

HarryG COVID-19 Dashboard

Cum +Cases		Daily Cases		RSA COVID-19 DASHBOARD	Daily Still in Hospitals	% of Reported Cases who Died (CFR)
1 380 807	11 381	Still Active +Cases	+Cases per mill PoP			
157 523	23 282	672			20831	2,89%
Deaths Age	Avg	Deaths Min Age	Deaths Max Age			% of RSA PoP who have died to date (CMR)
62,1	0,2	105				0,067%
						Deaths Median Age
						62,9

14-Jan
Cum Deaths Daily
39 841 667

Cases Deaths CFR

Female: 57,7% 50,9% 2,22%

Male: 42,3% 49,1% 2,92%

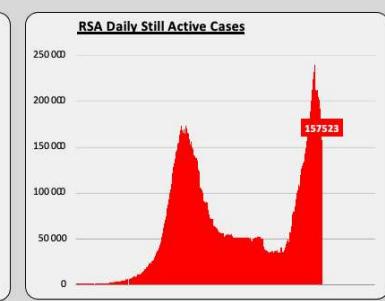
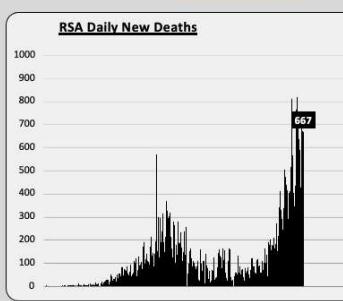
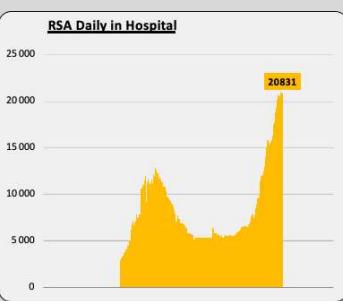
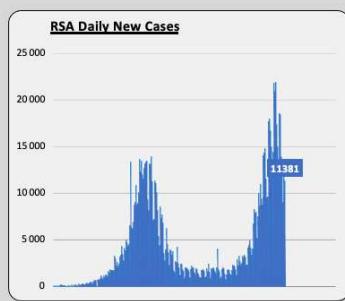
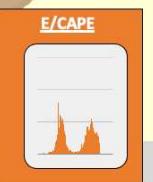
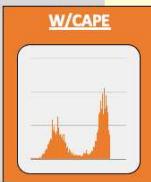
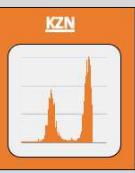
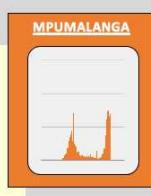
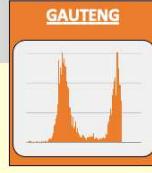
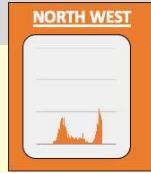
Cum Recoveries	
1 183 443	

Cum Tests	Daily Tests
7 820 613	58 540

Daily Change

Daily Positivity Rate:	19,4%
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Daily Cases



RSA Rt

Prev 2 : .94



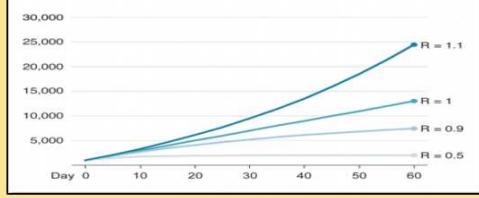
Prev 1 : .87

Latest : .81

Rt numbers rely on regular, recent & quality data inputs. This is not always the case in RSA and hence the Rt numbers below, although accurate, do not reflect the current situation. It is based on various inputs some of which is up to two weeks old.

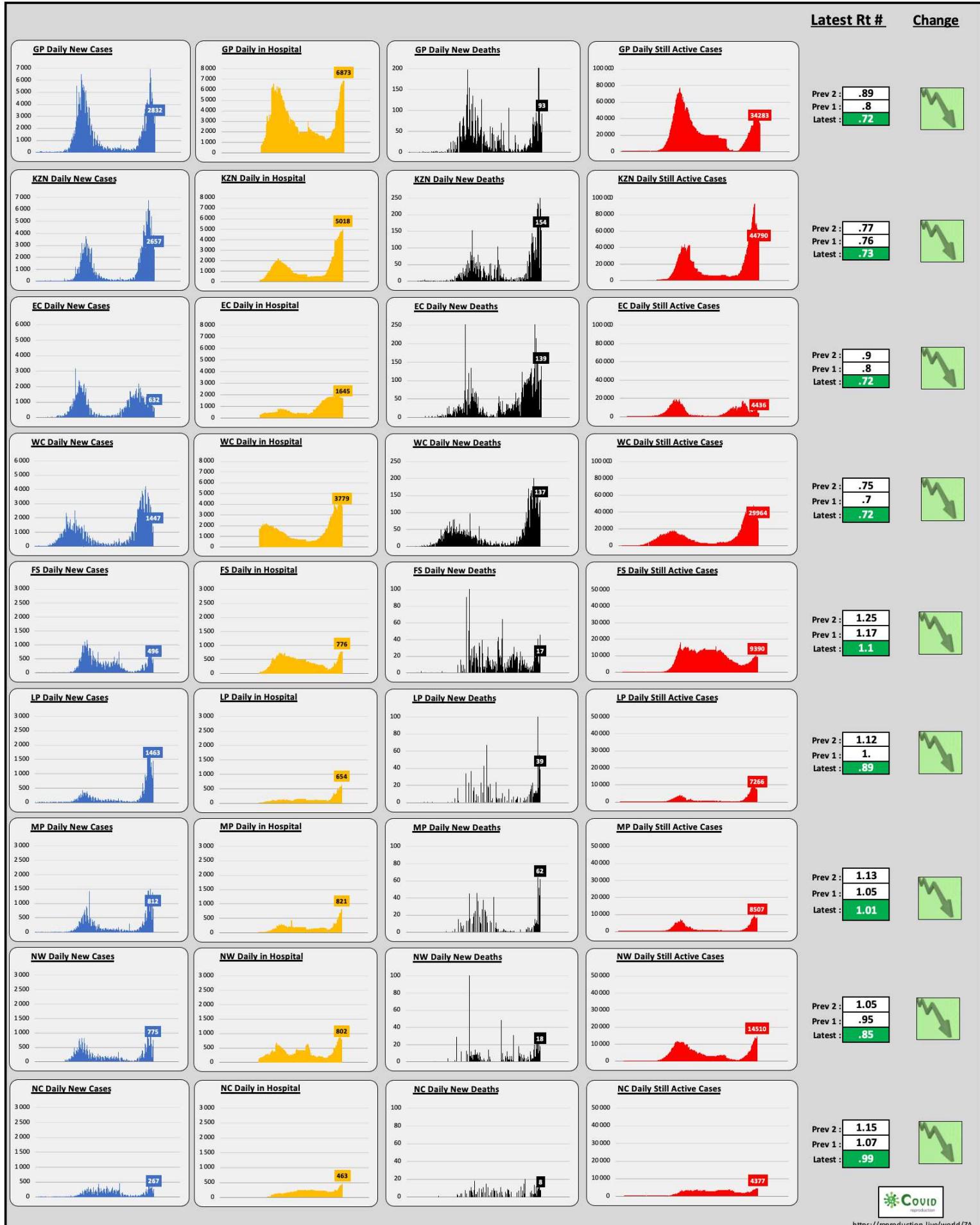
A Rt below 1 suggests that the number of cases is shrinking, possibly allowing societies to open back up. A Rt above 1 indicates that the number of cases is growing, perhaps necessitating renewed lockdowns or other measures.

How 1,000 cases would increase under different infection rates



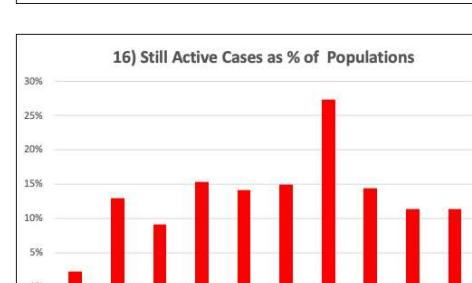
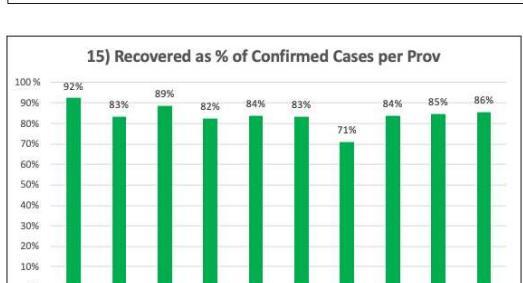
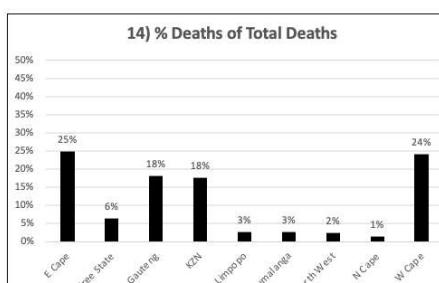
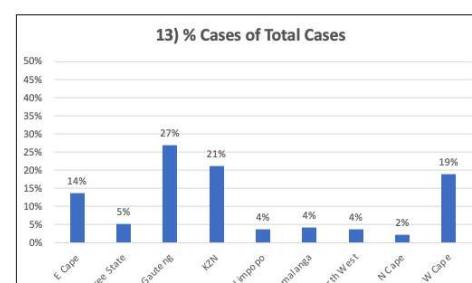
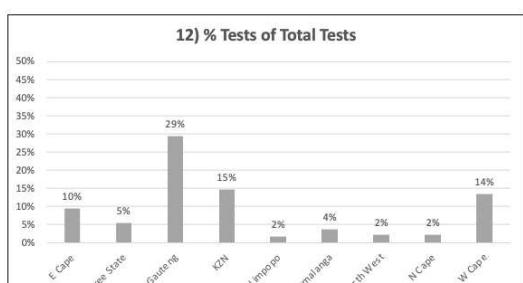
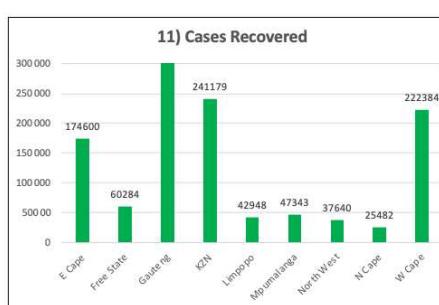
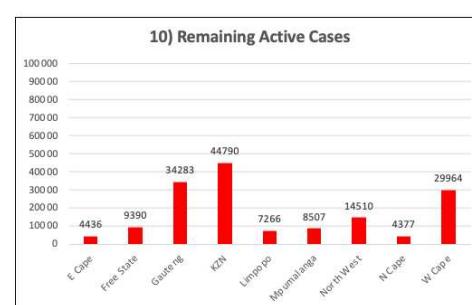
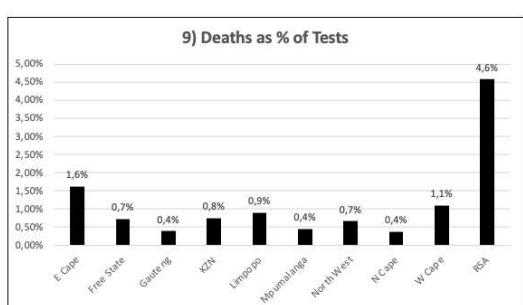
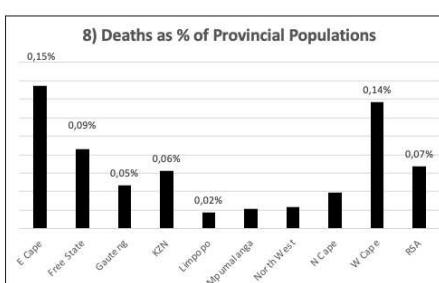
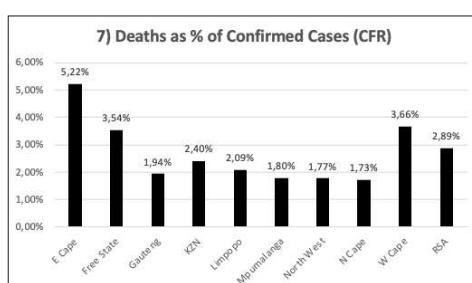
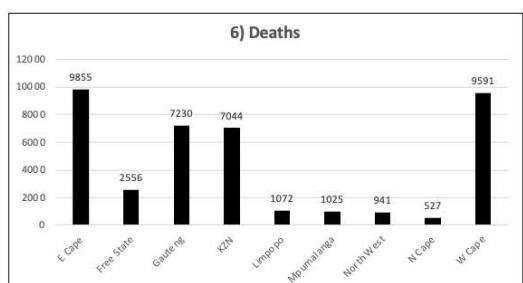
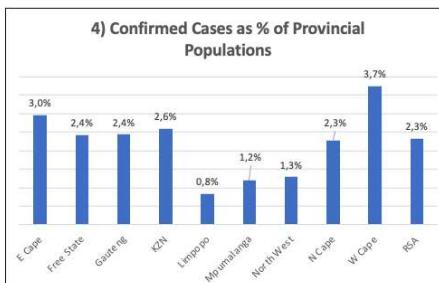
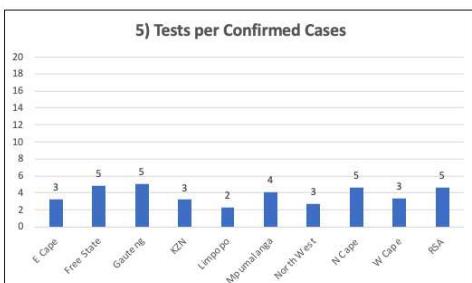
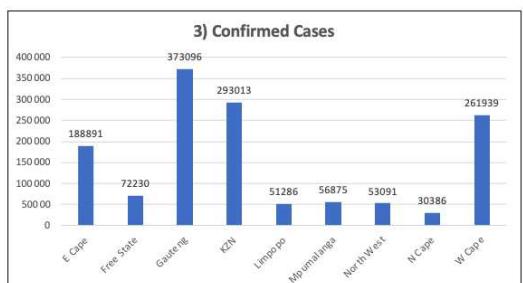
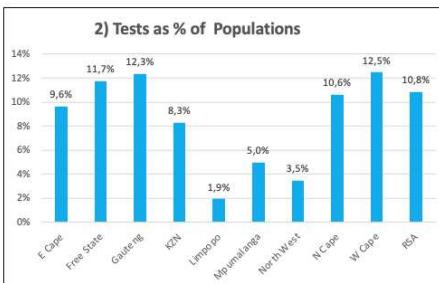
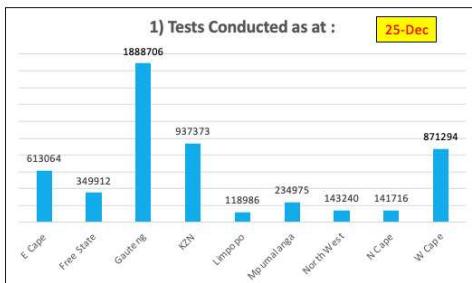
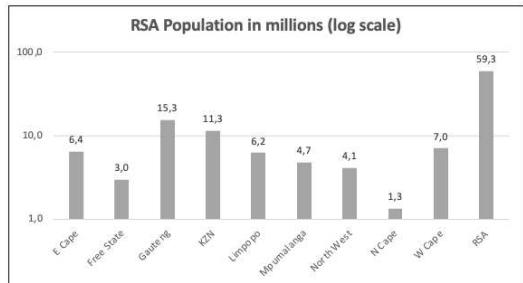
RSA Provinces detailed daily Data and Trends

