

South Africa's COVID-19 Public Health Response

Presented to: WHO COVID-19 Information Session

April 23rd 2020

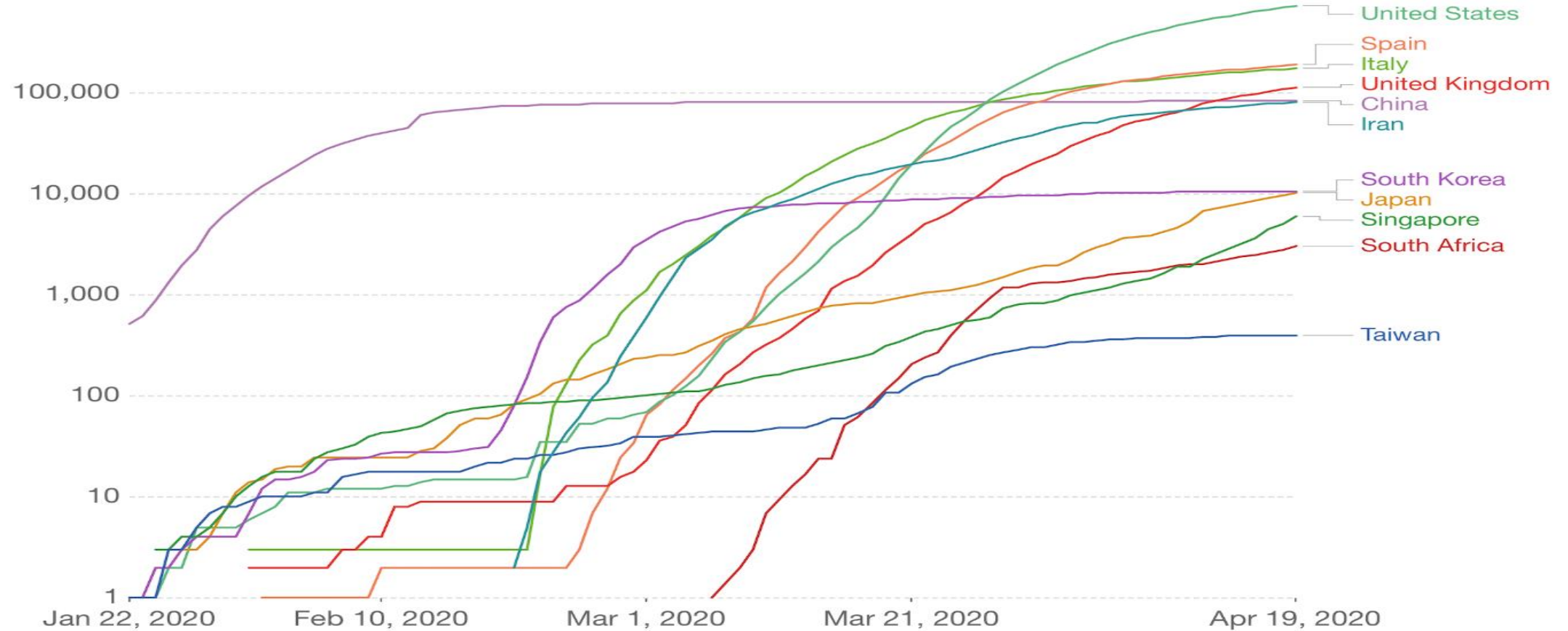
COVID-19: Cumulative Number of Cases – Global Comparison

Through and including the 22nd of April, by number of days since 1st reported case

