Western Cape Government

Health

Digital Press Conference

Health Update

Dr K Cloete

25 March 2021

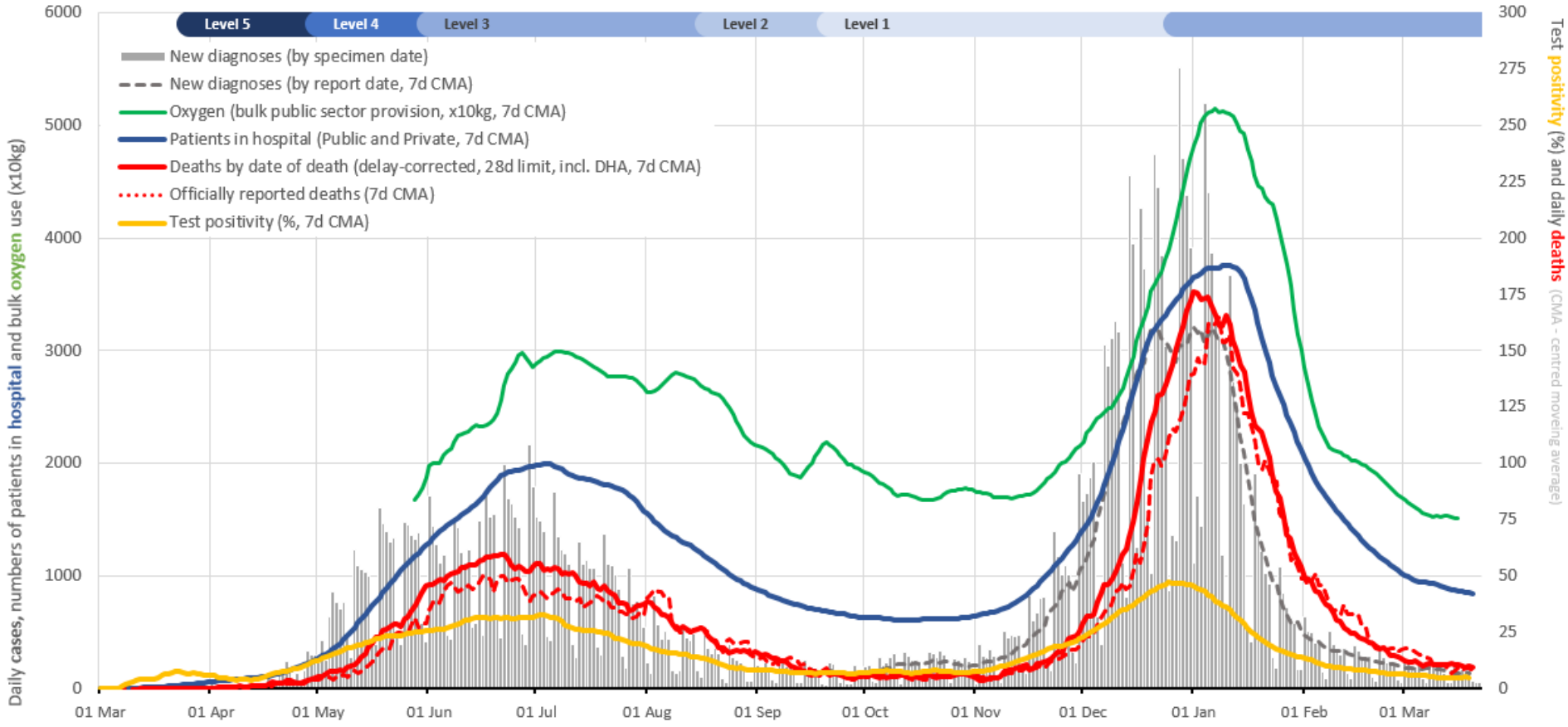
Overview

1. Surveillance & Response Update
2. Health platform COVID response
3. Well-being of health care workers
4. Vaccine Roll-out Update
5. Conclusions

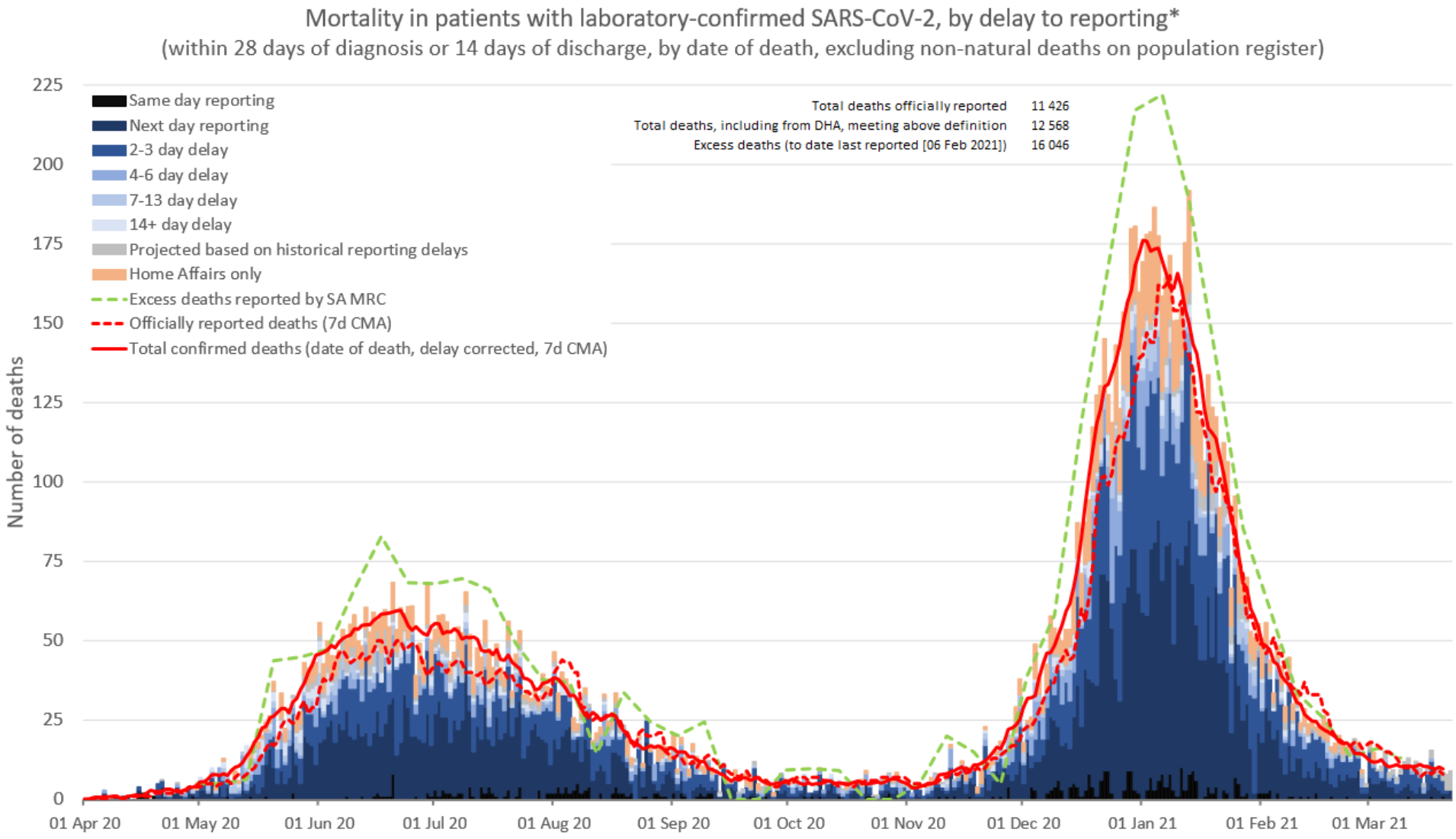
Surveillance & Response Update

Western Cape Government

Integrated testing, case, hospitalisation and mortality trends



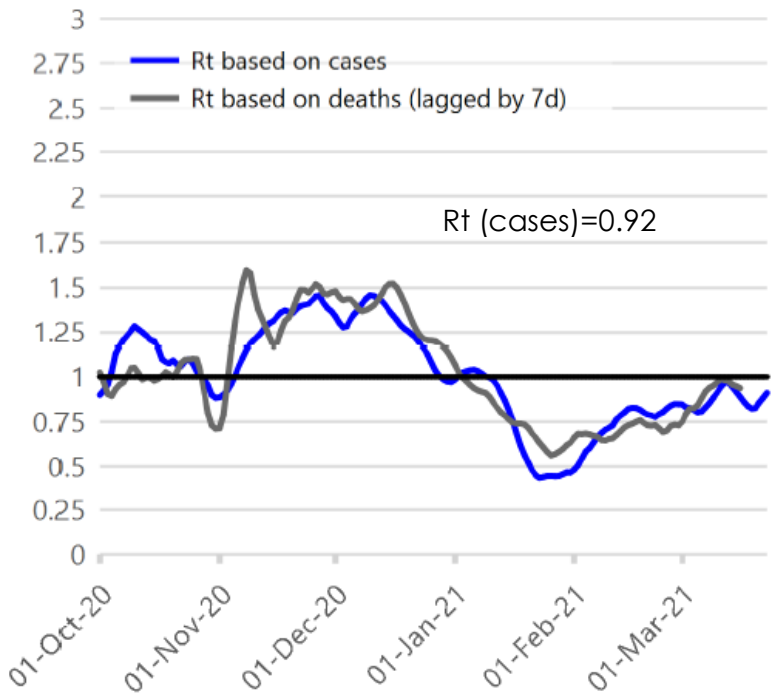
Mortality by date of death



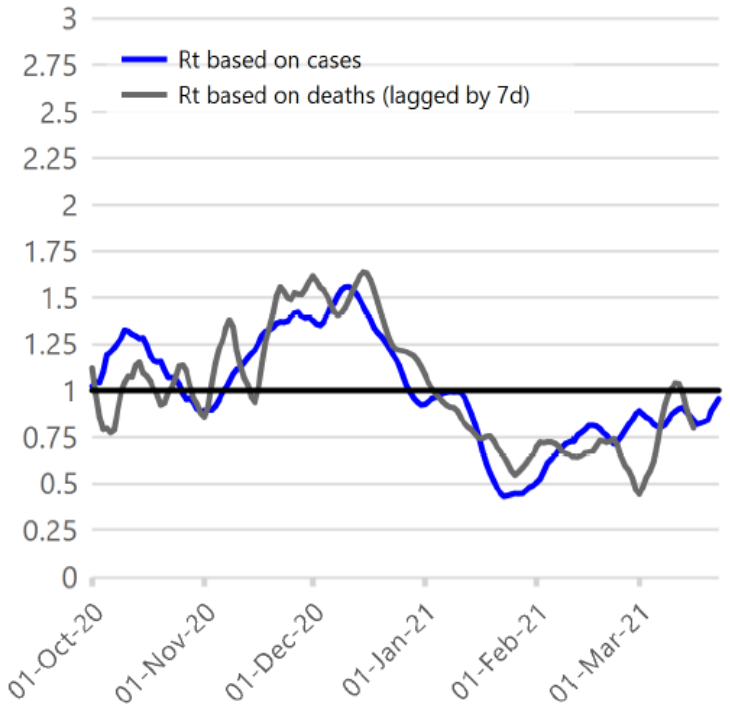
* Excludes deaths in those with undiagnosed COVID-19, in patients with clinical diagnoses in spite of absent or false negative SARS-CoV-2 test results, and in those without recorded ID numbers dying at home or in ambulatory or emergency room care; CMA - centred moving average