How old is the Data? : Cases 2-5 days, Hospitalisation 1-3 days, Deaths 4-10 days, Still Active Cases 4-10 days, Rt #'s 3-14 days

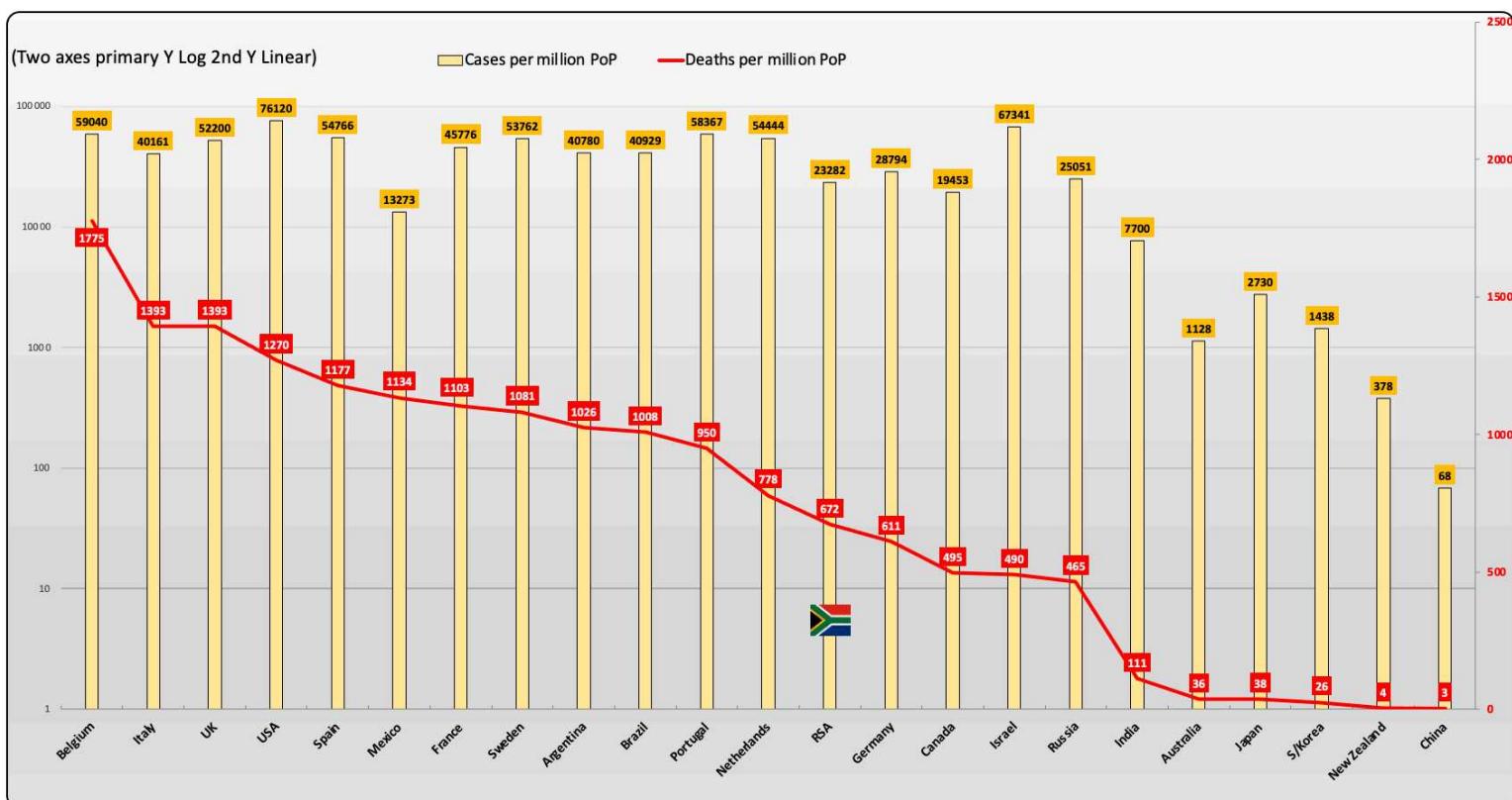
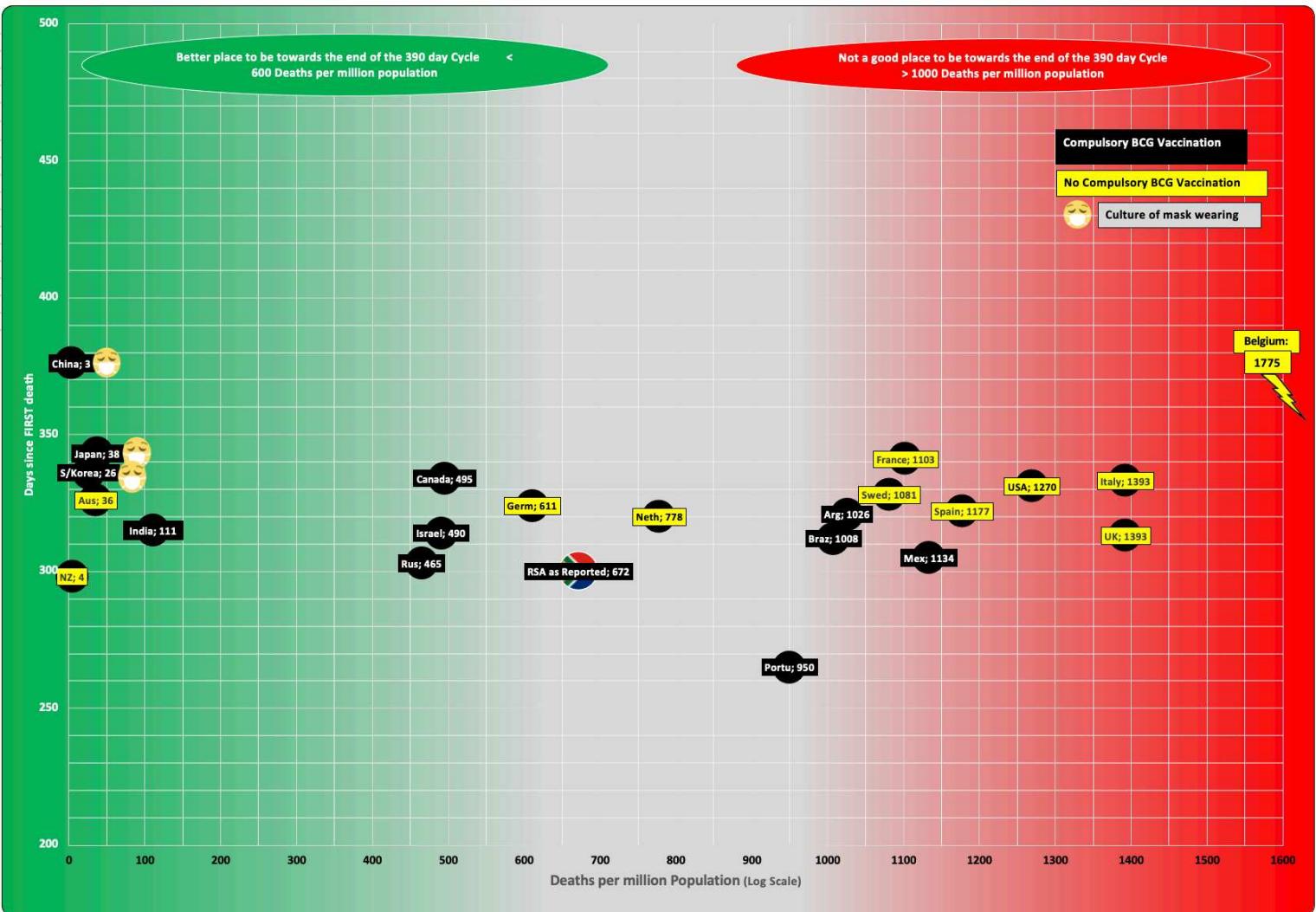


<https://reproduction.live/world/ZA>

RSA Covid Stats: National & Provincial Data & Ratios



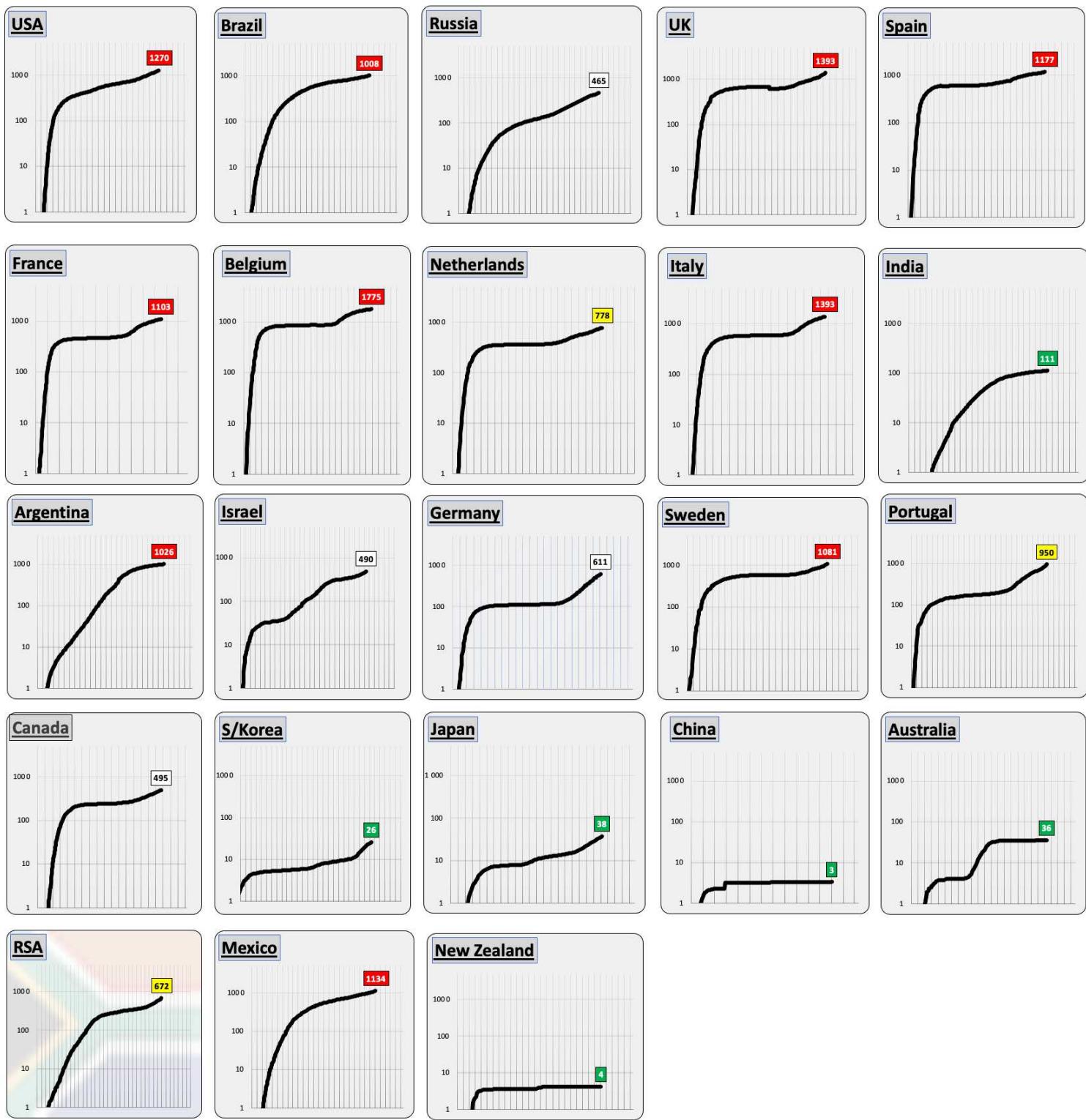
Selected Countries' **Reported** Cases & Deaths per mill PoP



Cum Deaths per mill PoP for selected countries

All on same Log Scale (compare Apples with Apples)

