks**

- The increase in active cases in all districts, represents a bigger 2<sup>nd</sup> wave in the Western Cape.
- 2. Our **local teams** are on **high alert for local surveillance and response** to localised clusters that can be targeted for maximum impact, **especially the vulnerable**.
- 3. The biggest concern is the **non-adherence to protective behaviours** hence the big drive for **targeted law enforcement and behaviour change** interventions.
- 4. The **hospitalisation** and **mortality data** showed a **rapid increase** over the past 3 weeks.
- 5. We have activated contingency plans per geographic area to scale up hospital COVID capacity as required, but alcohol-related trauma is a major challenge.
- 6. Our key concern is that our **health care workers face significant strain** over the coming weeks. We need to **safe-guard them and their families**.
- 7. It is essential to ensure a **strong focus on behaviour change to ensure containment** for the **next 3-6 months**, while clarity around the **availability of a vaccine** emerges.



# Thank you