Current reproduction number

Province

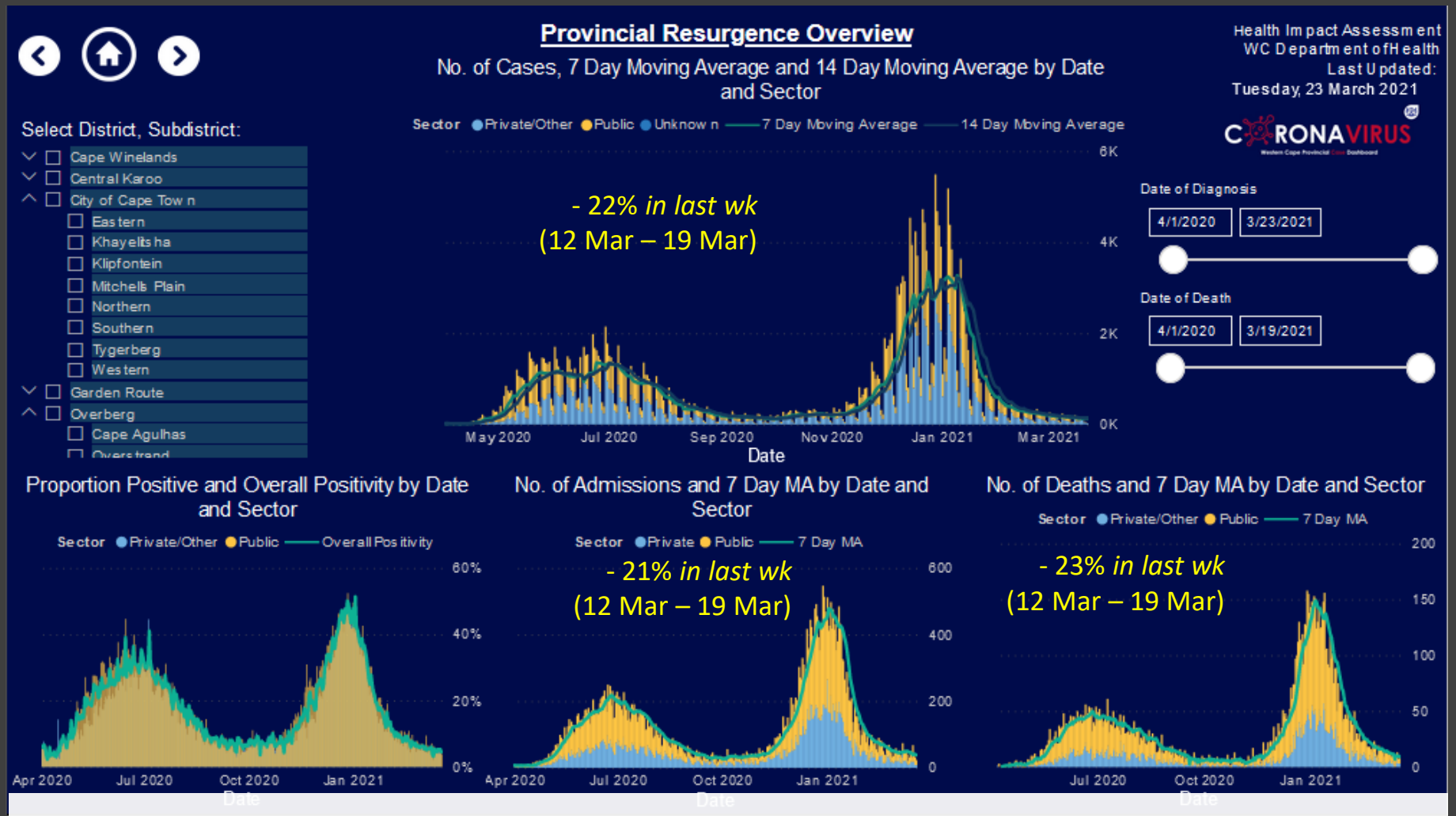


Metro



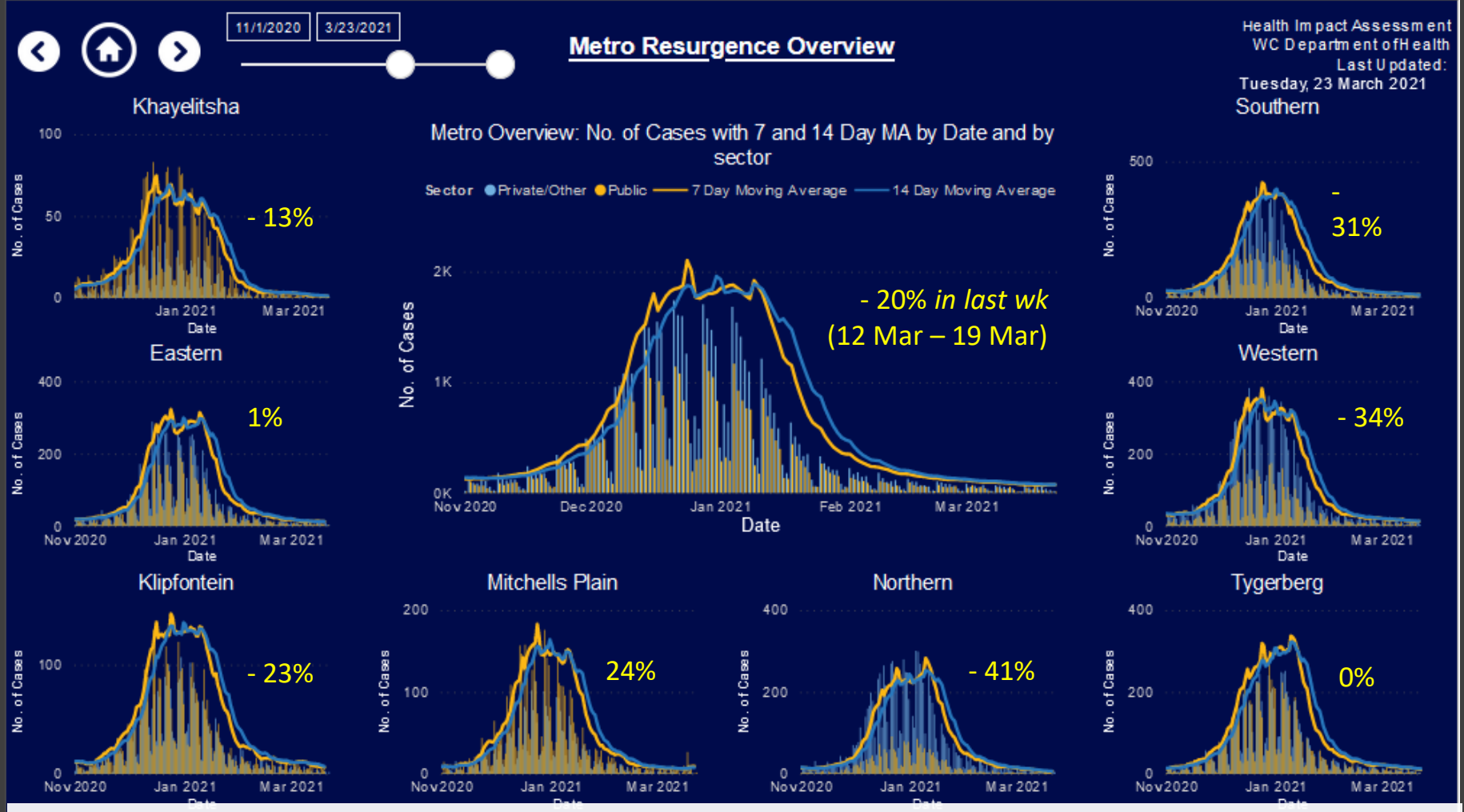
Western Cape Government

Approximated based on smoothed doubling times



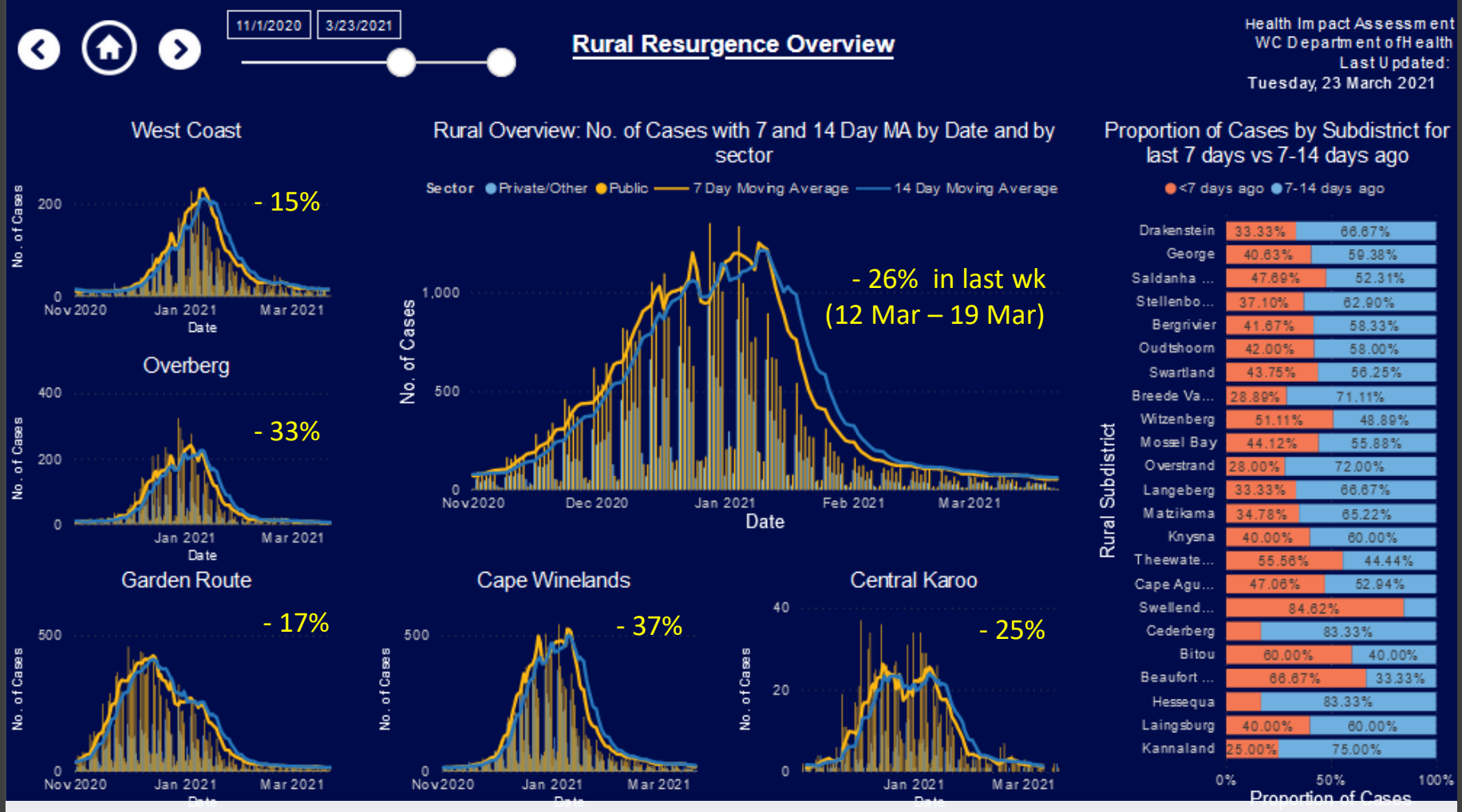
Provincial Overview

- COVID-19 cases, admissions and deaths in the Western Cape are starting to plateau, but small declines still being seen.
- While the weekly percent decreases in cases, admissions and deaths seem large (21-23%), the actual change is absolute numbers is relatively small.
- We are approaching but have not yet reached the situation seen between the first and second waves last year.
- The proportion positive is stable at 5.1% on 19 March 2021.