Confirmed COVID-19 cases

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World
in Data



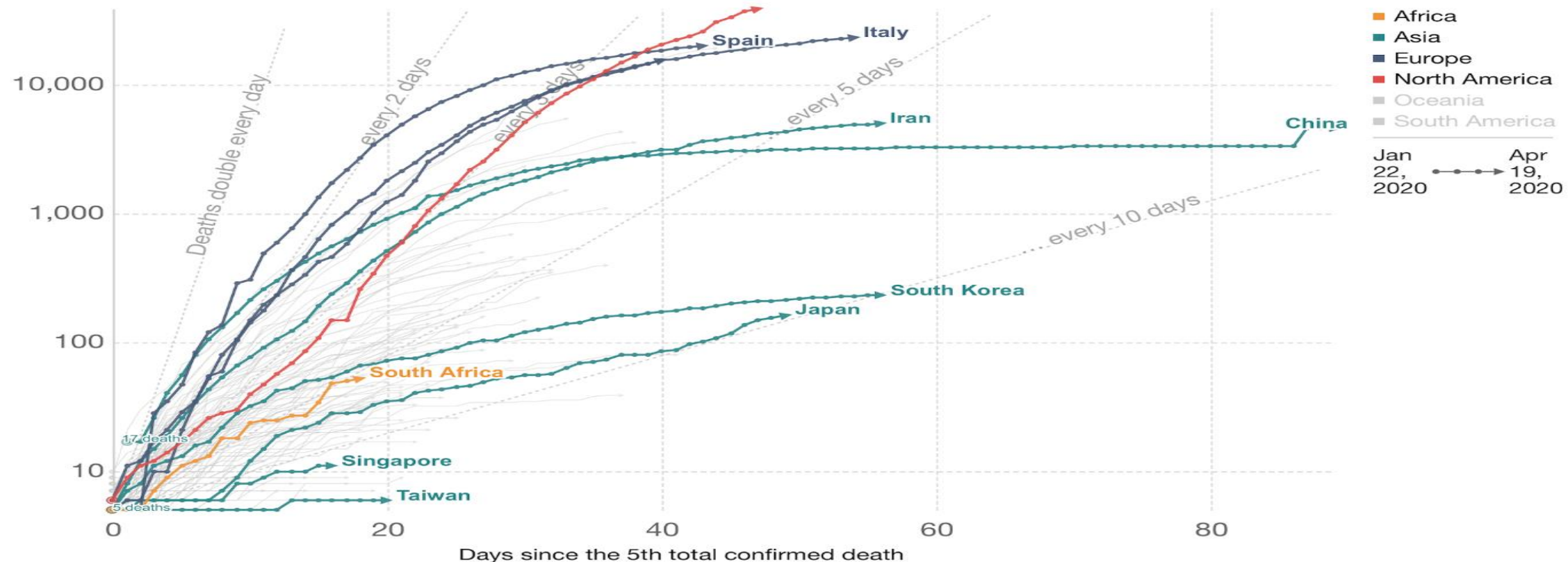
Source: European CDC – Situation Update Worldwide – Last updated 19th April, 11:00 (London time) OurWorldInData.org/coronavirus • CC BY

COVID-19: Cumulative Number of Deaths – Global Comparison

Through and including the 22nd of April, by number of days since 1st reported case

Total confirmed COVID-19 deaths: how rapidly are they increasing?

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: European CDC – Situation Update Worldwide – Last updated 19th April, 11:00 (London time) [OurWorldInData.org/coronavirus](https://www.ourworldindata.org/coronavirus) • CC BY

Breakdown of Cases (22nd April) /Deaths (23rd April) based on Reported and Adjusted Cases

Province	Reported Cases 21 April 2020	Updates Cases Post Harmonisation 21 April 2020	New Cases 22 April 2020	Total Cases 22 April 2020	% Total Cases	Deaths 21 April 2020	Case Fatality Rate
Eastern Cape	345	344	33	37	104%	7	19%
Free State	106	106	0	106	29%	5	47%
Gauteng	1199	1199	25	1 24	337%		07%
KwaZulu Natal	671	714	44	758	209%	25	33%
Limpopo	27	27	0	27	07%	1	37%
Mpumalanga	24	23	0	23	06%	0	00%
North West	24	24	0	24	07%	0	00%
Northern Cape	16	16	0	16	04%	0	00%
Western Cape	1010	1010	69	1079	297%	22	20%
Unknown	43	1	0	1	00%	0	00%
Total	3465	3464	171	3635	100%	65	1.9%