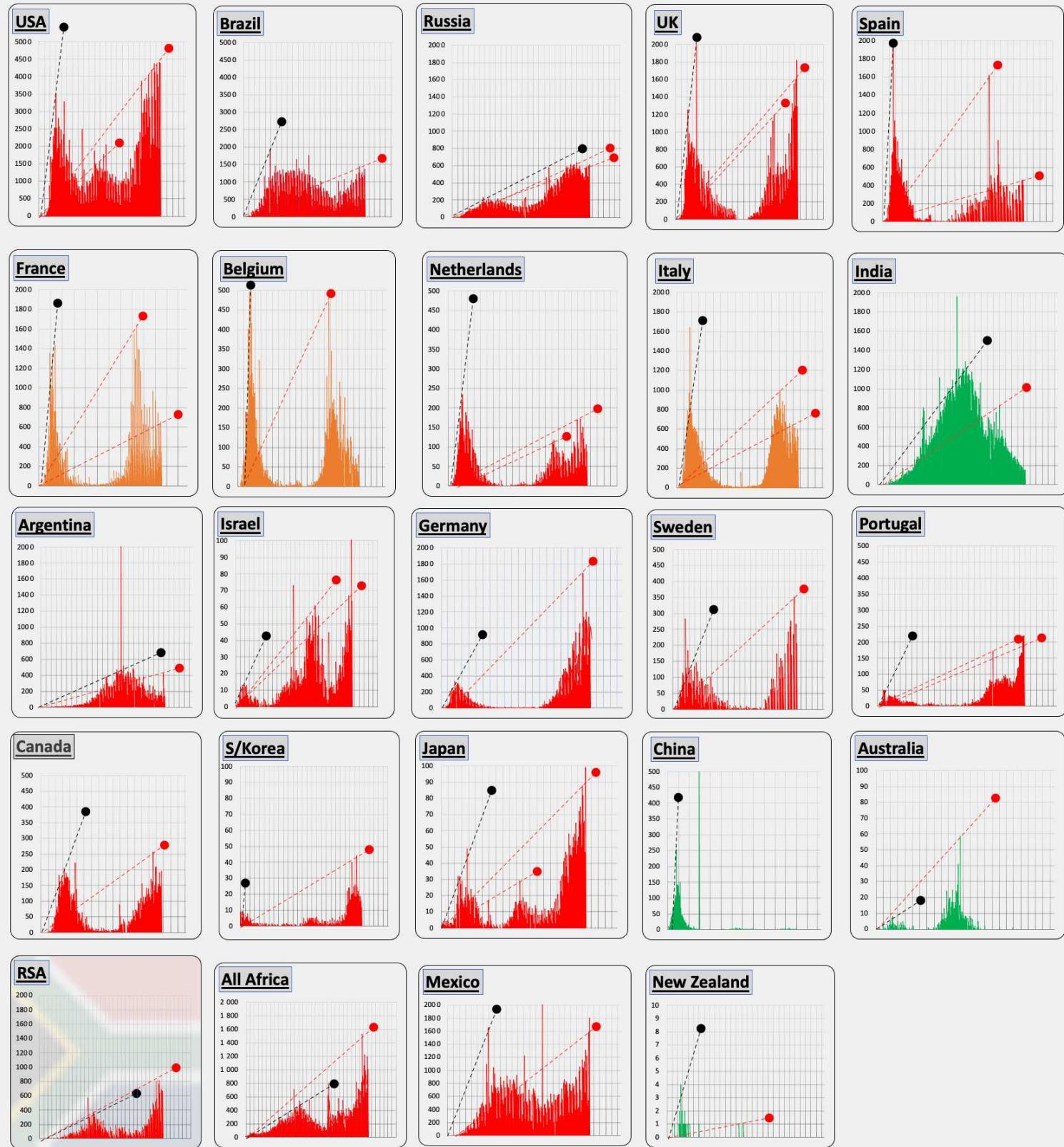
Cum Deaths > 1000 per Mill
Cum Deaths > 600 per Mill
Cum Deaths < 200 per Mill



Daily Deaths Curves & Rate of Onset/Next Wave "Inclinometers" for selected countries

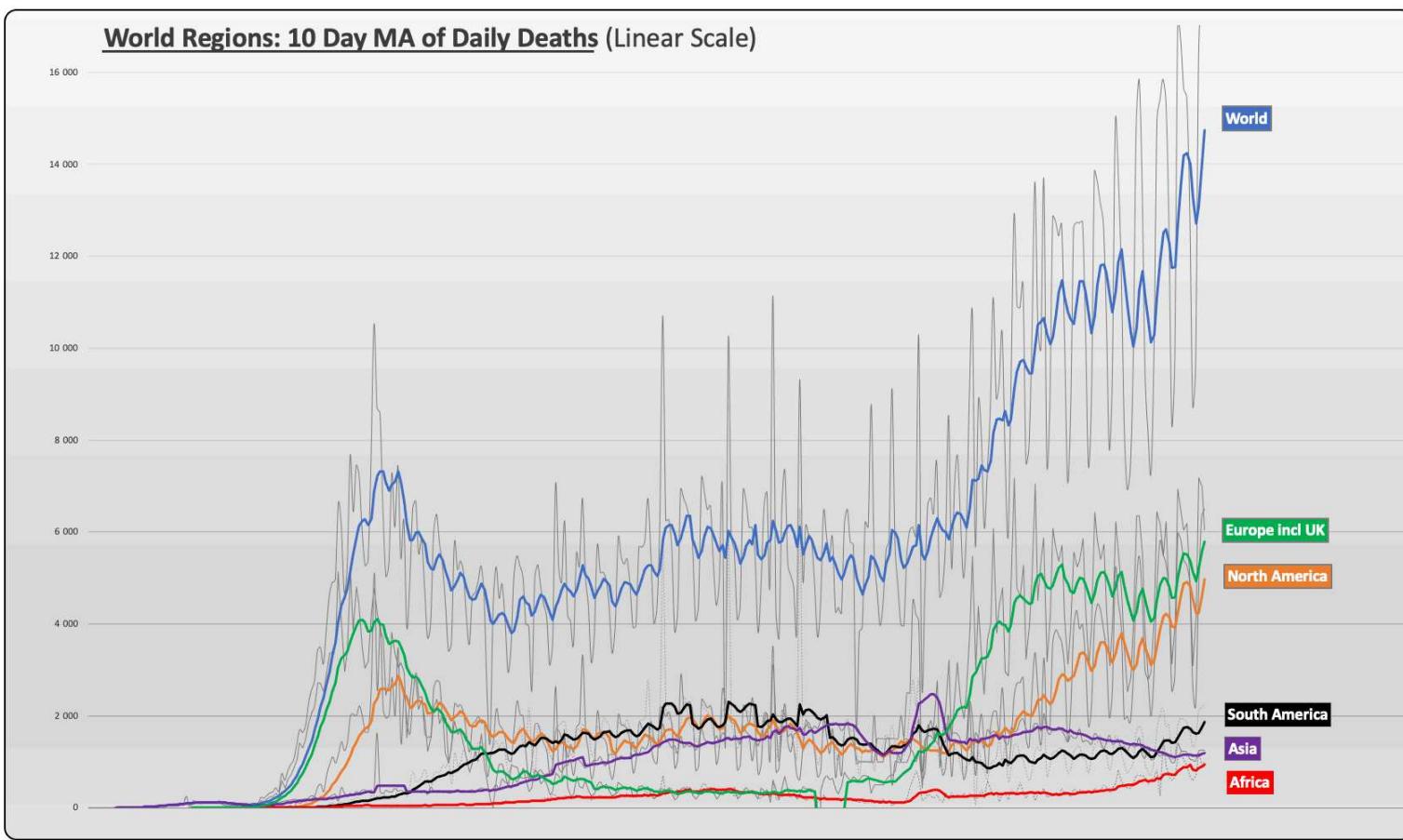
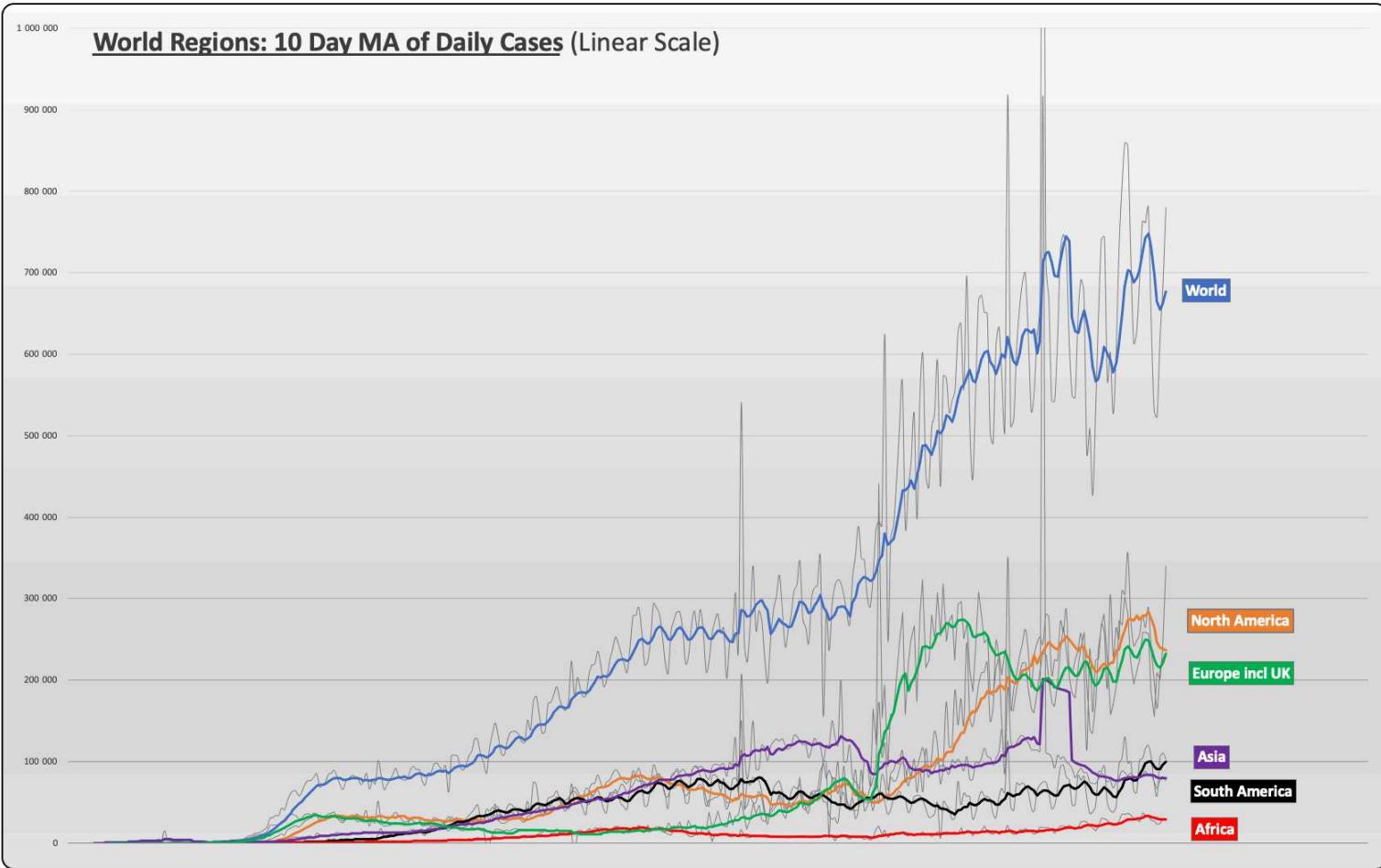
Daily Deaths from date of 1st death

Peaked but spiking again
Passed peak but could rebound OR next wave
Well past peak, unlikely to rebound
----- ● Onset/1st wave
----- ● Next waves