Metro Overview

- Cases in the Metro decreased by 20% from 12 March to 19 March 2021.
- With relatively small absolute numbers of cases, the percentage increases of cases can vary quite dramatically.
- Mitchells Plain is showing an increase in case numbers, related to an **outbreak in a hospital ward** there that is now contained. Eastern and Tygerberg are unchanged, while the rest of Metro is showing a decline in cases.



Rural Overview

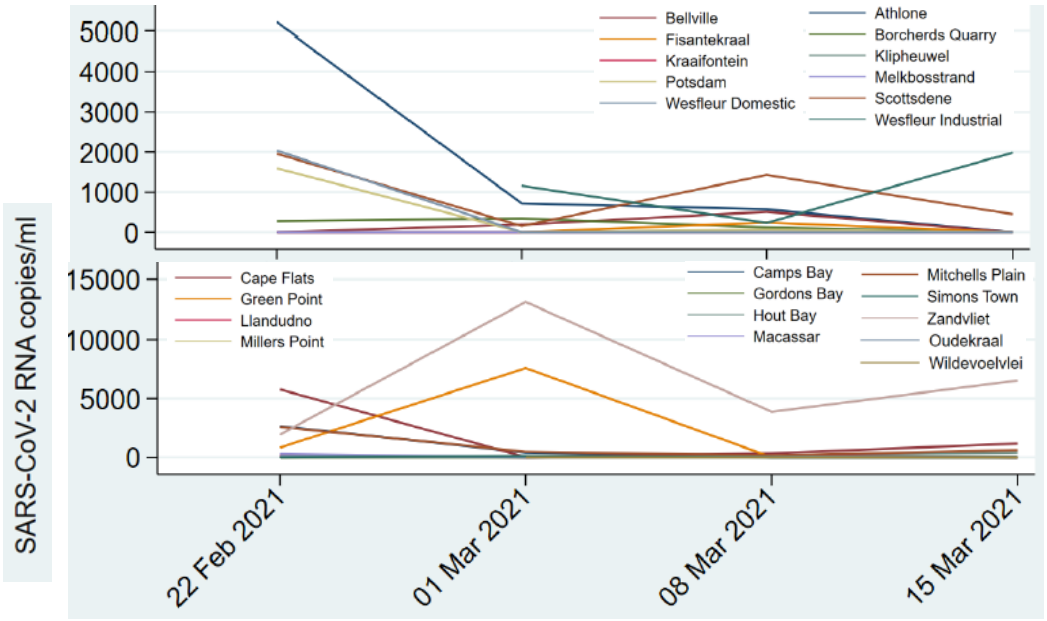
- Cases in Rural have decreased by 26% overall.
- All districts in Rural have seen decreases of more than 15%, but the absolute numbers are very small.
- We continue to watch for and work to **contain local outbreaks** in all districts, especially over **upcoming holiday period**.

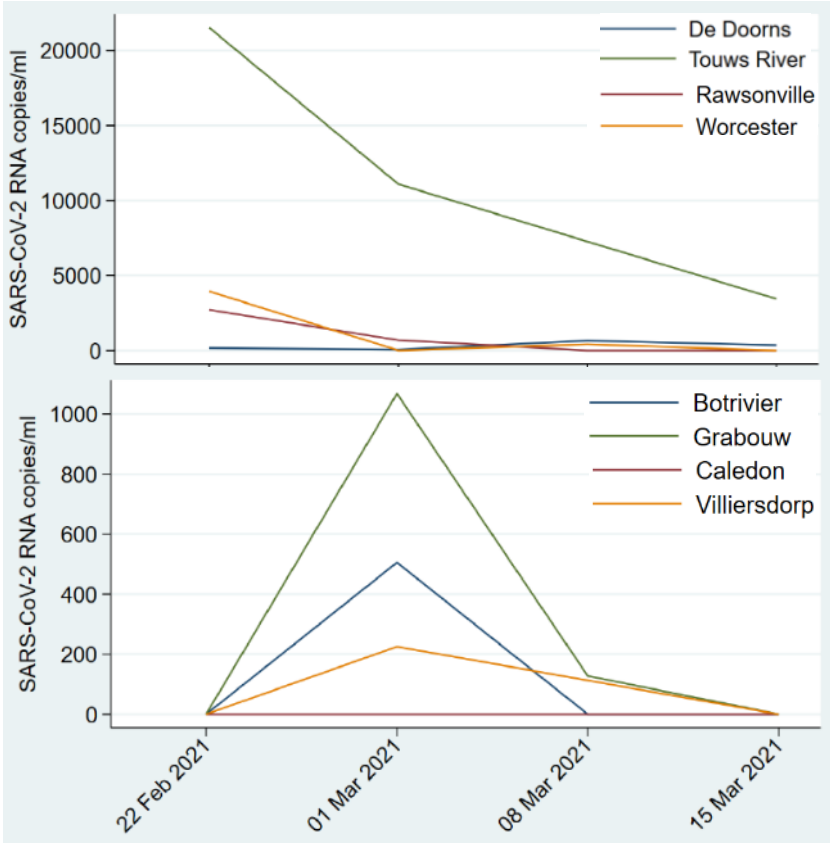
Triangulating with wastewater

SAMRC COVID- 19 AND WASTEWATER EARLY WARNING SYSTEM

WEEK 10
2021

City of Cape Town, Breede Valley AND Overberg





Metro:
Decrease/sustained low SARS CoV-2 RNA across most treatment plants with none detected at 18 treatment plants (previously 9). Scottsene decreased.

Increase in SARS-CoV-2 RNA >1000 copies/ml at:
- Wesfleur Industrial
- Cape Flats
- Zandvliet

Breede Valley:
SARS CoV-2 remains low; not detected in Rawsonville & Worcester

Theewaterskloof:
SARS-CoV-2 not detected at any of 4 treatment plants

South Africa and Western Cape – expectations for 3rd wave

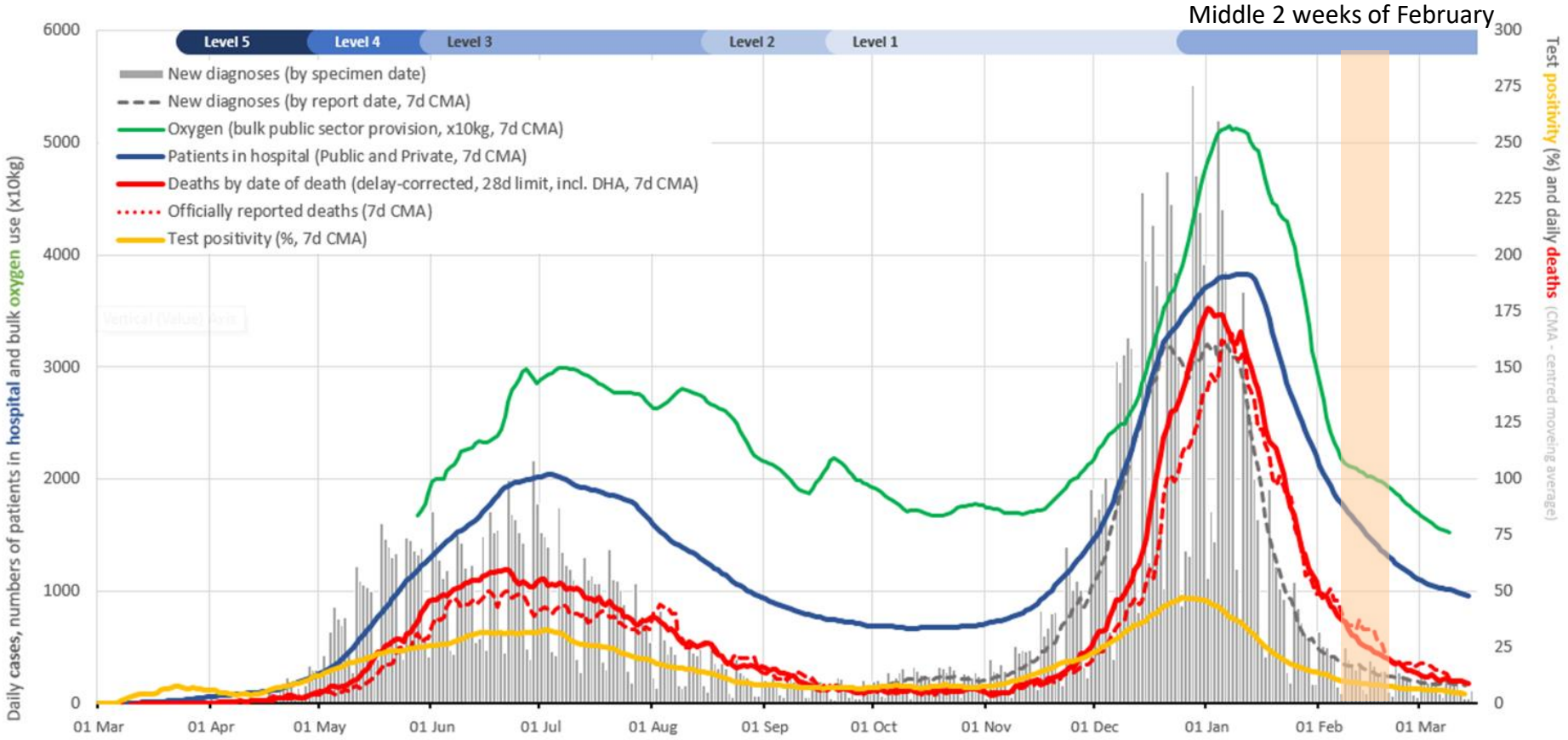
1. National MAC technical working group with involvement of WC epidemiologists
2. 3rd wave is very likely but there remains uncertainty about timing, location and magnitude of resurgence. This will be driven by:

Change in viral transmissibility	▪ Seasonality (weather) ▪ Seasonal changes in behaviour (long weekends, funerals, Easter)
Behavioural changes in a population	▪ People touched by COVID ▪ Restrictions on movement and behaviour (alcohol ban, gatherings etc.) steep declines in cases & deaths from 28 Dec '20 (reinstating level 3) ▪ Now shift back to Level 1 ▪ Contact tracing; Encouraging Q&I
Change in interactions between weakly connected subpopulations	▪ Between provinces ▪ Between urban and rural ▪ Between wealthy and poor
Changing immunity / reinfection risk	▪ Evidence of some immunity post infection, but may wane ▪ Communities hard hit in wave 1, relatively less severe in wave 2
Viral evolution	▪ As with 501Y.V2 variant, other variants may affect viral transmissibility
Speed, uptake & impact of vaccination	▪ This will become more evident over the coming weeks and months with vaccine rollout in the Province