The total cumulative cases reported on 22nd April 2020 is 3 635 reflecting a 4% increase or 171 new cases from 23rd of April 2020

- The majority of new cases are in Western Cape 69/171 (40%)
- The day over day increase in Western Cape continues to remain high and is in line with Western's Capes strategy of focusing and prioritizing hotspots to identify cases
- The national case fatality rate, based on deaths from midnight on 23rd April 2020 is 1.9%, with the total number of deaths as of the 21st April 2020 at 68
- The number of positive cases has increased successively over the past four days: 124, 142, 167 and 171 yesterday.

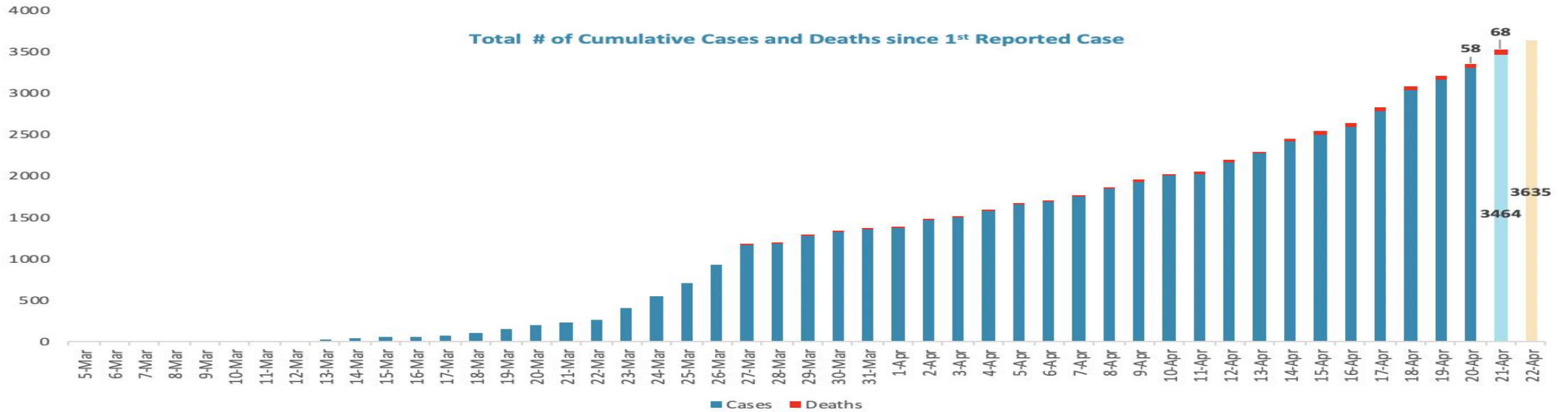
COVID-19 Cases and Deaths since 1st reported case

Through and including **cases** through 22nd of April and **deaths** through 21st of April

Total # of New Cases since 1st Reported Case



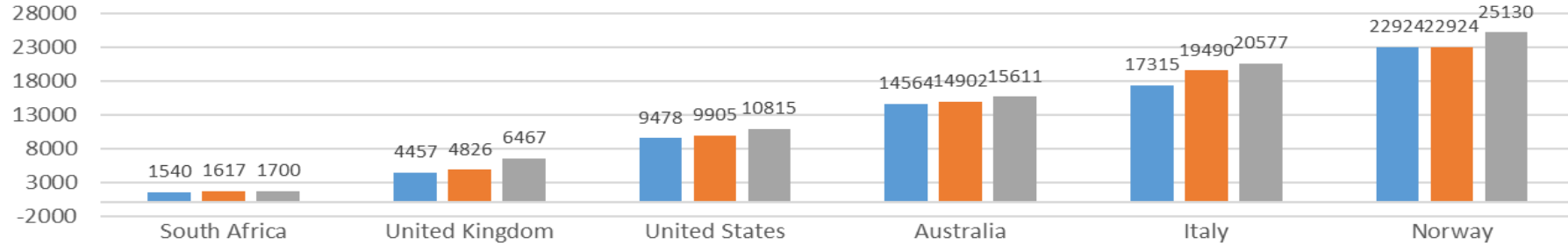
Total # of Cumulative Cases and Deaths since 1st Reported Case