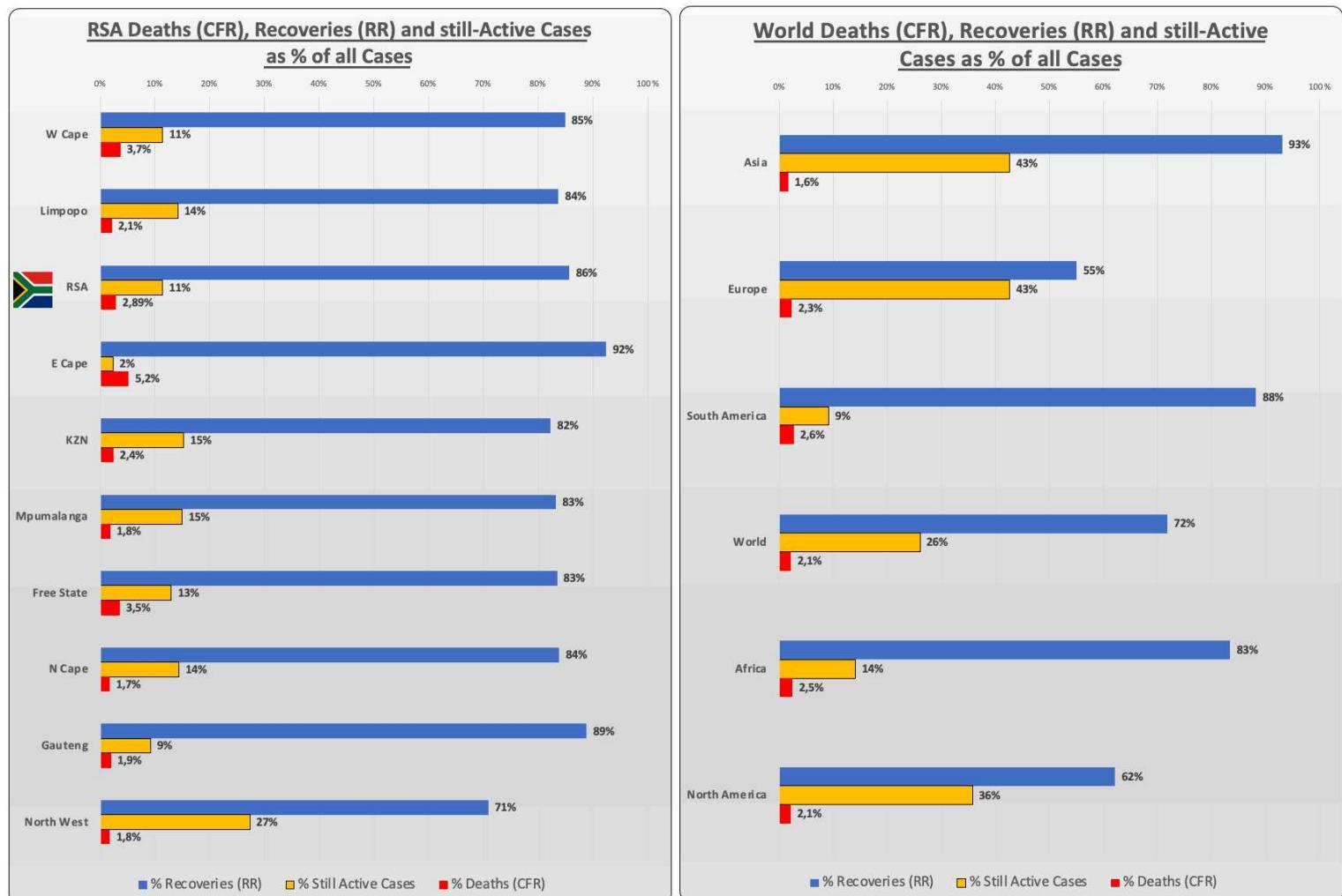
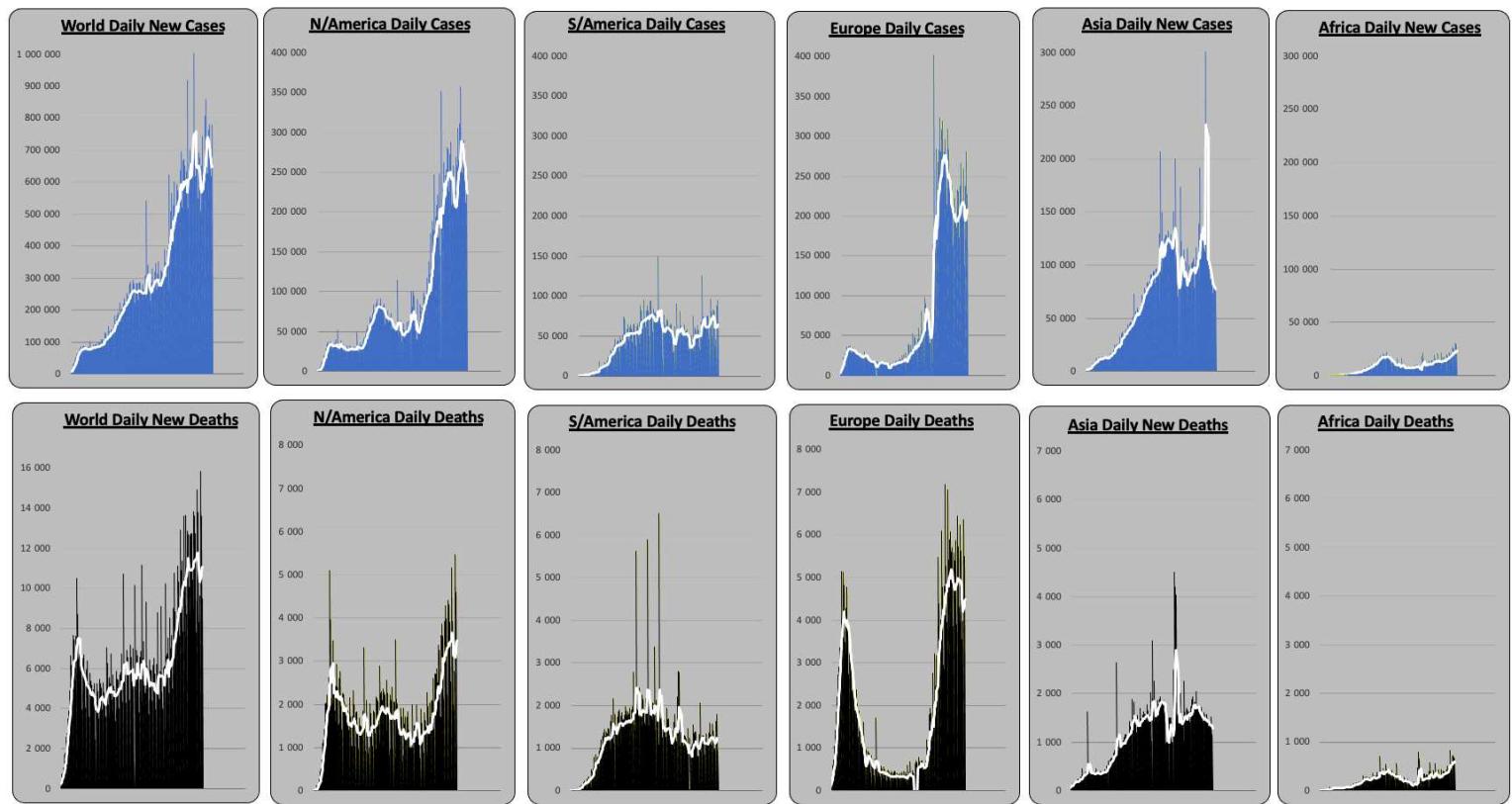


10 Day Moving Average of Daily Deaths & Cases by World Region

Page 3.0



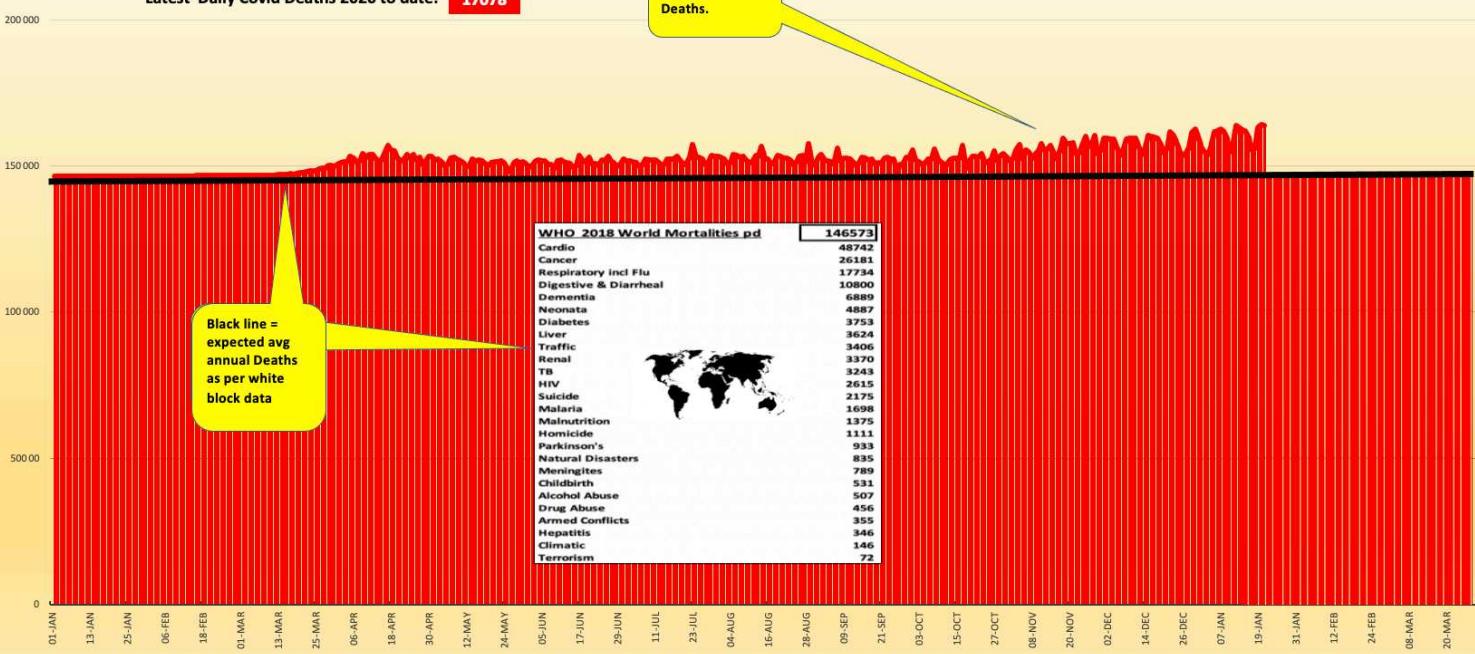
World Data: Dailies & 7 Day MA's



2018 Avg DAILY WORLD Mortalities v COVID: Daily Deaths (Linear Scales)

Avg Daily Covid Deaths 2020 to date: **5586**
 Highest Daily Covid Deaths 2020 to date: **17654**
 Latest Daily Covid Deaths 2020 to date: **17078**

Red line =
Reported Covid
Deaths.



The two graphs WORLD (above) and RSA (below) attempt to put the number of Covid Deaths into some sort of perspective graphically.
 The big RED blocks are TOTAL Daily Avg Deaths from ALL causes over a full calendar year.

The RED area/lines on top of the red blocks are the INCREMENTAL Actual Daily Deaths due to Covid as officially reported.
 Obviously some of the Covid Deaths will "overlap" with the "normal" Deaths due to comorbidities.

2017 Avg DAILY RSA Mortalities v COVID Daily Deaths (Linear Scales)

Avg Daily Covid Deaths since 1st Death 2020 to date: **88**
 Highest Daily Covid Deaths 2020 to date: **821**
 Latest Daily Covid Deaths 2020 to date: **667**

Excess Deaths
at
30 Dec

Red line =
Reported daily
Covid Deaths.

Blue line =
Excess Deaths
(see Pg 4.1)

Black line =
expected avg
daily Deaths as
per white block
data

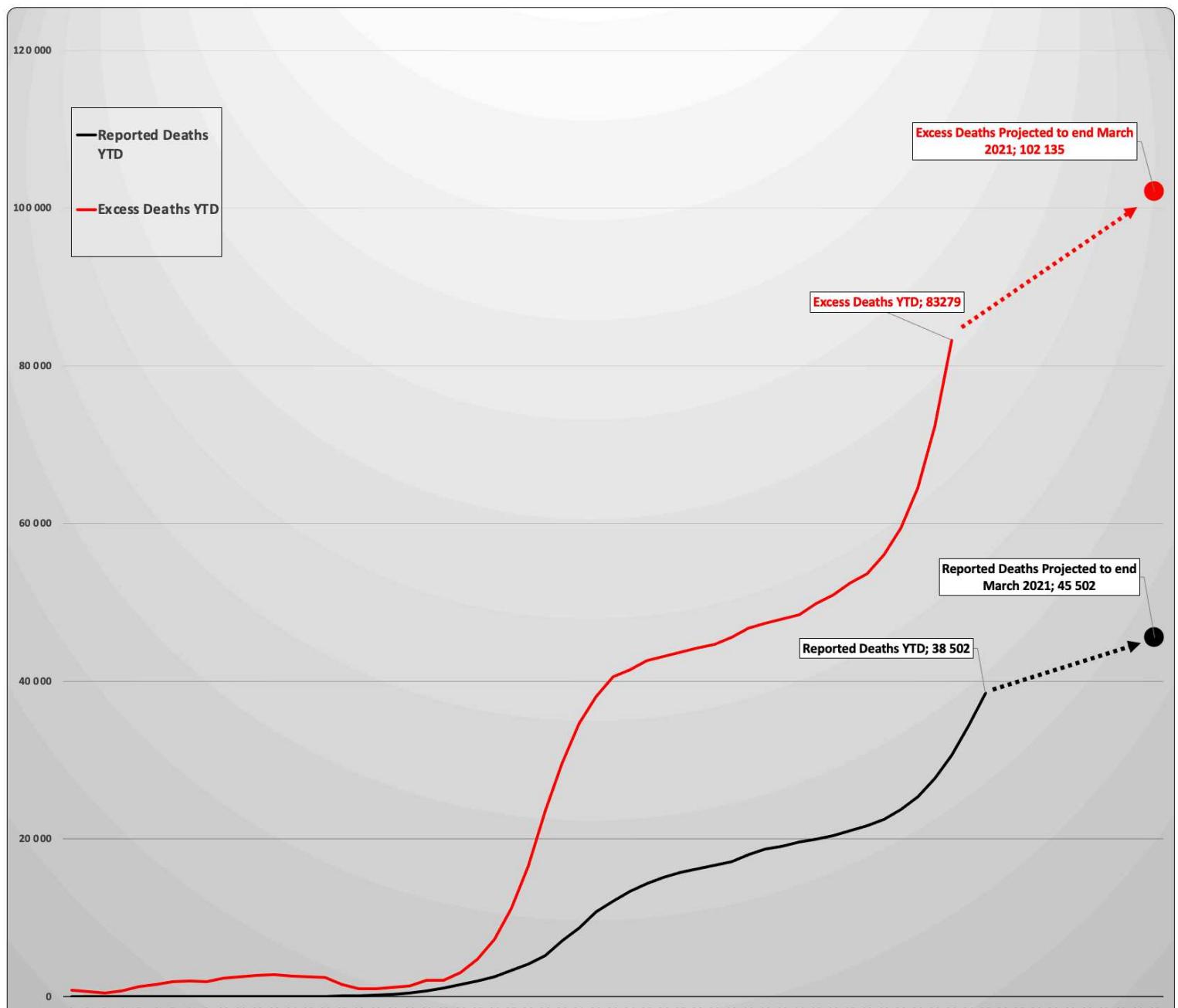
	1223
Natural Causes	543
Unnatural Causes	140
Cardio	96
Respiratory incl Flu	88
TB	79
Diabetes	69
Cancers	61
HIV	59
Hypertensive	55
Other Viral	46