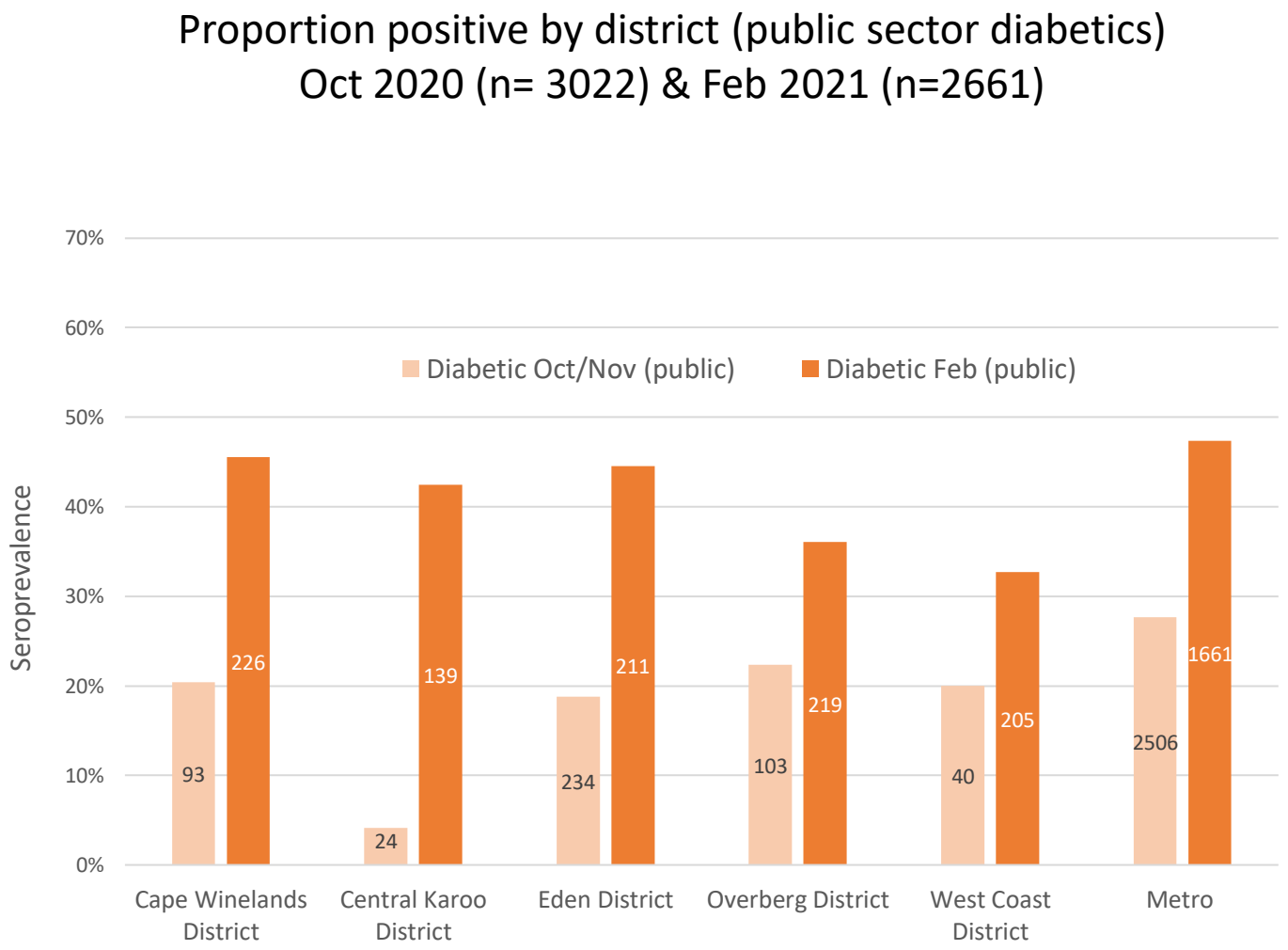
Sentinel seroprevalence results

Tested residual ("leftover") convenience samples from patient groups attending health services for non-COVID reasons:

- Public sector diabetic HbA1c specimens (Metro 1661; Rural 1000)
- Private sector diabetic HbA1c specimens (Metro 1000)
- Public sector HIV VL specimens (Metro 1529)
- Public sector children (age <15 years) attending RXH & TBH (53% outpatients)

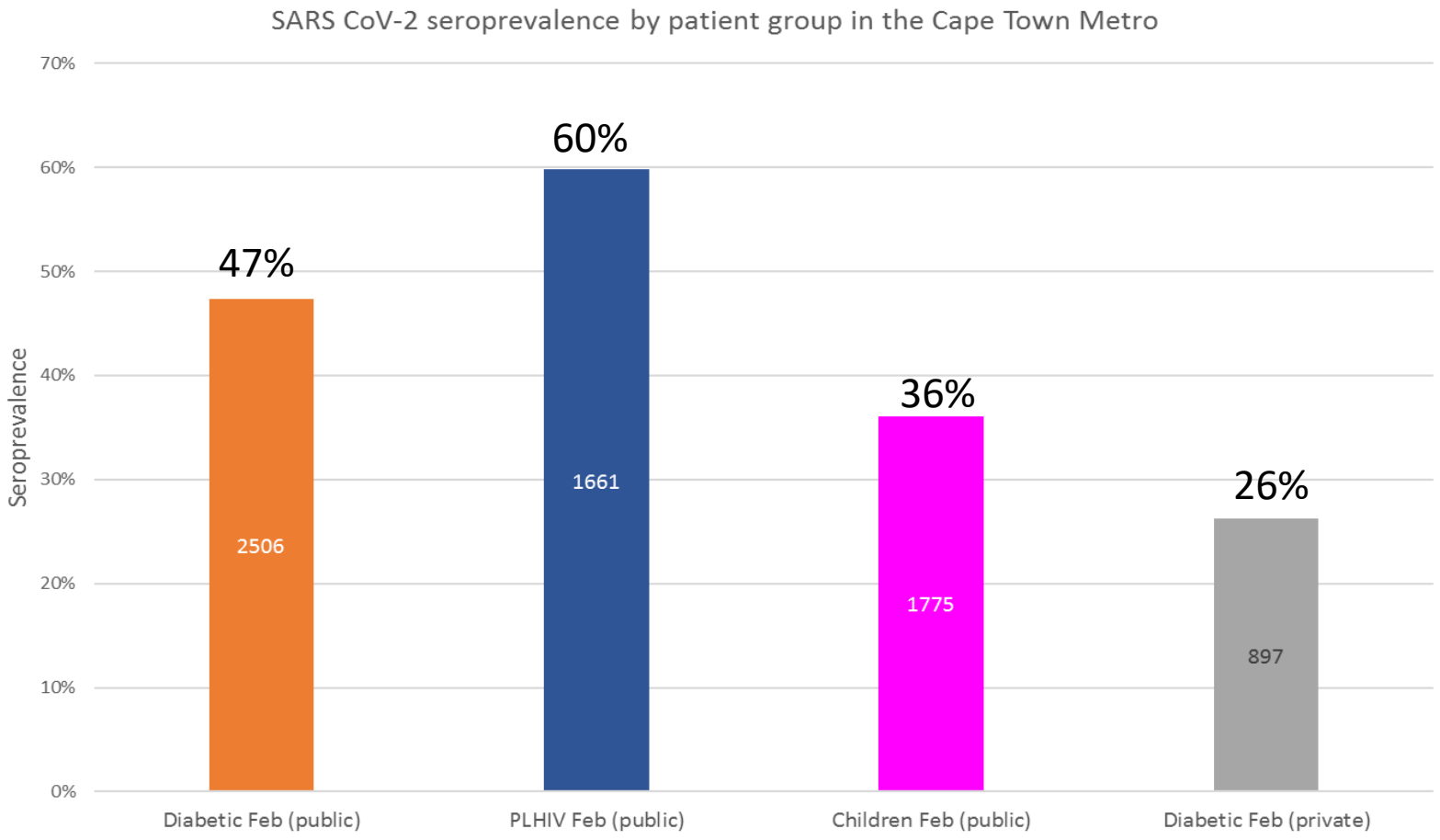


Public sector diabetics comparing with previous results



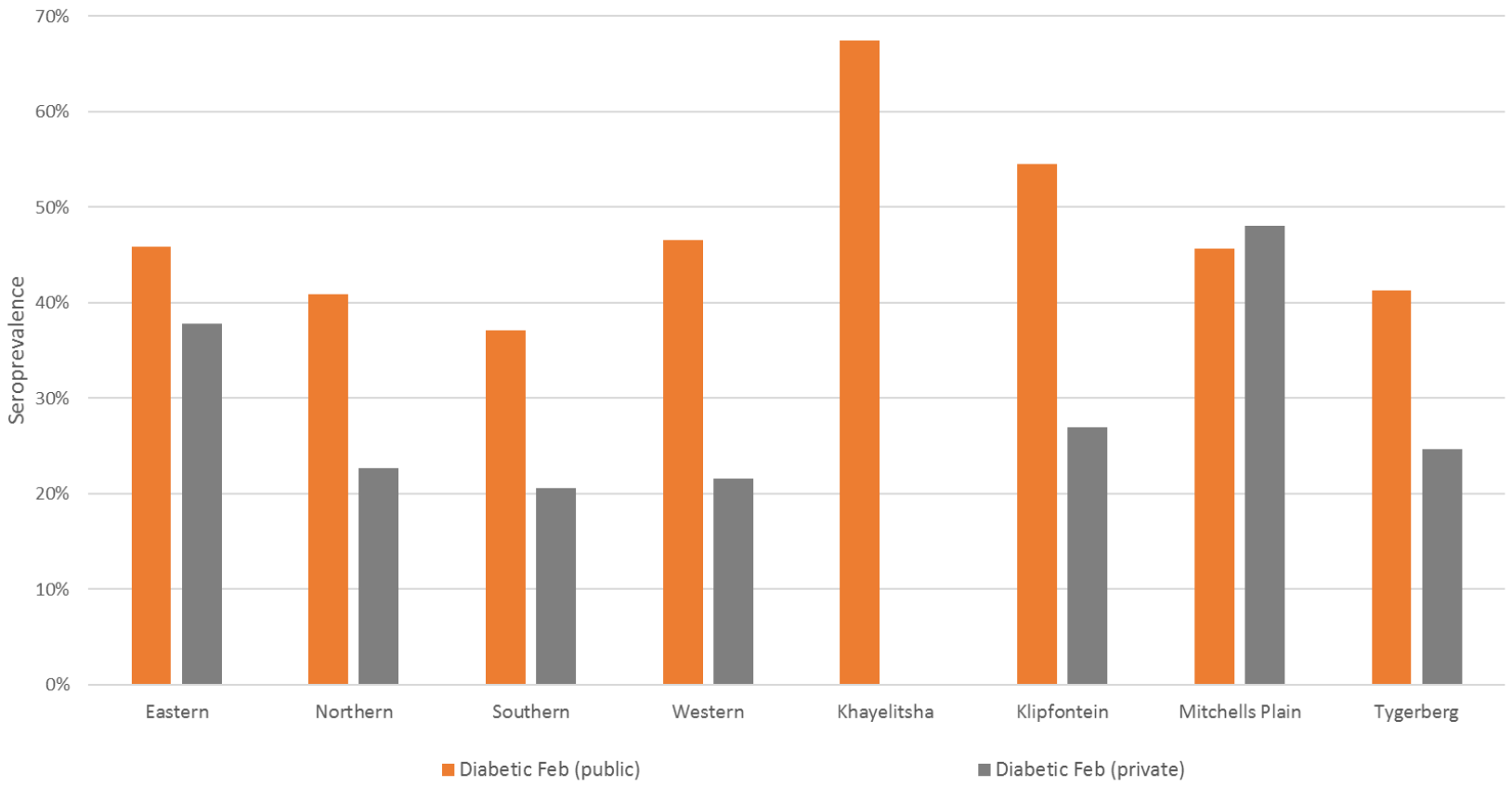
Seroprevalence in February ranged from 33% in West Coast to 47% in Cape Town Metro