PUBLIC HEALTH INFECTIONS CONTAINMENT

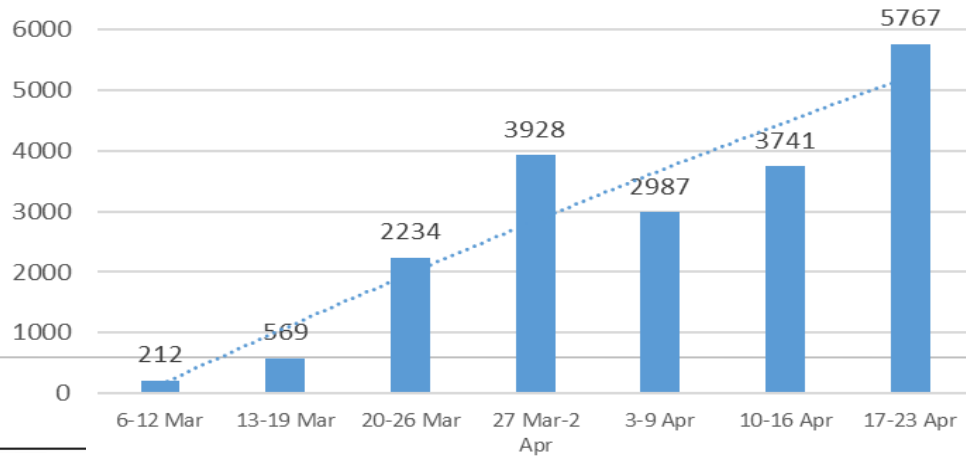
Laboratory Tests

Tests per 1 million population

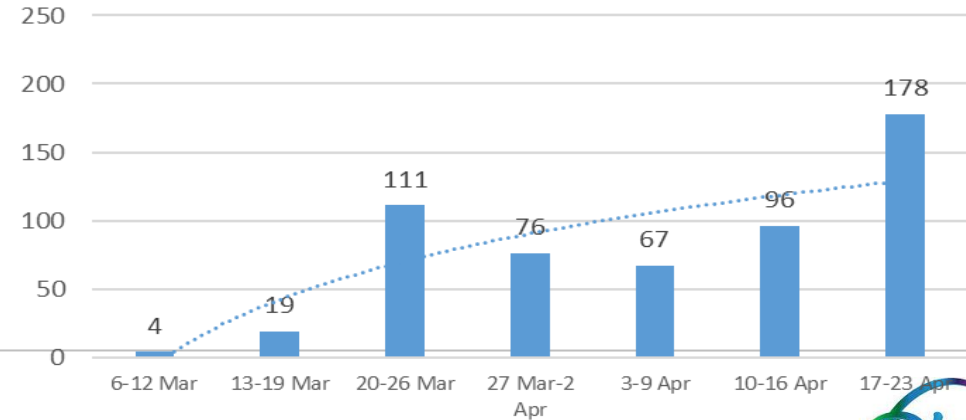


% per million	0,17%	0,65%	1,08%	1,56%	2,05%	2,51%
% Increase per million	5,1 (5,0)	25,4	9,2	4,8	5,6	9,6