Covid Deaths: Reported and Excess Deaths

Page 3.2

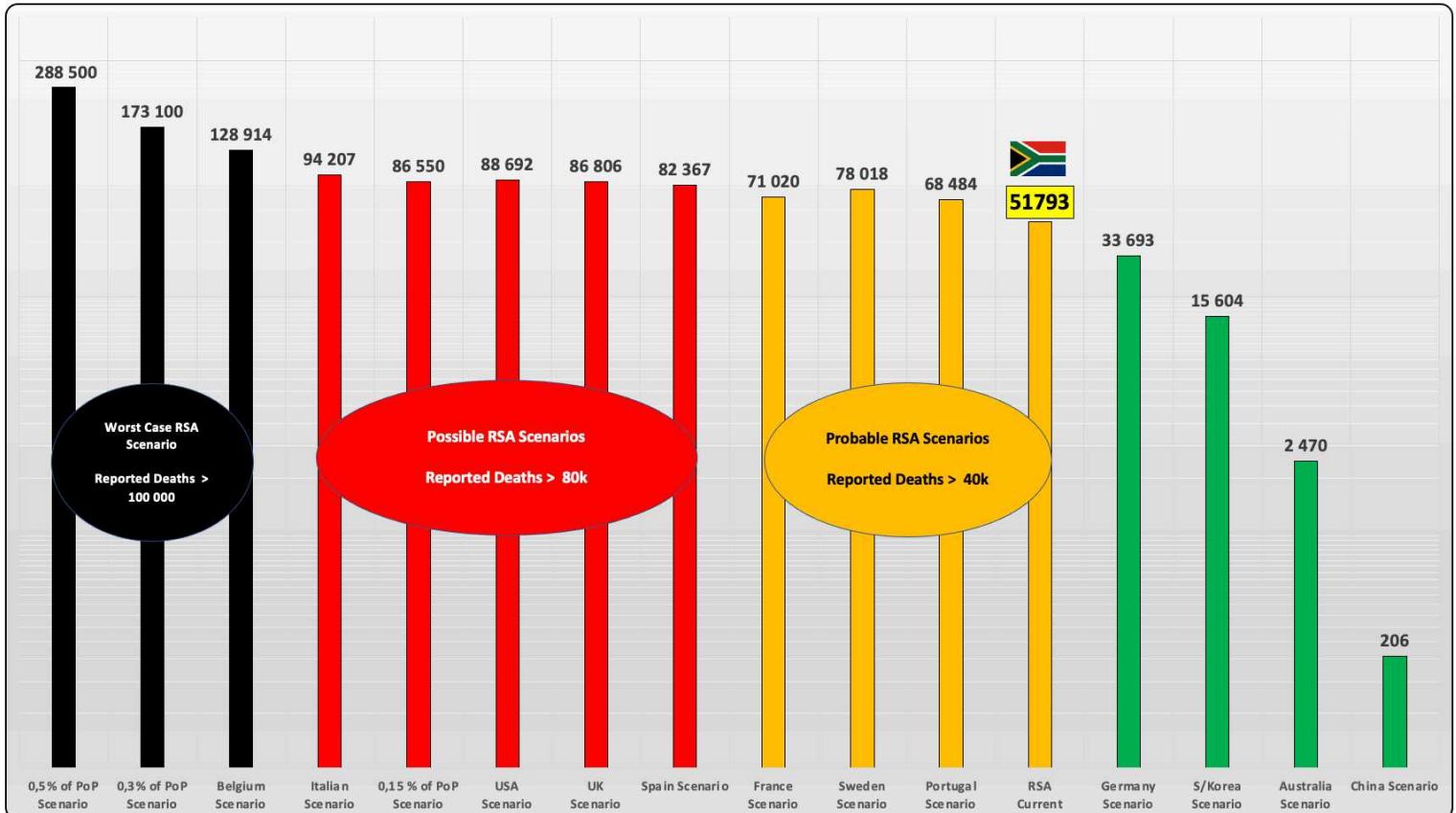
Trends & Projections for end March 2021

(See Pg 4.1 for more details on Excess Deaths)



RSA Covid Mortality Scenarios & Projections for end Mch 2021 (390 day cycle)

15 Scenarios and 1 Projection (Log Scale)



Key:

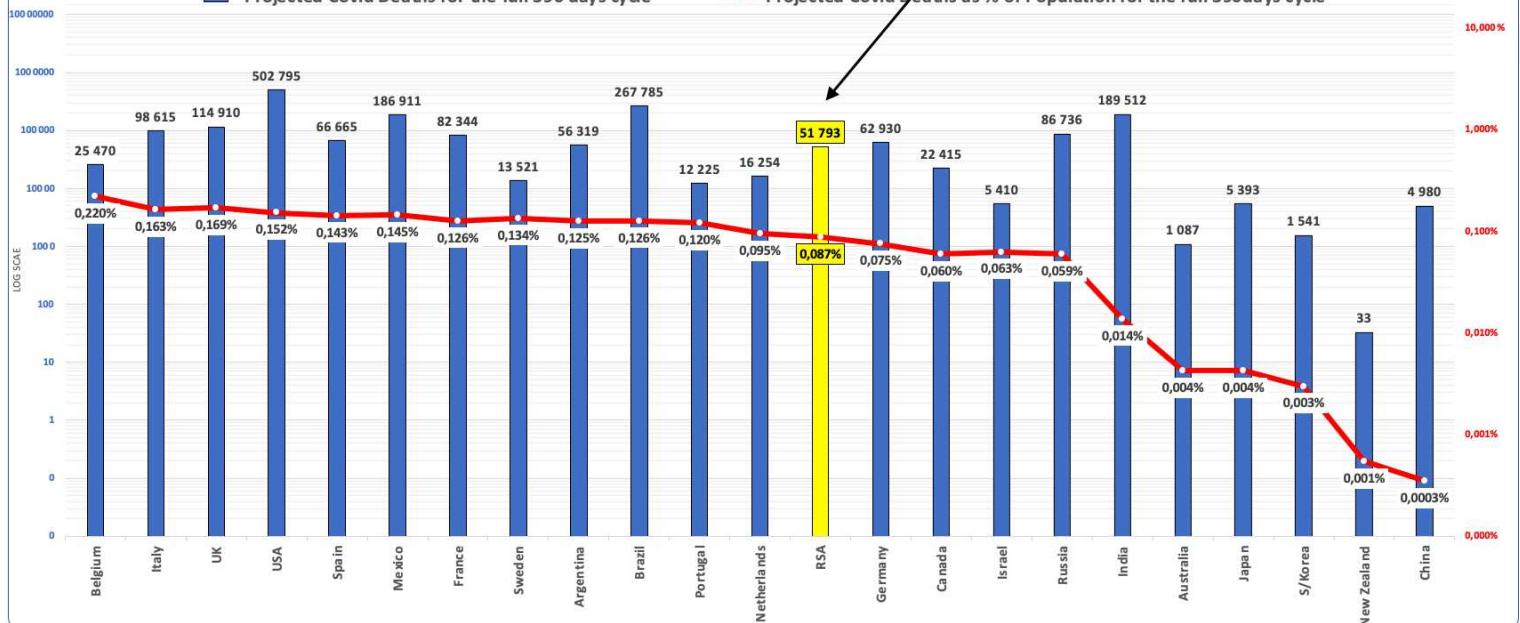
All Scenarios duly adjusted daily for population size and for the different timelines into the deemed 390 day pandemic cycle.

This number is simply the avg daily Deaths as reported to date x 390 (deemed cycle).

Projected Deaths by end Dec 2020 per country and % Deaths per Country Populations

at current officially reported Death Numbers as reported by WHO (no "Excess" deaths)

■ Projected Covid Deaths for the full 390 days cycle - - - Projected Covid Deaths as % of Population for the full 390days cycle



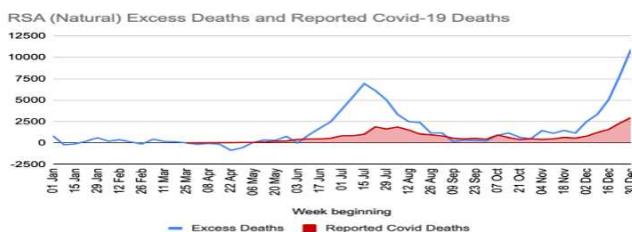
Note: Above Mortality %'s are overall projected mortality of the populations (PMR), NOT deaths of only those infected (CFR).

RSA Excess Deaths as per SA Medical Research Council

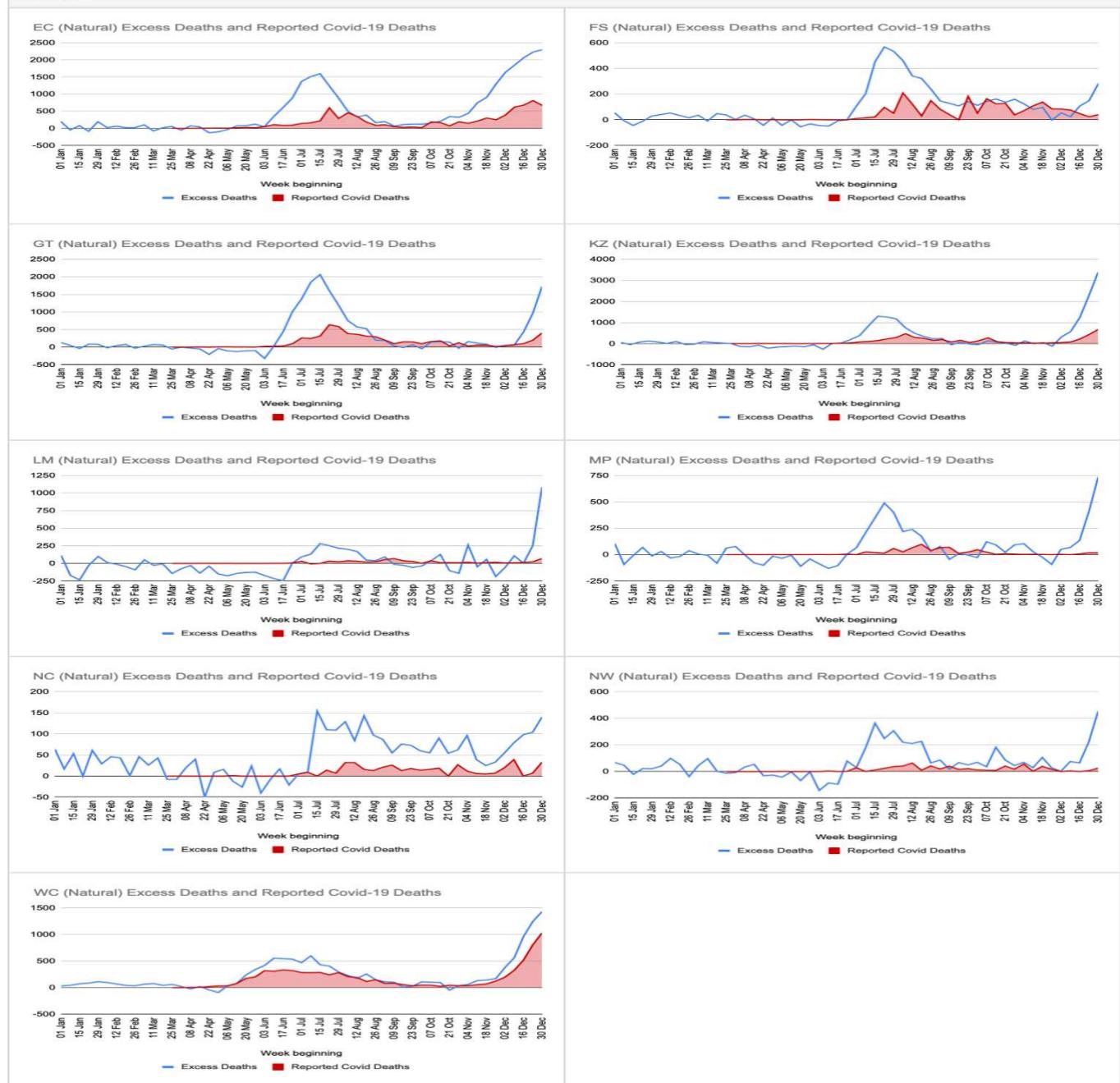
Data as at:

30 December 2020

One approach to aid understanding of the emerging COVID-19 mortality is to compare the estimated weekly excess deaths with the number of COVID-19 deaths reported by the Minister of Health as shown in the figure below. This comparison is hampered to some degree by the fact that the excess deaths are classified by week in which the death occurred; the reported COVID-19 deaths are classified by date the numbers are reported to the Department. If all excess natural deaths were due to COVID-19, and all COVID-19 deaths were perfectly identified and reported, the two series would be identical. The number of estimated excess deaths has begun to decrease, consistent with the trend in the number of confirmed COVID-19 deaths. Although more data are needed on the underlying causes of death, this observation is strongly supportive that a significant proportion of the current excess mortality being observed in South Africa is likely to be attributable to COVID-19.



Provinces



The red lines are weekly Covid deaths as reported by Dept of Health.

The blue lines are total Natural Deaths as reported by Dept of Home Affairs.

The gaps are the so-called "Excess Deaths" which can largely be ascribed to Covid,

directly (home/rural deaths) and indirectly (limited access to hospitals due to fear of Covid or no space).