Metro: different patient groups – February 2021



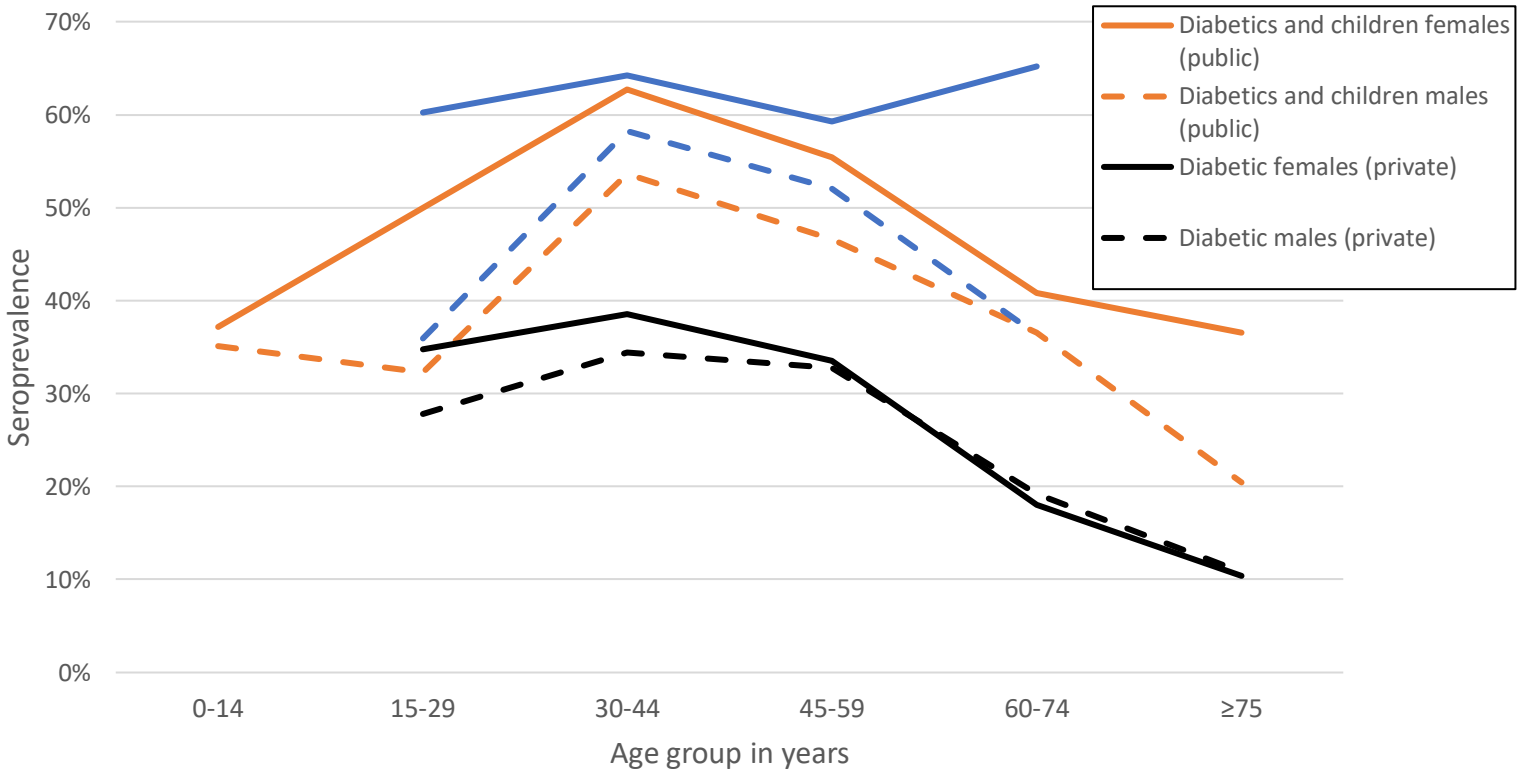
- Metro public sector seroprevalence higher in PLHIV (60%; range across subdistricts 54-70%) vs. diabetics (47%; range across subdistricts 37-68%)
- In diabetics seroprevalence increased in 2nd wave by ~20% in all subdistricts, even subdistricts that had >40% seroprevalence at end of wave 1
- Lower seroprevalence in children in public sector (36%)
- Lowest seroprevalence in private sector diabetics (26%; range across subdistricts 21-48%)

Proportion SARS-CoV-2 antibody positive by Metro subdistrict (Public and private sector diabetics Feb 2021)



Note: No private sector specimens from Khayelitsha

Proportion SARS-CoV-2 antibody positive by age for different patient groups (Cape Town Metro; Feb 2021)



- Seroprevalence highest in 30-44 year old group; decreases with increasing age (supports vaccinating elderly)
- In public sector – seroprevalence consistently higher in females vs. males

In summary:

- Substantial variation in community-level susceptibility to resurgence; affluent & rural communities may remain particularly vulnerable.
- Very few areas/groups had estimated seroprevalence approaching “putative herd immunity threshold” of approximately 65-70% →most areas are susceptible to at least minor resurgences.

Summary of implications for the 3rd wave preparedness

1. **High sero-prevalence** may provide **a measure of protection** against a significant impact in the 3rd wave, but we **should still plan for appropriate mitigation**.

2. **Low sero-prevalence** indicates **a risk of potentially a more severe impact** in the 3rd wave, and this should be taken into consideration **in planning mitigation for these areas**.

3. Overall, we should plan for **additional mitigation in rural districts** (especially West Coast and Overberg), and with the **private sector in general**.

4. Access to **beds with oxygen supply**, and specifically **access to high-flow nasal oxygen**, will be a **key focus for the 3rd wave**.

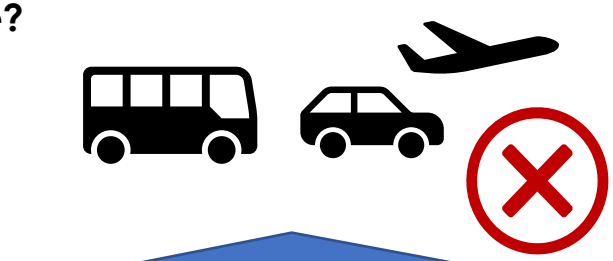
Western Cape Government
Health

Recommendations for the holiday period

1. **Numerous public holidays** coming up where people travel for religious and family **gatherings.**

2. **These gatherings pose a high risk of being super-spreader events, with infected people travelling back to different parts of the country, which could easily lead to a 3rd wave.**

3. **What can we do to prevent the holiday period causing a 3rd wave?**
   - Avoid unnecessary inter-provincial travel
   - Avoid gatherings:
     - Especially with lots of people from different places
     - Especially older people or with comorbidities
   - If you must gather:
     - Keep it small (more people = more risk)
     - Keep it short (longer = more risk)
     - Keep it outside (indoor = more risk)
     - Keep it quiet and don't sing
   - Social distance, ventilate, mask up and hand hygiene if must travel or gather



Messages for the holiday season: making safer choices

Western Cape Government
Health

The health platform COVID response

Western Cape Government

Acute service platform – general comments

1. Currently **880 COVID patients** in our acute hospitals (**544** in **public** hospitals & **336** in **private** hospitals). This **excludes PUIs** and **cases in specialised hospital** settings.
2. COVID **hospitalisations** have continued **to decline;** there has however been an increase in **trauma cases**
3. The **Metro hospitals** have an average **occupancy rate** of **86%; George** drainage area hospitals at **64%; Paarl** drainage area hospitals at **72%** & **Worcester** drainage area hospitals at **70%.**
4. Occupancies in COVID beds show **Metro** hospitals at **15%; George** drainage area hospitals at **16%**; **Paarl** drainage area hospitals at **21%**; **Worcester** drainage area hospitals at **23%.**
5. **COVID & PUI cases** currently make up **7%** of all available acute general hospital capacity in both Metro and Rural Regional Hospital drainage areas.
6. **COVID inter-mediate care** – the **Brackengate Hospital of Hope** currently has **27** patients (3 274 cumulative patients), **Freesia & Ward 99** has **4 patients**, **Mitchell Plain Hospital of Hope** has **41 patients** and **Sonstraal** currently has **1 patient.**
7. The Metro **mass fatality centre** has capacity for **240 bodies;** currently **3 decedents (cumulative total of 1377 bodies)** admitted. The overall capacity has been successfully managed across the province.

Western Cape Government
Health

Acute Care Availability & Utilisation per Drainage Area

WCDOH: Daily Operational Bed Status Dashboard as at 24/03/2021

Drainage Area	Operational Beds	Filled Beds	BUR %	COVID BUR %	% Covid patients	BUR % for Designated Covid Beds(General	BUR % for Designated Covid Beds(Critical
Cape Town /Metro	5 041	4 316	86%	15%	6%	15%	13%
George	918	589	64%	16%	8%	16%	13%
Paarl	940	674	72%	21%	8%	20%	50%
Worcester	781	543	70%	23%	15%	21%	37%
SubTotal WCDOH	7 680	6 122	80%	17%	7%	16%	20%

Excluding Specialised Hospitals e.g. Mowbray Maternity,Psychiatric Hospitals, etc

Operational Bed = an inpatient bed available for inpatient use that is staffed and equipped.

Western Cape Government
Health

Oxygen utilisation – general comments

1. The **combined public-private** utilisation is now **25.55 tons/day or 36.5 % of the maximal production capacity** (**70 tons/day)** at the Afrox Western Cape plant.
2. The public sector **total bulk oxygen** consumption has reduced to **15.13 tons/day (21.44% of capacity)**, compared to **51 tons/day** in the first week of January.
3. The Western Cape still has **4 bulk oxygen tankers** allocated for the daily delivery of oxygen supplies during the week.
4. We have started to **address some of the capacity challenges** at facility level, as identified during the 2nd wave, in preparation for the 3rd wave.
5. We will **continue to monitor the utilisation of oxygen** over the coming weeks, but **the situation** has completely **stabilised**.