Average daily tests per week



Average daily positives per week



COVID-19 Hospitalized Patients (as of April 22nd) by province

Hospitalised Patients	Nation wide
Public	123
Private	133
Total Hospitalised	256
Total Recoveries (Cumm)	1369
Total Deaths (Cumm)	65
Isolation	
Public	107
Private	75
Total isolation	182
High Care	
Public	2
Private	12
Total High Care	14
ICU Beds	
ICU Admissions Public	12
ICU admissions Private	23
Total ICU	35
Ventilators	
Public	9
Private	16
Total Vents	25
On Oxygen	
Public	8

Laboratory Service

Total numbers tested as per midnight 22nd April 2020

All tests

Sector	Total tested		New tested	
	Count	Percentage	Count	Percentage
PRIVATE	85889	64%	3276	48%
PUBLIC	47885	36%	3592	52%
Grand Total	133774		6868	

Community Screen and Test

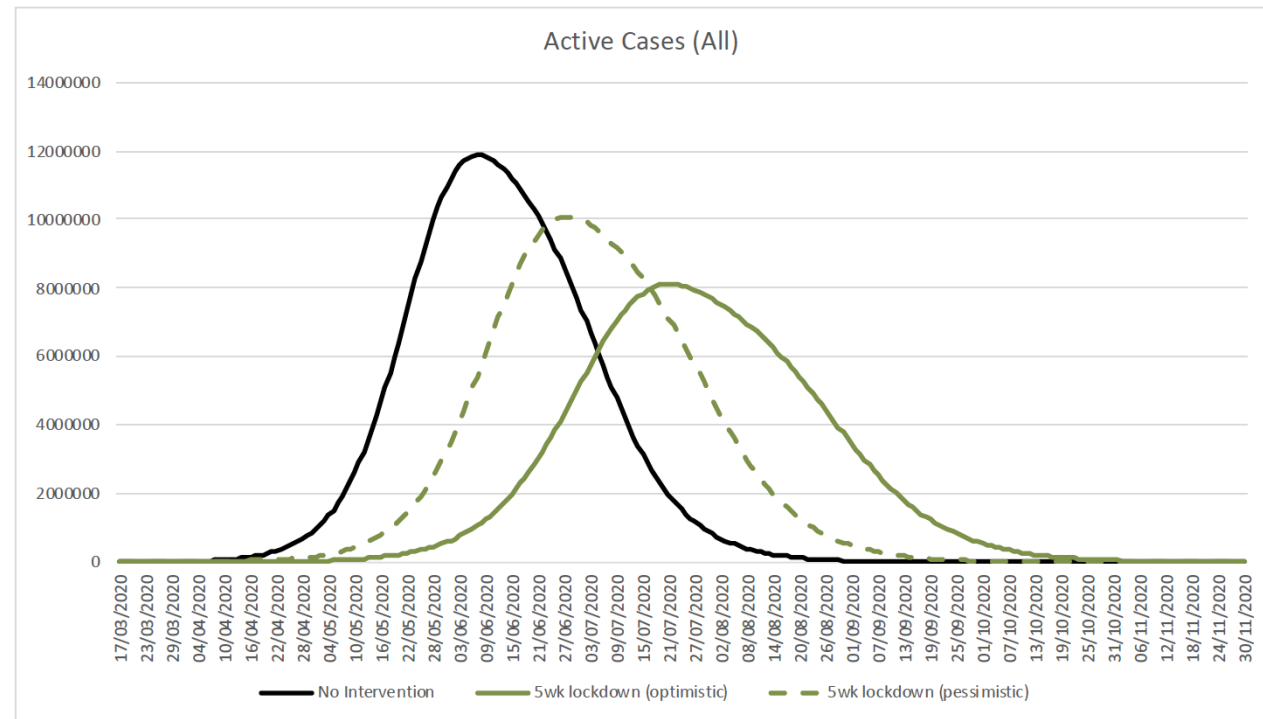
Case-finding method	Total tested		New tested	
	Count	Percentage	Count	Percentage
Community screen and test (CST)	6453	4.8%	1000	14.6%
Passive case-finding	127321	95.2%	5868	85.4%
Grand Total	133774		6868	