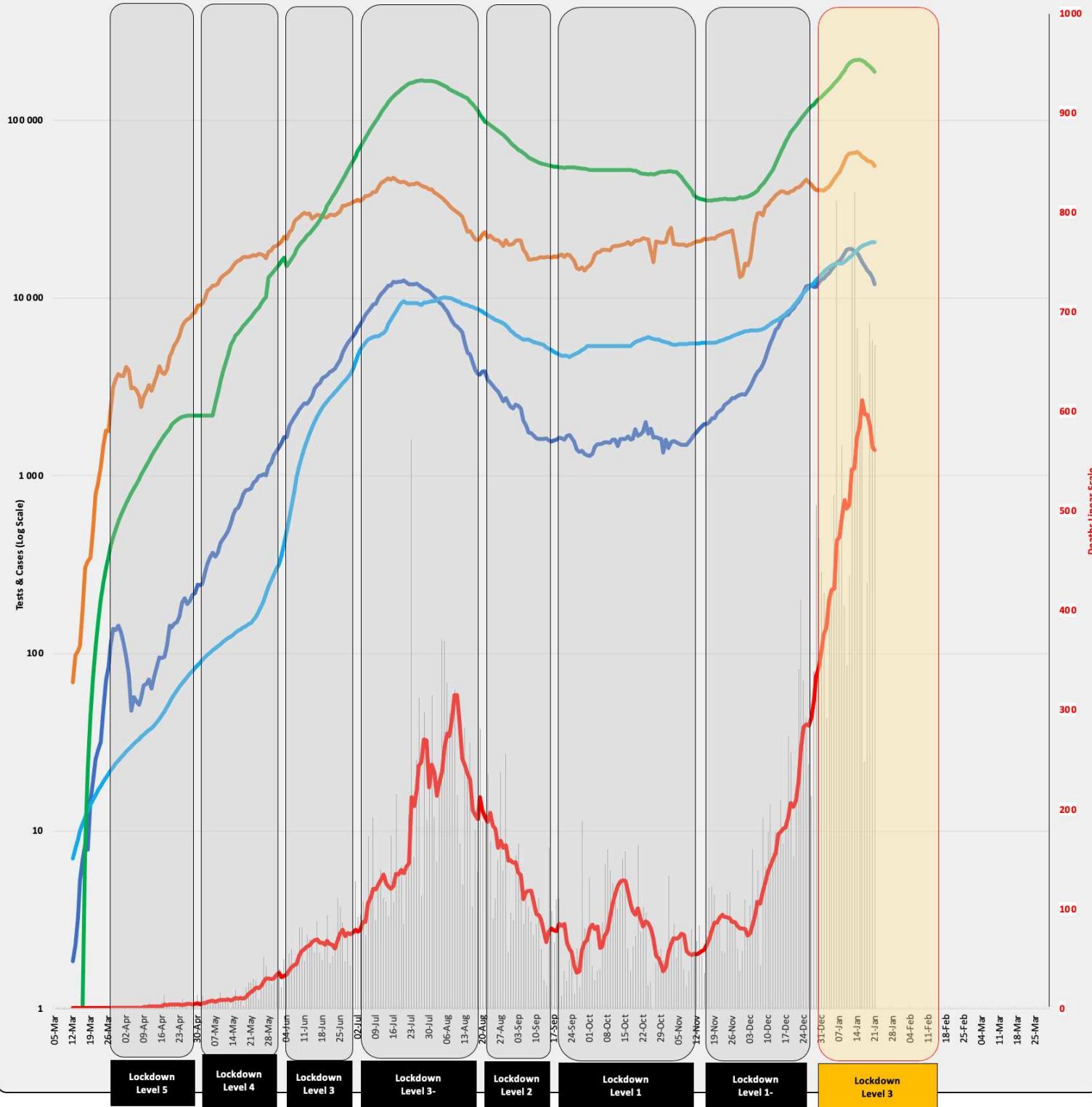
Data as at:

Latest Available

hdg 22 January 2021

RSA Daily Testing v Daily Cases v Daily Deaths 7 Day MA

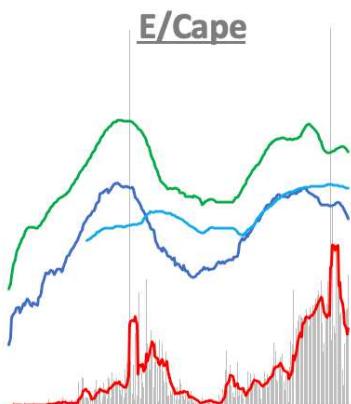
— Daily Tests — Daily Cases — In Hospital — Active Cases — Daily Deaths



RSA Provinces Daily Cases/Hospitals/Actives/Deaths (7 Day MA)

Daily Cases In Hospital Active Cases Daily Deaths

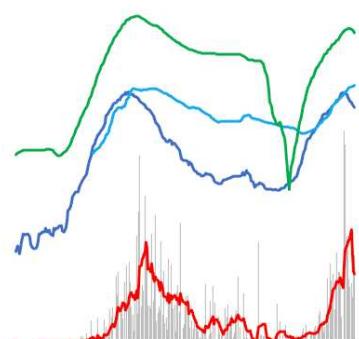
E/Cape



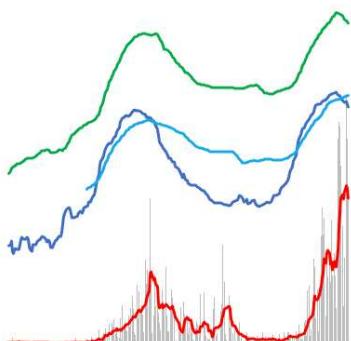
Free State



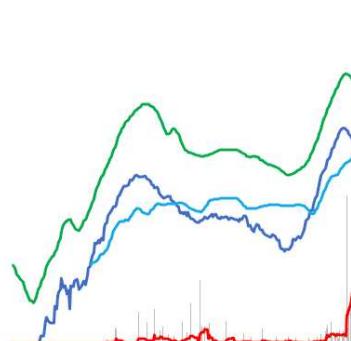
Gauteng



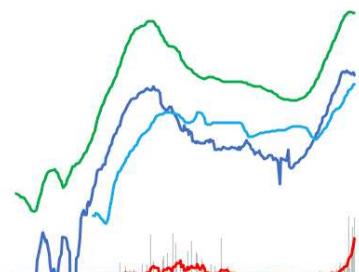
KZN



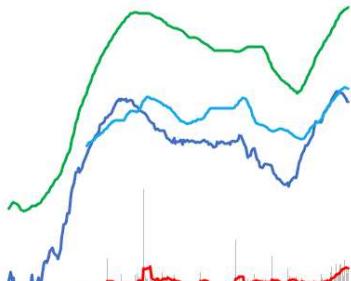
Limpopo



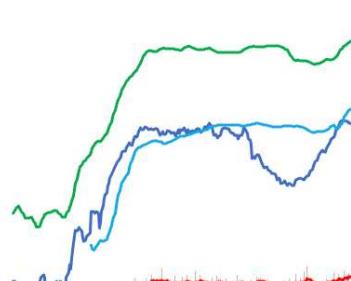
Maphumalanga



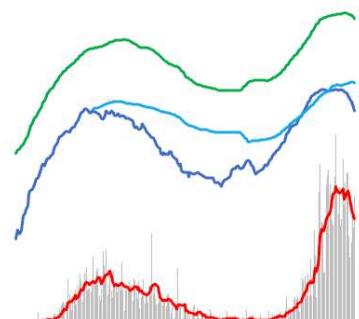
North West



N/Cape



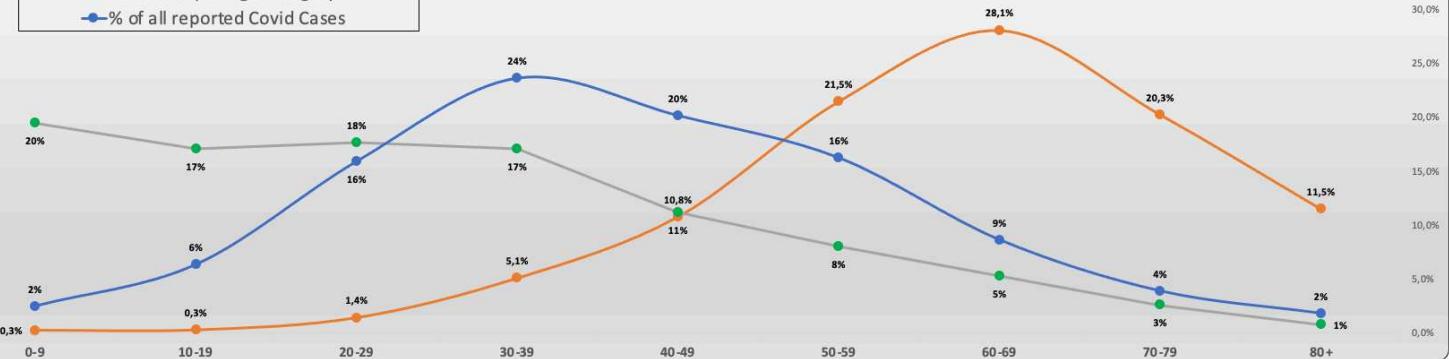
W/Cape



RSA Age & Gender Stats

- Orange circle: % of all reported Covid Deaths
- Green circle: RSA PoP% per Age Category
- Blue circle: % of all reported Covid Cases

14-Jan



Probability of DYING based on % Deaths of Hospitalised Cases in each Age Group (Age Group CFR)

14-Jan

— RSA Age Group CFR % — World Age Group CFR %

COVID-19 Fatality Rate by AGE:

*Death Rate = (number of deaths / number of cases) = probability of dying if infected by the virus (%). This probability differs depending on the age group. The percentages shown below **do not have to add up to 100%**, as they do NOT represent share of deaths by age group. Rather, it represents, for a person in a given age group, the risk of dying if infected with COVID-19.

Covid Deaths per Age Group as % of ALL Covid Deaths (CMR)

14-Jan

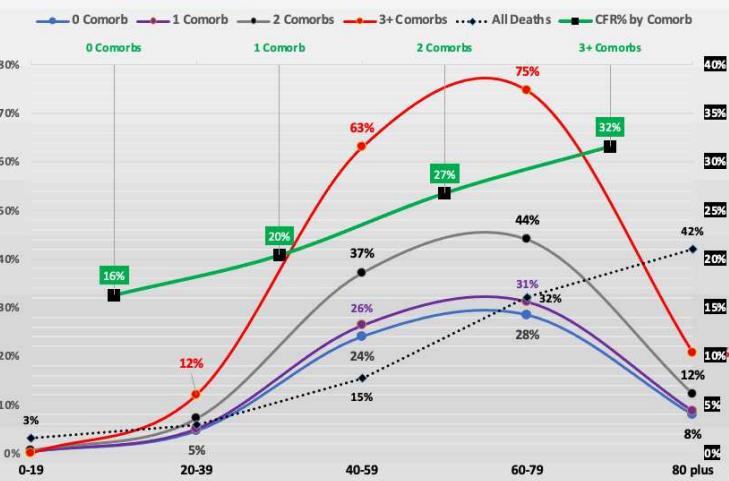
— RSA % Share of Deaths — World % Share of Deaths

COVID-19 Fatality Rate by AGE:

*Death Rate = (number of deaths / number of cases) = probability of dying if infected by the virus (%). This probability differs depending on the age group. The percentages shown below **do not have to add up to 100%**, as they do NOT represent share of deaths by age group. Rather, it represents, for a person in a given age group, the risk of dying if infected with COVID-19.

Probability of DYING based on % Deaths of Cases per Age/Comorb Group of HOSPITALISED Covid Cases & Deaths (Source RSA NICD)

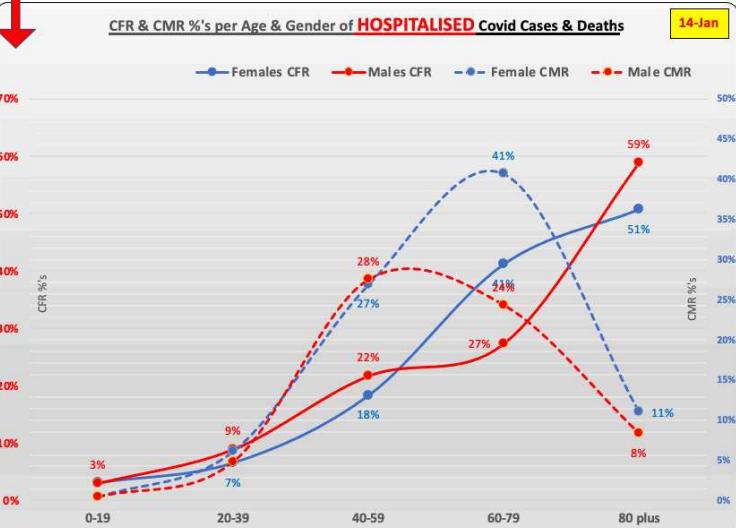
30-Nov



CFR & CMR %'s per Age & Gender of HOSPITALISED Covid Cases & Deaths

14-Jan

— Females CFR — Males CFR — Female CMR — Male CMR

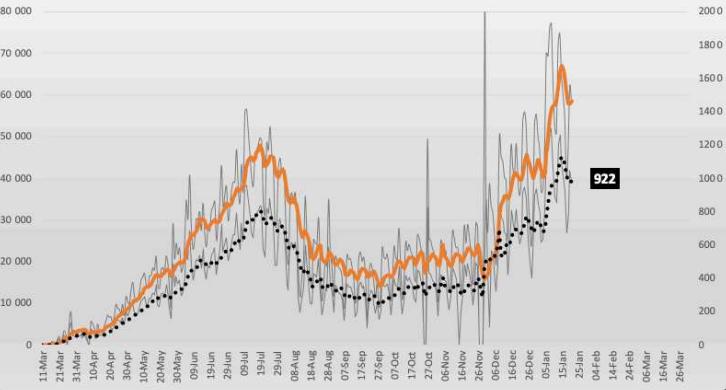


Data as at: As indicated per graph

hdg 22 January 2021

RSA: Daily Tests per million PoP

— 10 per. Mov. Avg. (Daily Tests) ••••• 10 per. Mov. Avg. (TpmPoP)



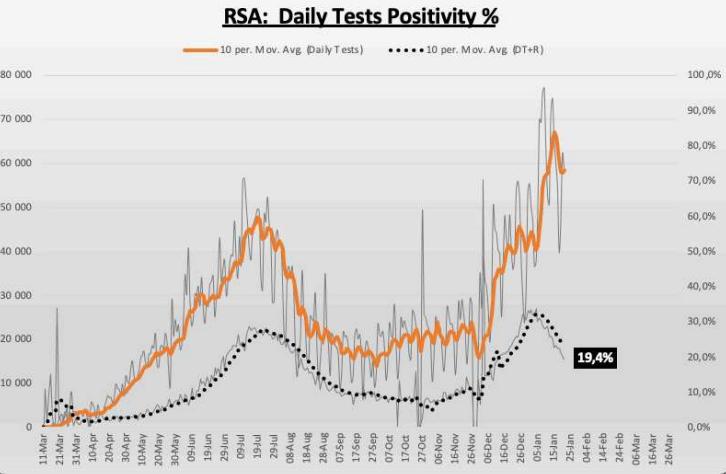
RSA: Daily Tests per +Case

— 10 per. Mov. Avg. (Daily Tests) ••••• 10 per. Mov. Avg. (T+R)



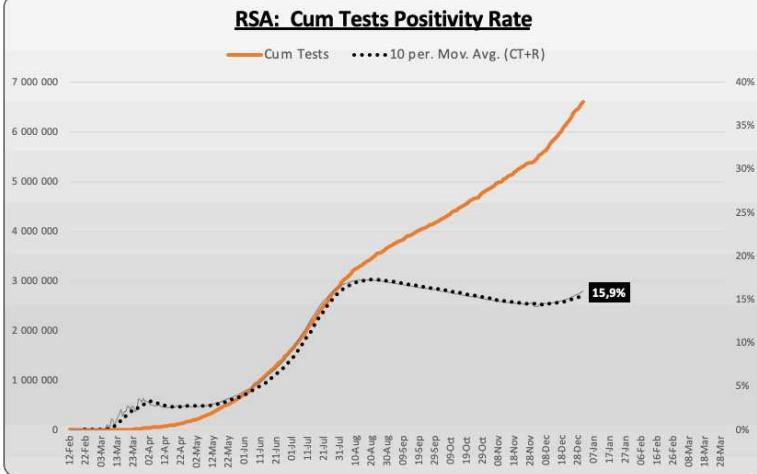
RSA: Daily Tests Positivity %

— 10 per. Mov. Avg. (Daily Tests) ••••• 10 per. Mov. Avg. (DT+R)