Western Cape Government
Health

Safe-guarding the well-being of health care workers and the health services

Western Cape Government

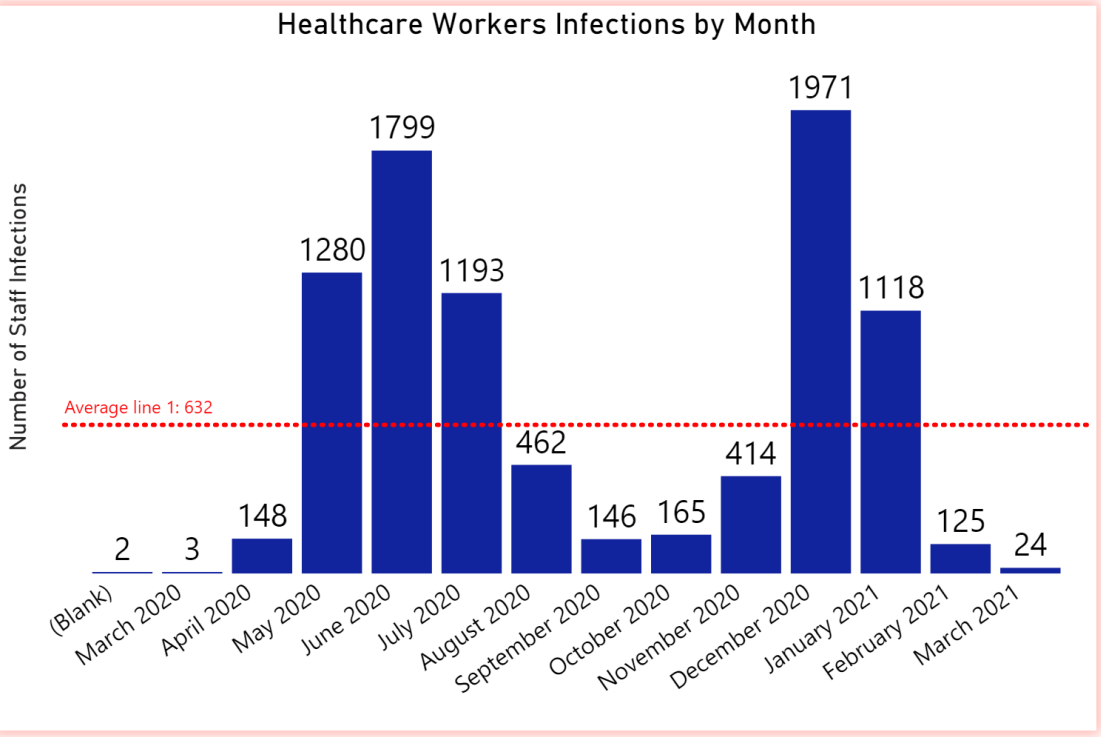
Western Cape Government
Health

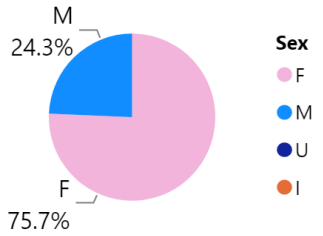
DEPARTMENTAL OVERVIEW
HEALTHCARE WORKERS INFECTED WITH COVID-19

Totals as at 25 Mar 2021

Cumulative Infections		RECOVERED		R.I.P		Active Cases
8,851	-	8,708	-	123	=	20

Doctors	804
Nurses	3,975
Radiographers	109
Pharmacists	83
Other Categories	3,880





DEPARTMENTAL OVERVIEW
HEALTHCARE WORKERS INFECTED WITH COVID-19 -DAILY TRENDS

Totals as at 25 Mar 2021

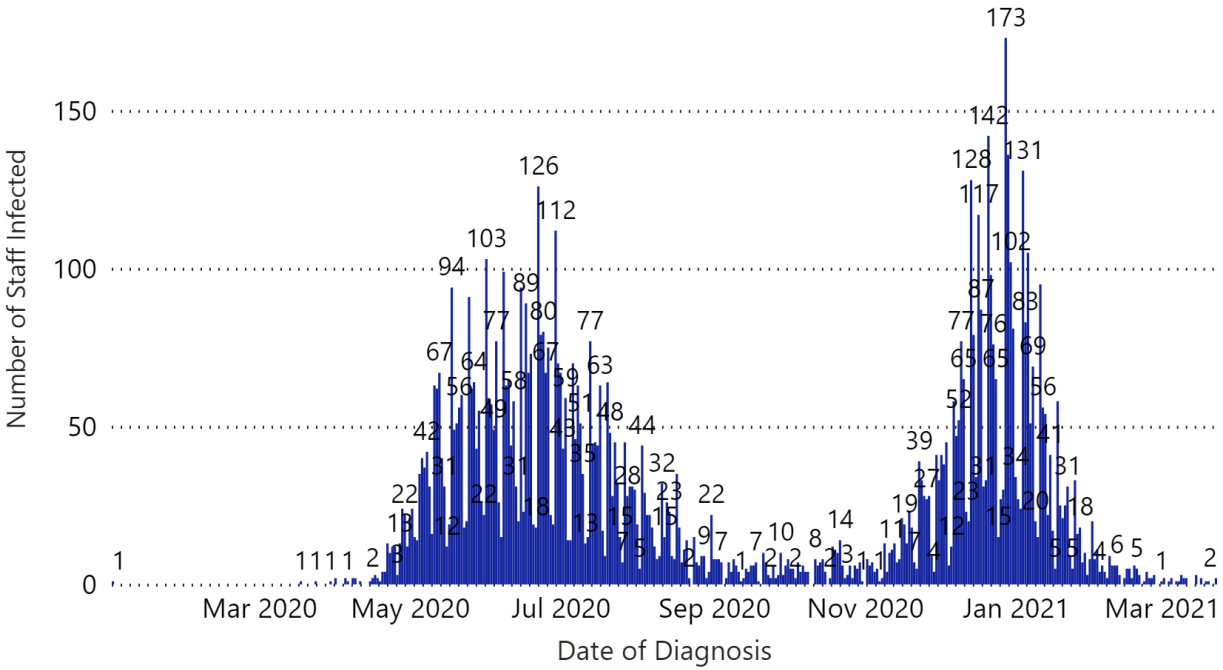
Cumulative Infections

8,851 - 8,708 - 123 =

Active Cases

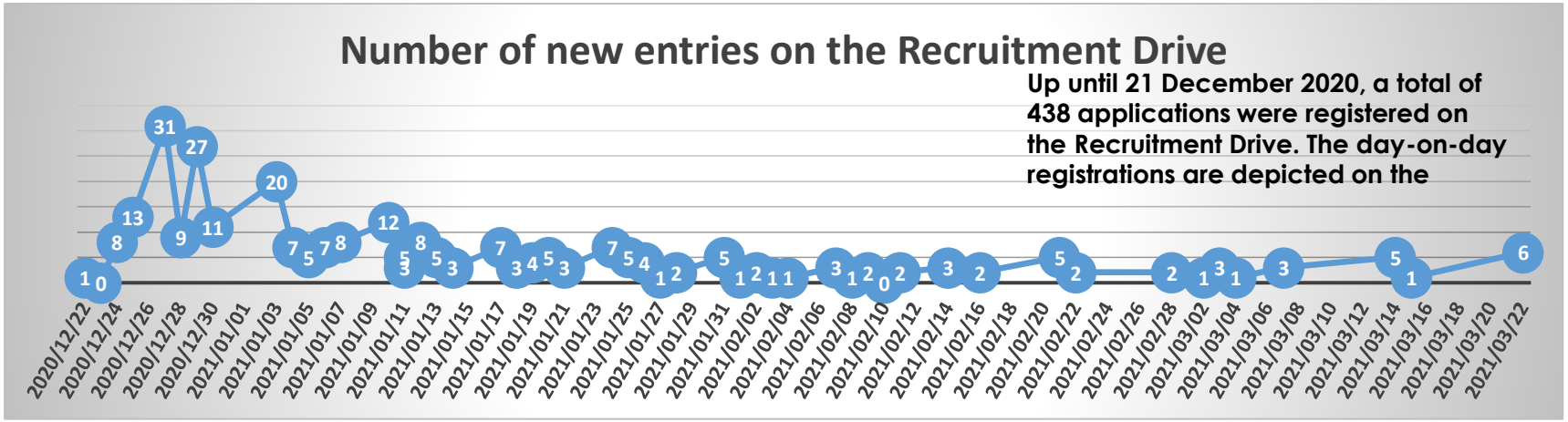
20

Daily Staff Infection Trends



Doctors	4
Nurses	4
Radiographers	(Blank)
Pharmacists	1
Other Categories	11

High Level Summary on Recruitment Drive



Category of HCW	Possibly Available	Appointed on PERSAL
MO	157	26
Enrolled Nurse(EN)	96	20
Enrolled Nursing Auxiliary (ENA)	111	24
Not Indicated	33	7
Professional Nurse	130	61
Professional Nurse with Specialty	41	8
	568	146

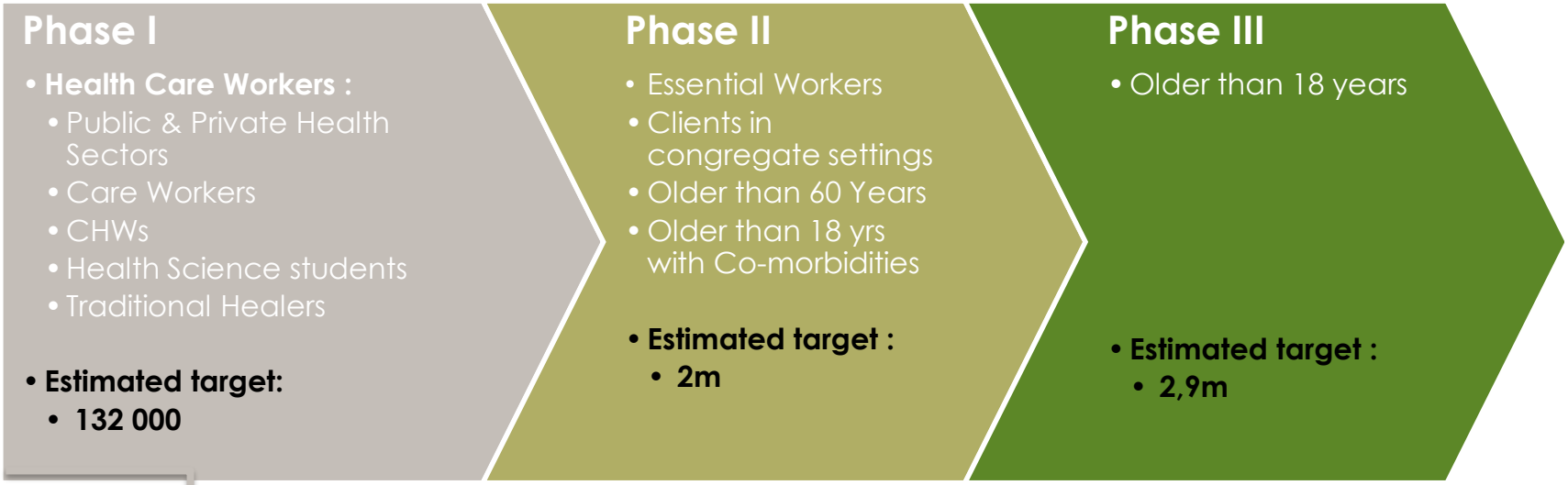
Institutions have made 31 Offers to the following categories of staff:

OSD-Category Rank	Filled	Reserved Posts	Grand Total
Allied Health	24	2	26
Doctors	77	1	78
Nursing	852	27	879
Pharmacists	5		5
Pharmacists-Assistant	10		10
Social Workers	5		5
Admin and Related	155	1	156
Grand Total	1128	31	1159

There are currently 1128 filled posts across the platform for additional COVID posts, 31 offers are pending finalization which will bring the total to 1159. Of the 714 Recruitment Drive applicants, 146 has thus far been appointed on PERSAL. The balance of which 568 are possibly available for appointment.