- As of 20th April 2020, **2 910 452 individuals have been screened** in the community and **19 604 have been referred** for testing translating to the referral rate of 0.67% nationally.
- A total of 133 774 tests have been conducted as of the 22nd of April 2020.
 - ◆ Of the total number of tests conducted, 6 868 new tests were conducted through referrals from Community Screening and Testing
 - ◆ Community Screening Tests account for 14.6% of new tests performed in the last 24 hours
 - ◆ The number of tests performed in the public sector continues to improve and accounted for 52% of new tests performed in the last 24 hours

Epidemiological Model – Long Term Projections

Long-term Projections: active cases

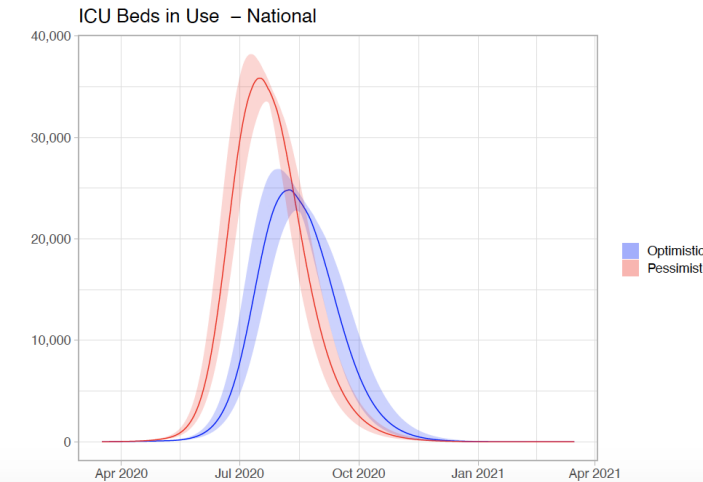
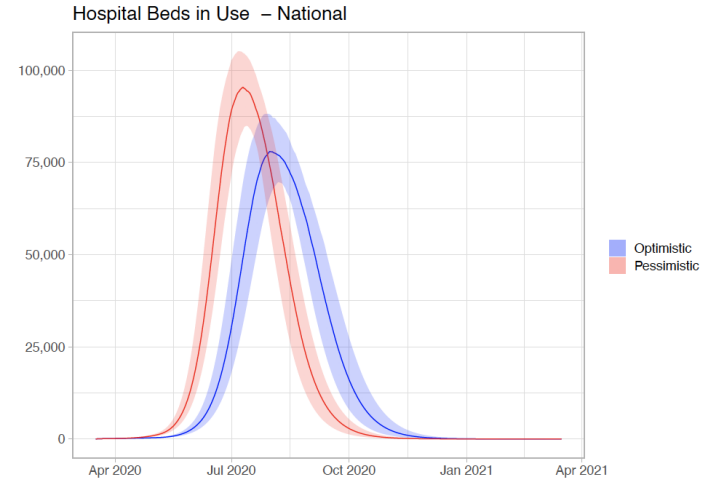
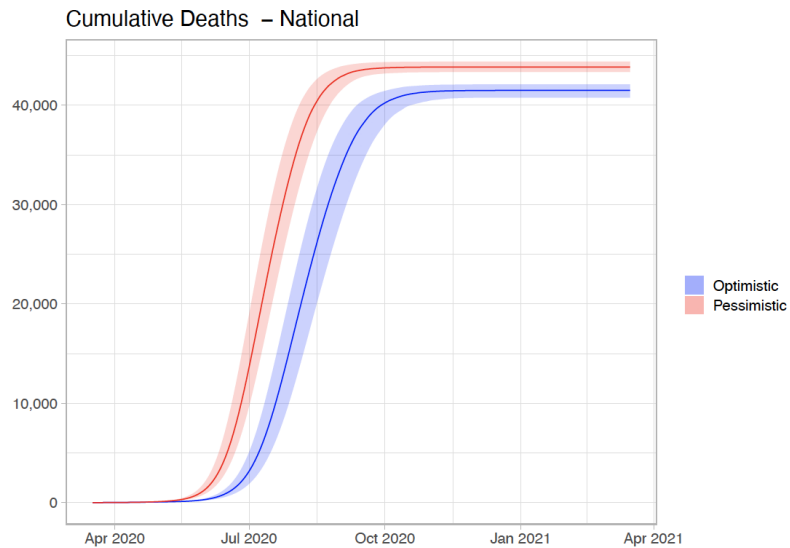
- Greater uncertainty
- Lockdown has flattened the curve and pushed the peak later
- Projections will be updated weekly