RSA: Cum Tests Positivity Rate

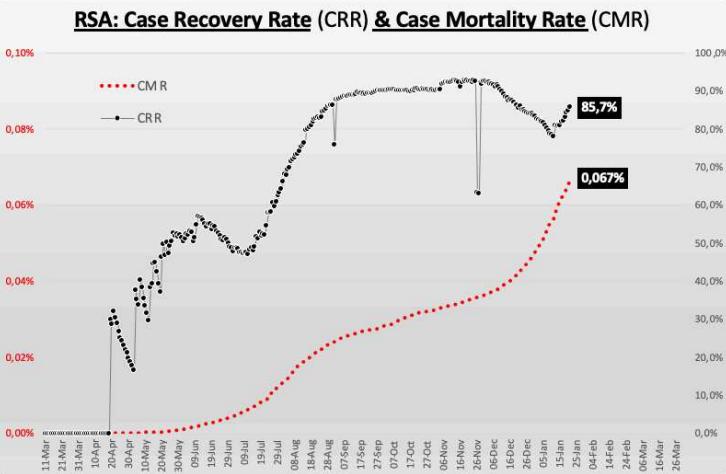
— Cum Tests ••••• 10 per. Mov. Avg. (CT+R)



RSA: Case Recovery Rate (CRR) & Case Mortality Rate (CMR)

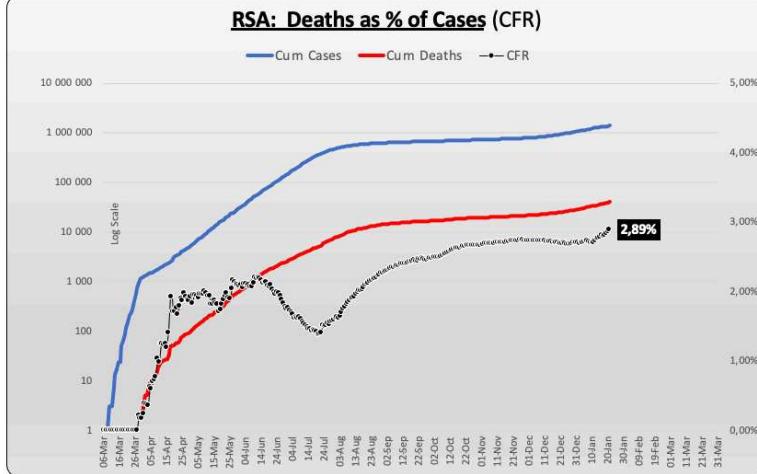
••••• CM R

— CRR



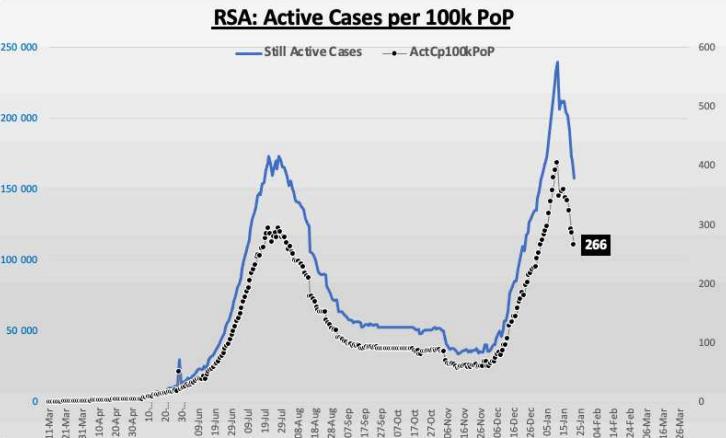
RSA: Deaths as % of Cases (CFR)

— Cum Cases — Cum Deaths — CFR

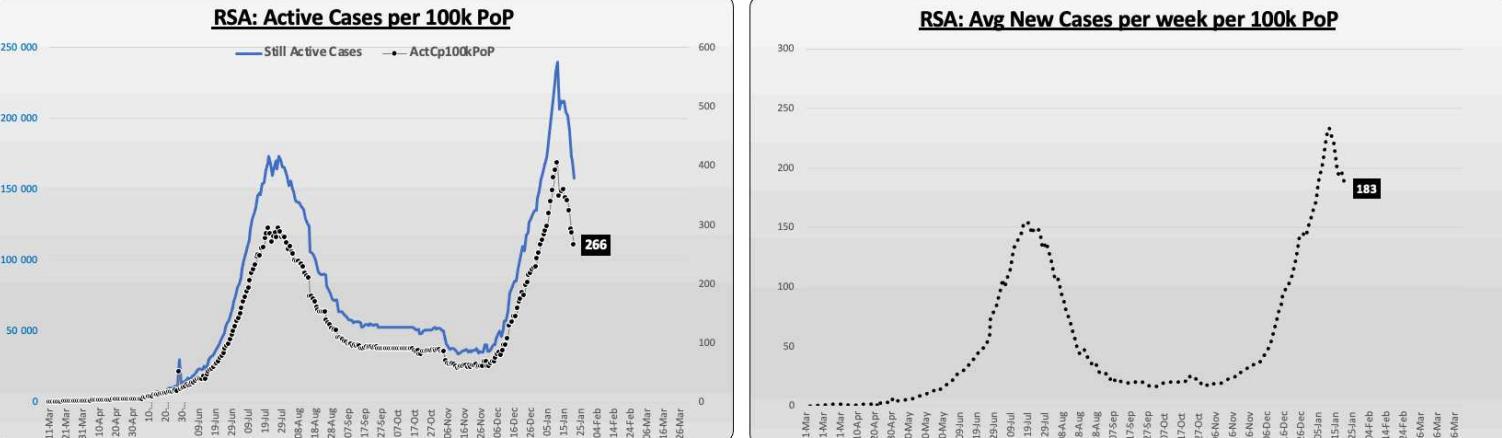


RSA: Active Cases per 100k PoP

— Still Active Cases — ActCp100kPoP



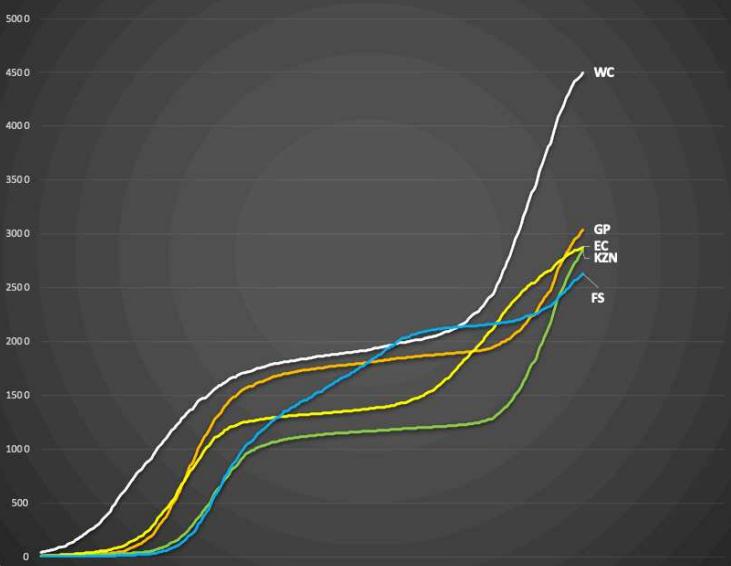
RSA: Avg New Cases per week per 100k PoP



All linear scales

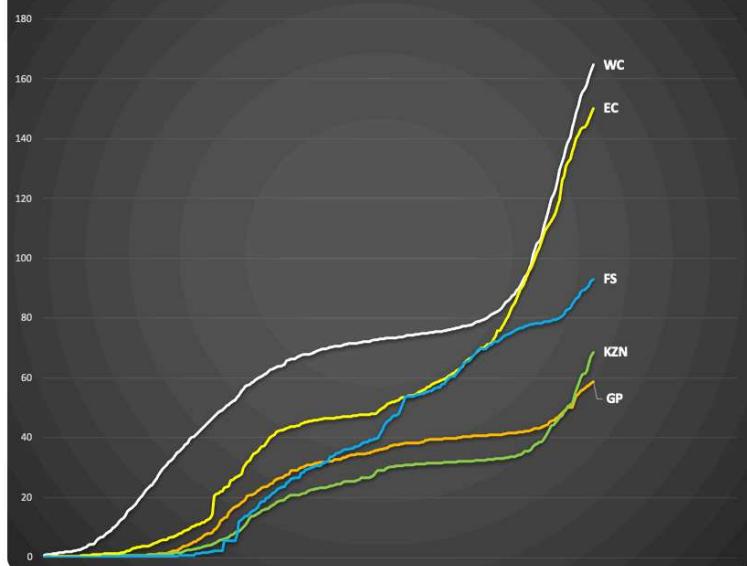
Major Provinces: Cum Cases per 100k PoP

GP — WC — KZN — EC — FS



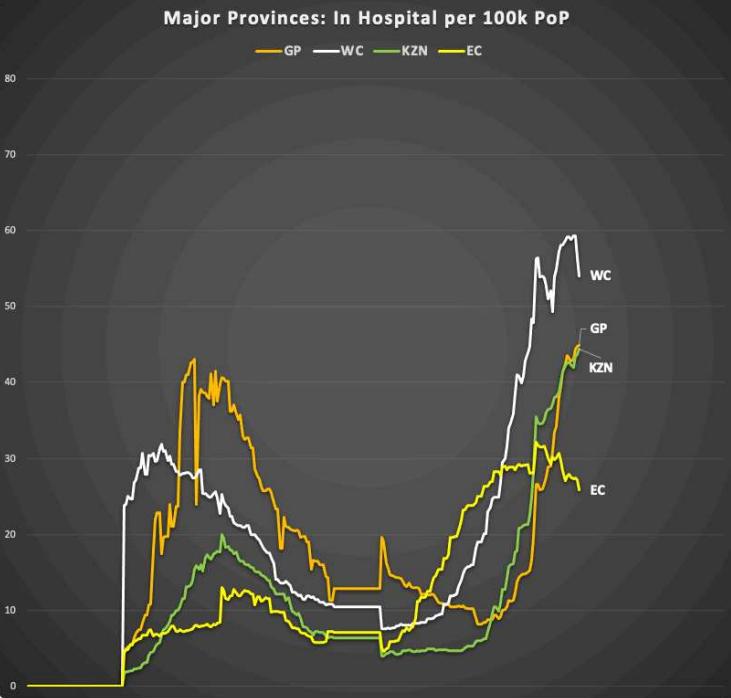
Major Provinces: Cum Deaths per 100k PoP

GP — WC — KZN — EC — FS



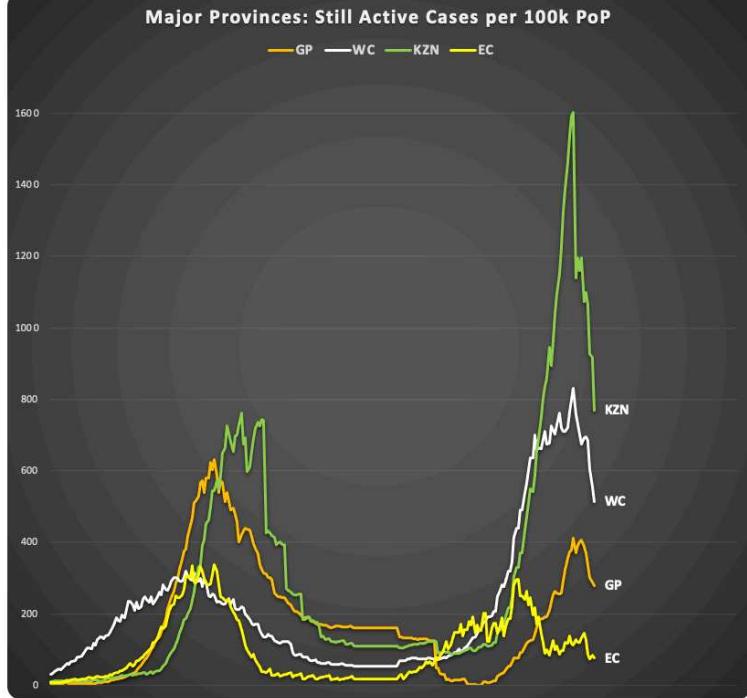
Major Provinces: In Hospital per 100k PoP