Vaccine Roll-out Update

Vaccine update: Phases and Prioritisation Groups



- It is anticipated that we will be able to cover **50% of health care workers** with the **limited doses** being received via the Sisonke Programme. We support equitable access to staff from across the service platform, **from acute hospitals to EMS and PHC (incl. CHWs) both within WCGH and CoCT.**
- We are preparing to **scale up vaccination during April** to **complete Phase 1 (the remaining 50% of health care workers)**, with expected delivery of **sufficient Pfizer doses**.

Western Cape Government
Health

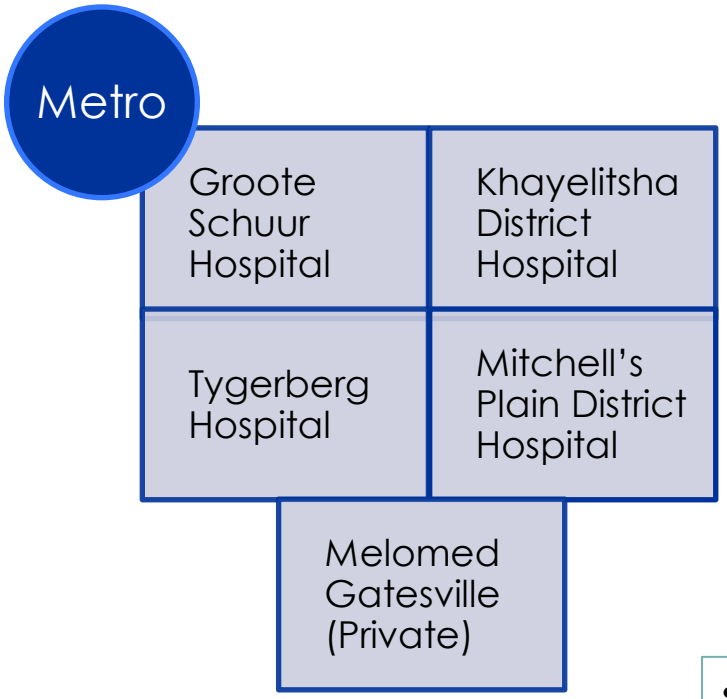
Vaccine Update: J&J Sisonke Programme

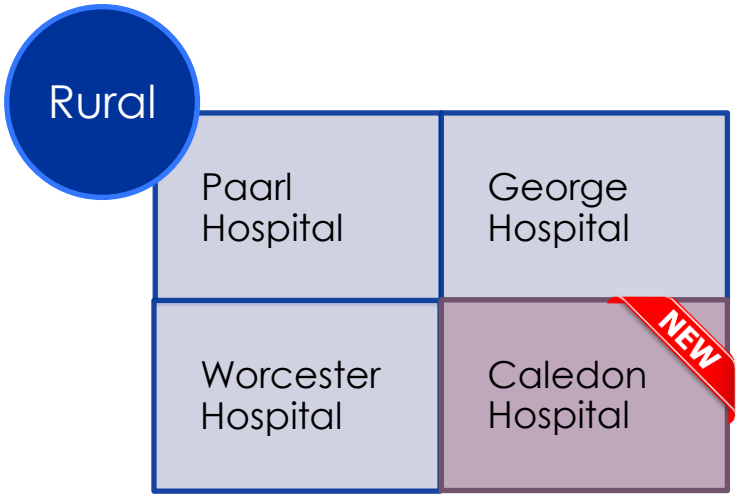
1. Since the launch of the **J&J Sisonke Programme** took place on 17 February 2021 at Khayelitsha District Hospital, the province is currently in the process of implementing its **third tranche** of the vaccines.

2. Each vaccine tranche covers a 2-week period. Thus far the province has received 3 Tranches:

3. The total number of doses received thus far: **44 308**
4. As at **24 March 2021**, a total of **36 098** health care workers have been vaccinated in the province (public and private sectors).

Vaccine Update: Sites

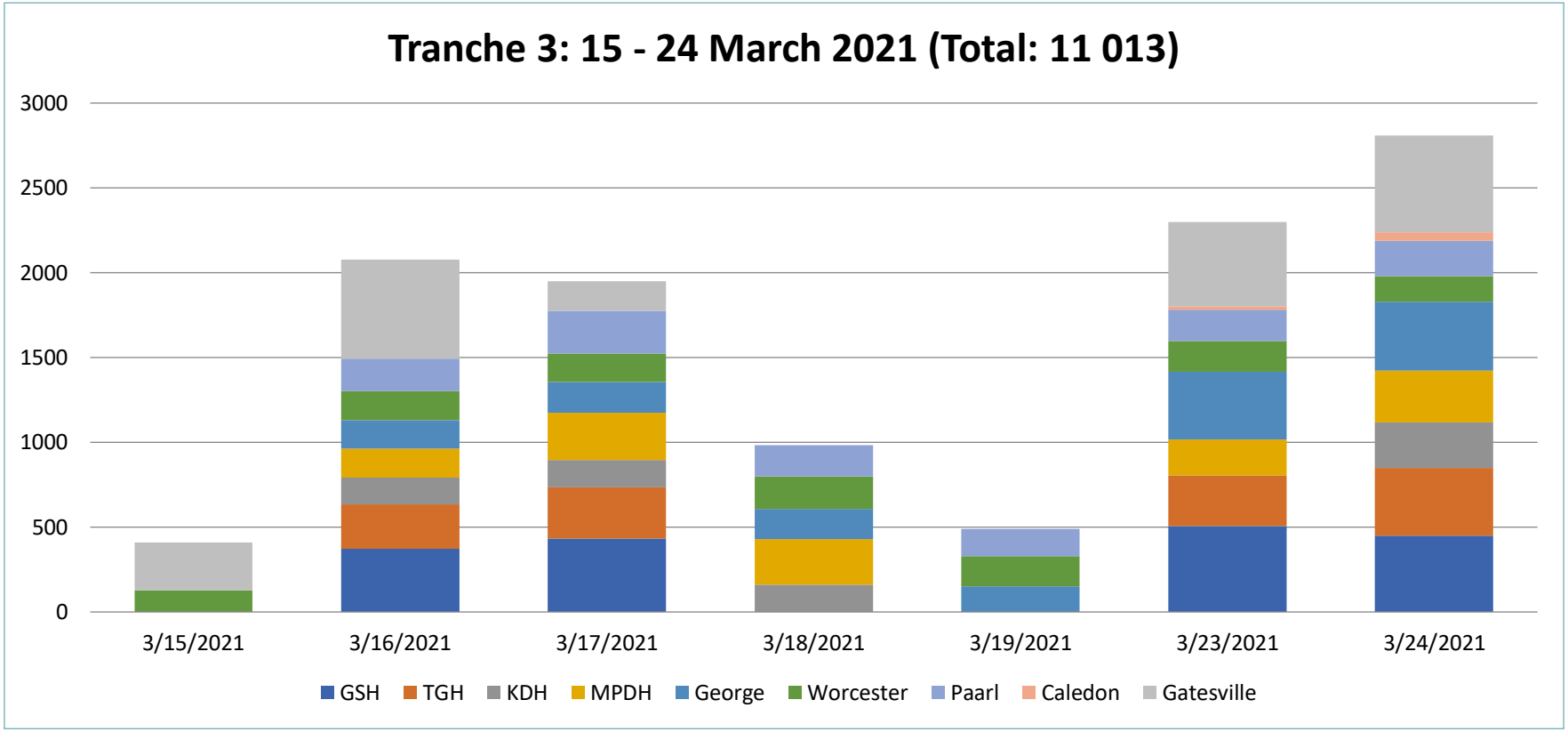




- Vaccination sites in **rural districts** service both the public and private sectors.
- In the **Metro**, Melomed Gatesville services the private sector and the public sector vaccination sites service the public sector.

Western Cape Government
Health

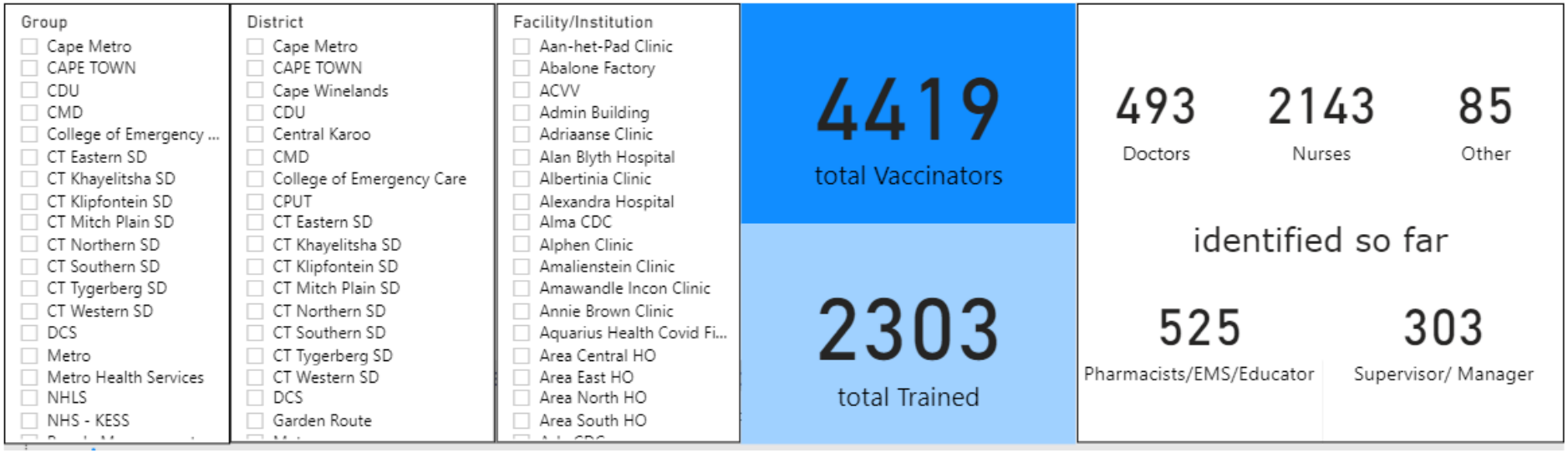
Vaccine Update: Current Tranche (15 - 28 March 2021)



Highest daily output achieved on 24 March 2021 – 2 808 vaccinations administered

Western Cape Government
Health

Vaccinator Database (as at 25 March 2021)



Western Cape Government
Health

Phase 2 preparation – targeted to start in May 2021

Western Cape Government

Global and Local Lessons Learned

Key Global Lessons:

- High-level leadership & commitment
- Information Systems: Scheduling / Appointments, Monitoring, Reporting
- Effective Communications and Citizen Engagement to obtain buy-in and trust
- Patient centred, highly organised and efficient logistics