Key Assumption: Asymptomatic proportion of cases: **75%**

Epidemiological Model – Long Term Projections

Long term projections



Key Steps in SA interventions

- Preparation (Before First Case)
 - Community Awareness : understanding the outbreak (studying global trends, country responses eg China, S. Korea)
 - Readiness of the health system
- COVID-19 Case
 - case testing and management
 - Hospitalization , isolation / quarantine
- Containment Measures
 - Contact Tracing
 - Case identification
 - Community Screening

Key Steps in SA interventions cont...

- Infrastructure Upgrade
 - Increase testing capacity
 - Personal Protective Equipment
 - Hospital Beds and building field hospitals
- Inter - Sectoral Response
 - Decisions of movements and large gatherings
 - Lockdown
 - Post Lock Down: Phased / Gradual return to normality

Risk-adjusted strategy for economic activity



Risk-adjusted strategy for economic activity

An alert system with levels of restriction

Ongoing feedback loop informs decision to remain at a particular level, relax restrictions further, or return to a higher level of restriction.

Level 1	Low virus spread, high health system readiness
Level 2	Moderate virus spread, with high readiness
Level 3	Moderate virus spread, with moderate readiness
Level 4	Moderate to high virus spread, with low to moderate readiness
Level 5	High virus spread, and/or low readiness

Need Analysis for PPE requirements for the Public Sector for a 6-month supply

	April	May	June	July	August	September	6 months total
Apron	1 466 759	1 468 077	1 487 360	1 583 973	1 583 973	1 583 973	9 174 116
Biohazard bag	2 653 683	2 648 531	2 690 040	2 887 258	2 887 258	2 887 258	16 654 028
Body bag	42	58	252	1 281	5 722	7 355	14 710
Boot Covers	835 021	829 882	841 753	892 345	892 345	892 345	5 183 690
Coverall	70 047	45 975	48 467	48 970	57 128	72 195	342 781
Disinfectant (hospital-level need only)	130 000	130 000	130 000	130 000	130 000	130 000	780 000
Gloves (sterile and non-sterile)	19 935 051	19 629 557	19 886 703	20 701 637	20 701 637	20 701 637	121 556 223
Goggles/Face-Shield/Visor	211 518	213 265	216 407	234 374	234 374	234 374	1 344 312
Gown	3 711 632	3 716 741	3 778 967	4 094 938	4 094 938	4 094 938	23 492 154
Heavy-duty gloves	13 810	14 640	15 102	18 945	18 945	18 945	100 386
Particulate respirator, grade N95	3 340 086	3 319 528	3 367 010	3 569 379	3 569 379	3 569 379	20 734 761
Sanitizer	2 193 973	2 361 698	2 388 354	2 425 699	2 425 699	2 425 699	14 221 122
Scrubs	33 469	34 574	35 512	41 803	41 803	41 803	228 963
Surgical mask (Patient & HCW need con	18 415 649	19 564 482	19 868 263	20 966 540	20 966 540	20 966 540	120 748 013
Thermometer	35 000	-	-	-	-	-	35 000
Ventilator	97	125	209	1 600	8 557	14 536	25 124