Key Lessons from Phase 1

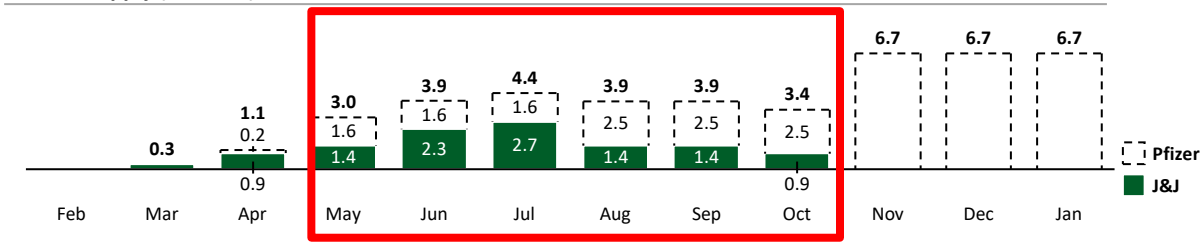
- Vaccination Site Setup
- Vaccinator Training and Training Updates
- Information Systems
- Registration and Appointment Scheduling
- People Behaviour
- Vaccine Logistics
- Governance
- Stakeholder Interaction

National Supply Pipeline - Accelerating the delivery of the J&J vaccines and securing the Pfizer vaccines could save >48k lives and relieve pressure on the healthcare system

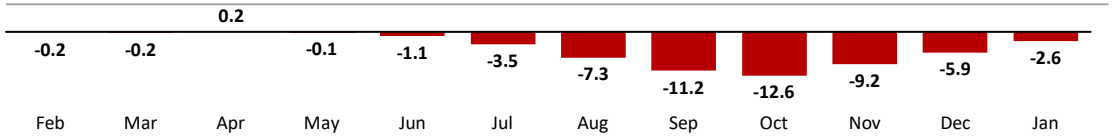
Supply demand balance (with accelerated J&J supply and Pfizer supply starting in Q2)

Accelerated Delivery of Q3 and Q4 J&J doses

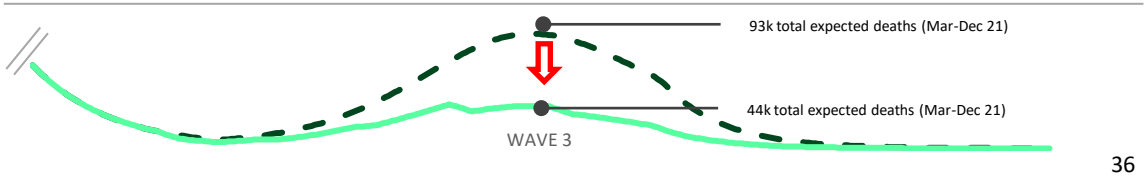
Vaccine Supply (m doses)



Rolling vaccine supply / demand balance in # individuals[1]



Incremental deaths expected



Key insights

- Accelerating the delivery of J&J vaccines from Q3 to Q2 and assuming Pfizer doses are also secured from Q2 onwards, the supply deficit required by winter could drop to 3.5m
- This will have a significant impact on the third wave
  - Up to 40,000 lives saved
  - Up to 200,000 fewer hospitalisations[1]
  - More than R8b savings in healthcare costs[2]

1 Based on best available data, ~12% of tested positive in high risk population will require hospitalisation, death rate of ~15-18% among the hospitalised
2 Assuming average ~10 days stay per case, at an average cost of ~R4,000 based on a case mix between general ward and ICU in private/public hospitals

Vaccine options in SA – SAHPRA approvals

AstraZeneca

VACCINES WITH PHASE 3 RESULTS

Product	Type	Doses Interval	Cold Chain	Vaccinated sample	Efficacy – Mild illness	Efficacy – Hospital	Efficacy – Death	Price	Production	SRA WHO EU	Comments
Pfizer	nRMA	2 21 days	-60 to -80	15,000 USA	94.1%	100%	100%	$6.5 – $19.5	1.89B	USA Canada UK EU Swiss Australia WHO	Ultra cold chain
moderna	mRNA	2 28 days	-15 to -25	18,600 USA	95%	97%	100%	$10-$37	822M	USA Canada UK EU Swiss	High cold chain
AstraZeneca	VVV Simian	2 4-12 weeks	2 to 8	8,588 UK RSA Brazil	70% overall	100%	100%	$3-$5.5	3.09B	Canada UK EU Australia WHO	
Johnson-Johnson	VVV Human	1 NA	2 to 8	22,000 USA RSA South America	72% USA 64% RSA 61% South America	100%	100%	$10 (single dose vaccine)	1.4B (single dose vaccine)	USA Canada EU WHO	

Pfizer and J&J - approvals granted by SAHPRA

Covishield - approval granted, but roll-out put on hold

Moderna – no submission made to SAHPRA yet, and is not imminent before 3rd quarter

Vaccine options in SA – SAHPRA approvals

BHARAT BIOTECH
AstraZeneca

Product	Type	Doses Interval	Cold Chain	Vaccinated sample	Efficacy – Mild illness	Efficacy – Hospital	Efficacy – Death	Price	Production	SRA WHO EU	Comments
NOVAVAX	PSU	2 21 days	2 to 8	8,833 UK SA	96.4% UK 55% RSA	100%	100%	$3- $16	937M		
Sputnik V	VVV Simian	2 21 days	2 to 8	14,964	91.6%	100%	100%	$9.5	394M		
SINOPHARM	IWV	2 28 days	2 to 8	Undisclosed sample size Middle East South America Pakistan	79-86% Announced, unpublished	100%	100%	$19.5- $40	187M		
sinovac 北京科兴	IWV	2 28 days	2 to 8	12,500 Brazil Indonesia Turkey	50.4% Brazil 65% Indonesia 86% Turkey Announced, unpublished	100%	100%	$20- $40	323M		
BHARAT BIOTECH	IWV	2 28 days	2 to 8	12,900 India	81% Press release	100%	100%	$1.5- $3	700M		28 days open vial reducing waste by 10-30%

Sputnik, Sinovac & Sinopharm – submitted applications to SAHPRA, approvals not imminent
Novavax & Bharat Biotech – no applications submitted to SAHPRA yet

Western Cape vaccine acquisition - Update

1. **Process followed by acquisition team**:
    a) Standard SCM process followed for all unsolicited bids
    b) 28 individuals/entities contacted to follow-up on specific details
    c) Each submission will be evaluated accordingly, with due diligence
2. **Approaches to suppliers/ manufacturers**:
    a) J&J – replied that they will supply to NDoH at this stage
    b) Pfizer - replied that they will supply to NDoH at this stage
3. **Next steps**:
    a) Continue with targeted RFI process, with view to acquire by August 2021
    b) Specific follow-up with foreign governments should be explored by DoTP
    c) Engage with private sector through the existing WCG Public-Private platforms
    d) Document the liability and no-fault provisions likely, and assess options for WCG in this regard

Potential SA portfolio of COVID-19 vaccination sites

50/50 sharing between public and private sector

NATIONAL TARGET

250 000 – 300 000
vaccinations per day

Provincial Target
30 000-36 000
Vaccinations per day

Small sites

~90 Vaccinations / day x **~1 200** Small sites = **~110 000** Vaccinations / day


Pharmacies


Community clinics

GP practices

Medium sites

~300 Vaccinations / day x **~500** Medium sites = **~150 000** Vaccinations / day


Hospitals


Medical centres


Select retail locations

Mass Vaccination sites

~1 000 Vaccinations / day x **~47** L / XL / XXL sites = **~55 000** Vaccinations / day


Gyms


Hotels / retail spaces


Conference centers / stadiums

Western Cape Government

Phase 2 modelling of clients, vaccinators and duration

VACCINATORS REQUIRED FOR PHASE 1	METRO DISTRICT				RURAL DISTRICTS					PROVINCE
	KMSS	KESS	NTSS	SWSS	Cape Winelands	Central Karoo	Garden Route	Overberg	West Coast	
No. of HCW to vaccinate	These figures are being updated based on the revised total number of health workers									131 264
No. of vaccinator days (50 vaccines/day)										2 626
NO. OF VACCINATORS REQUIRED IF 1 WEEK										376

VACCINATORS REQUIRED FOR PHASE 2	METRO DISTRICT				RURAL DISTRICTS					PROVINCE
	KMSS	KESS	NTSS	SWSS	Cape Winelands	Central Karoo	Garden Route	Overberg	West Coast	
Population over 60 years	93 576	85 919	141 557	157 047	84 818	9 614	80 213	31 820	38 602	723 166
Population 18-59 years with comorbidities	194 401	243 215	215 953	208 958	164 855	9 314	91 416	47 150	6 5821	1 241 084
Number of essential workers/congregate settings	18 432	21 263	21 743	23 106	17 169	1 160	10 398	5 328	8 401	127 000
Total number to vaccinate	306 409	350 397	379 253	389 111	266 842	20 088	182 027	84 298	112 824	2 091 250
No. of vaccinator days (50 vaccines/day)	6 128	7 008	7 585	7 782	5 337	402	3 641	1 686	2 256	41 825
3 OPTIONS BASED ON 4/8/12 WEEK PHASE 2 DURATION										
1 NO. OF VACCINATORS REQUIRED IF 4 WKS	219	250	271	278	191	14	130	60	81	1 494
2 NO. OF VACCINATORS REQUIRED IF 8 WKS	109	125	135	139	95	7	65	30	40	747
3 NO. OF VACCINATORS REQUIRED IF 12 WKS	73	83	90	93	64	5	43	20	27	498

Need to do 30 000/day to cover phase 2 in 3/12.

Western Cape Government

Vaccine Site Calculator

	XXL Site	XL Site	L site	M site	S Site	Outreach team
Assumptions						
Expected vaccinations /day	2 000	750	500	300	100	50
Number of operating days	20	20	20	20	20	12
Number of vaccinations /vaccinator /day	50	50	50	50	30	20
Vaccinators required per site per day	40	15	10	6	3	2.5

Projected							**Total**
Number of Sites	4	4	4	4	20	12	
Vaccinators /day	160	60	40	24	67	30	381
Vaccinations /day	8 000	3 000	2 000	1 200	2 000	600	16 800
Vaccinations / month	160 000	60 000	40 000	24 000	40 000	7 200	331 200

Vaccine Site Planning: Ensuring an Optimal Mix

The choice of **vaccination site model** depends on the population distribution, priority groups and projected efficiency.

An **optimal mix** of sites should be selected.

1. **Large**: Mass vaccination site (Propose 4-8 Metro+ 4 Rural)

2. **Medium**: Hospitals, CHCs

3. **Small**: Outreach team, pharmacies, small PHCs

Provincial **Infrastructure Database** of WCG and CoCT facilities is available to inform decision-making and site selection.

Conclusions

Western Cape Government

Concluding remarks

1. Our current situation is one of having **navigated and exited a 2nd wave** with a **clear and consistent** decline in **cases, hospitalisation and deaths**.
2. We move into **heightened surveillance vigilance** and urge everyone to **adhere to protective behaviours to reduce new cases** – while in Level 1, especially over the **coming holiday period**, to avert **an early 3rd wave**.
3. We have to **reflect on our experience over the 1st and 2nd wave** to **learn and to improve** our response for the **coming 12 months**.
4. We require a concerted **whole of government** and **whole of society response** to **mitigate the impact** of the **3rd wave**.
5. We have to **significantly scale up** the **implementation of vaccines over the coming months** as the **key drive against COVID** over the coming months.

Thank you

Western Cape Government