GP — WC — KZN — EC



Major Provinces: Still Active Cases per 100k PoP

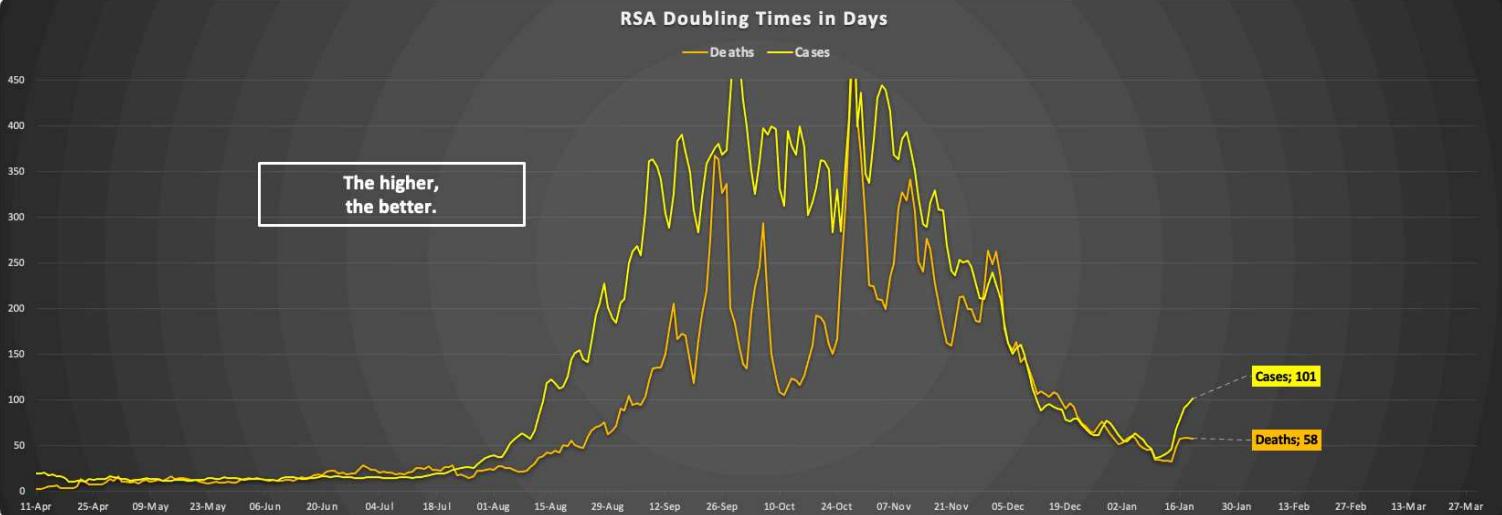
GP — WC — KZN — EC



RSA Doubling Times in Days

Deaths — Cases

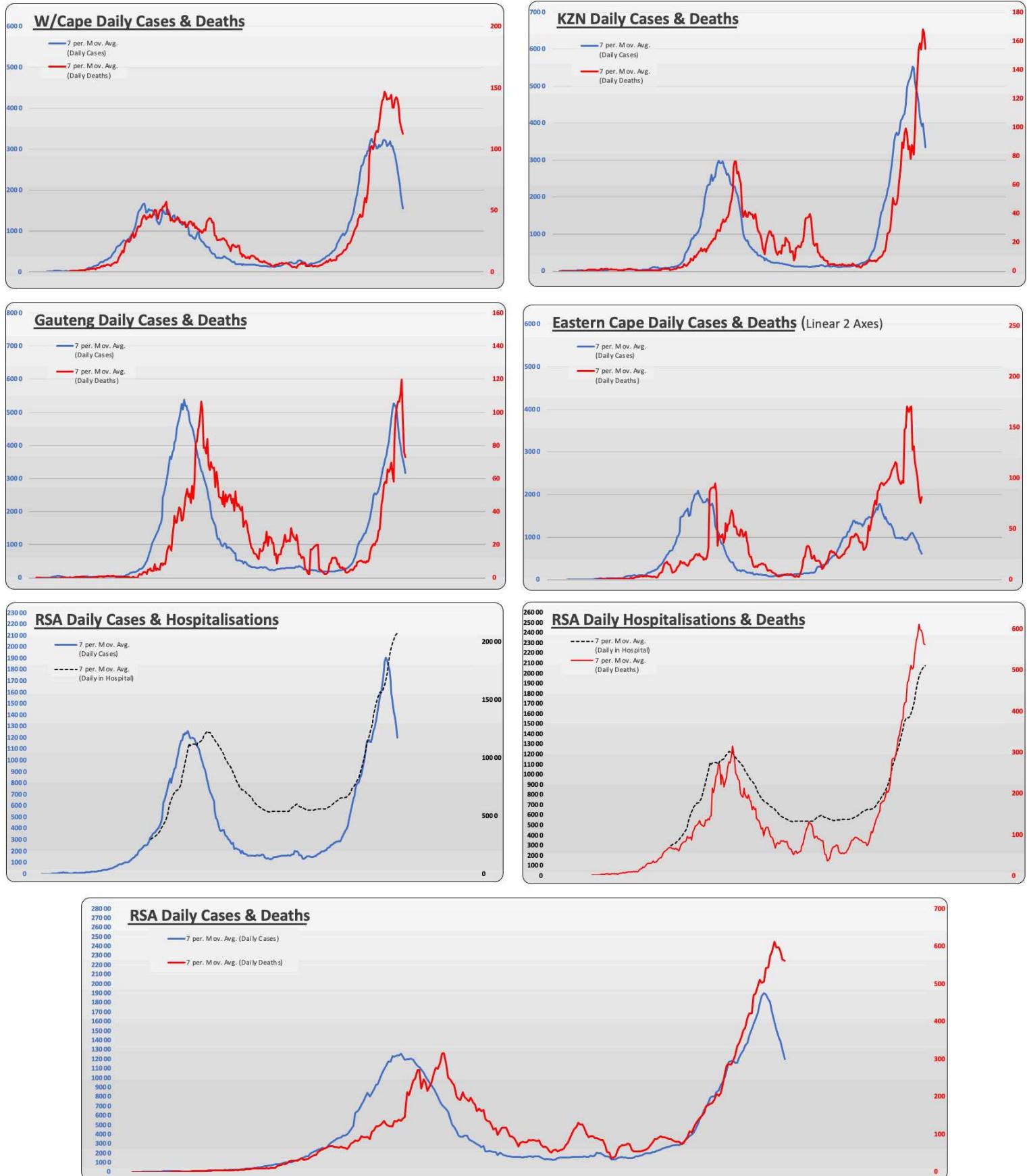
The higher,
the better.



RSA & Major Provinces:

1st Wave v 2nd Wave

The Y-axes scales have been adjusted in order to get the 1st Wave Cases/Hospitalisations & Deaths peaks aligned.
The unfolding 2nd Wave curves should therefore give a good indication of the 2nd Wave's rate of infection spread and severity resulting in fatalities.

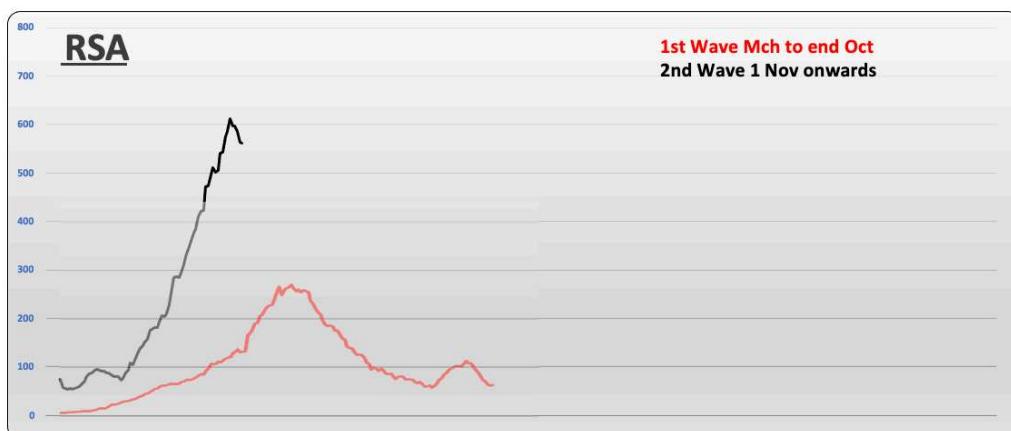
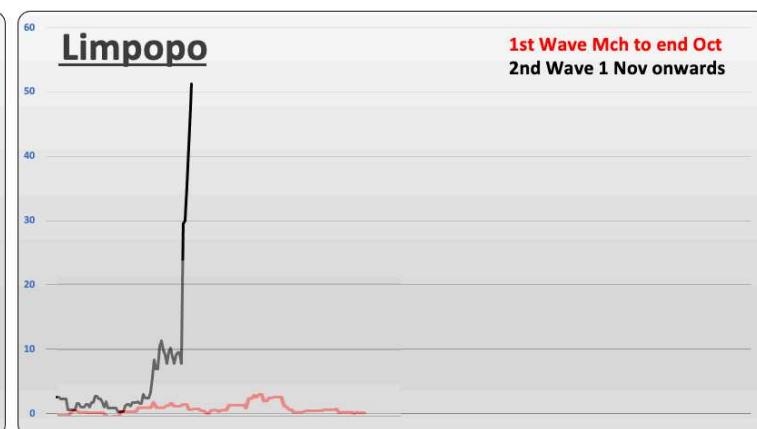
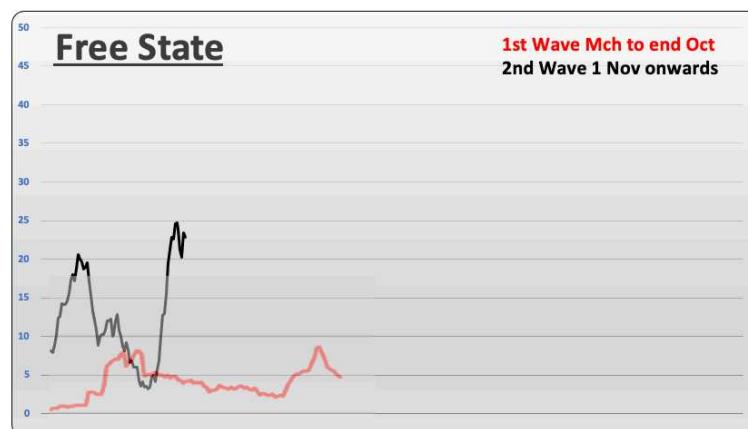
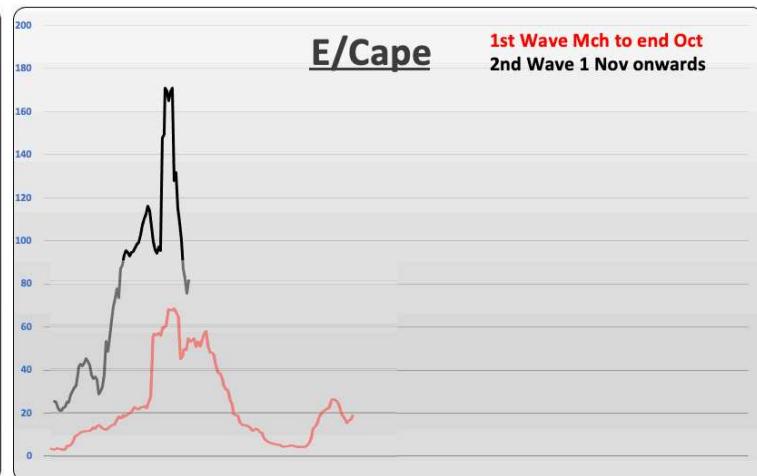
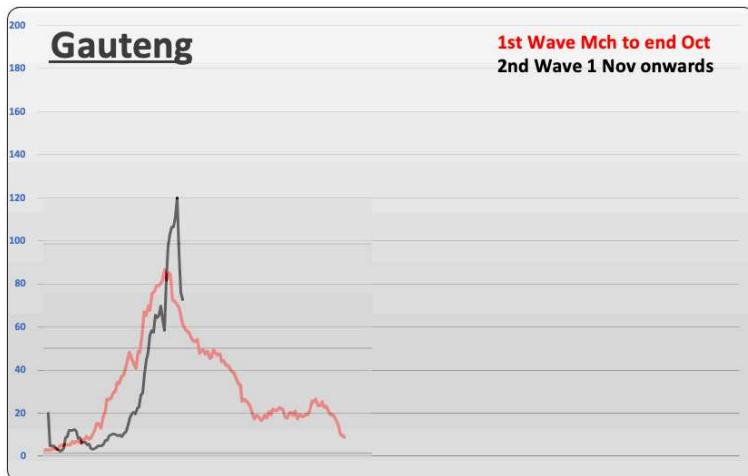
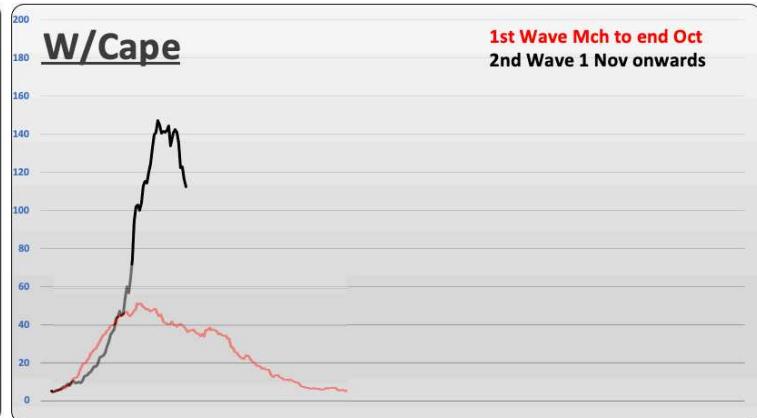
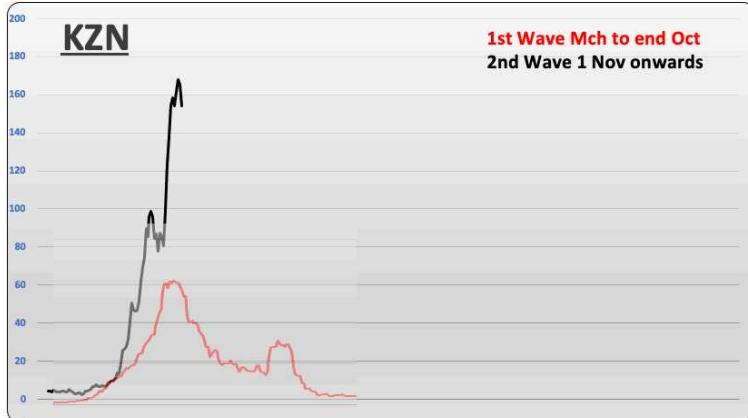


What are these graphs telling us ? (Ignore the numbers, look purely at the inclines and amplitudes).

- 1) The Cases and Deaths curves are almost identical, except for the approx 2 week delay in Deaths occurring.
- 2) There is possibly a problem with the ECape Case reporting. Their Deaths Curve is way ahead of their Cases Curve. Could be due to full hospitals and patients being referred to WC & KZN, but Deaths still attributed to ECape ? If the ECape Cases numbers are correct then the CFR (Fatality Rate) for the 2nd Wave is extremely high !! This is not borne out by the WCape and KZN data.
- 3) The WCape & KZN and even the Gauteng curves are exactly as one would expect, unfortunately their relative amplitudes does not bode well for Gauteng and the rest of the country.
- 4) The bottom right graph shows Hospital Capacity under serious strain.

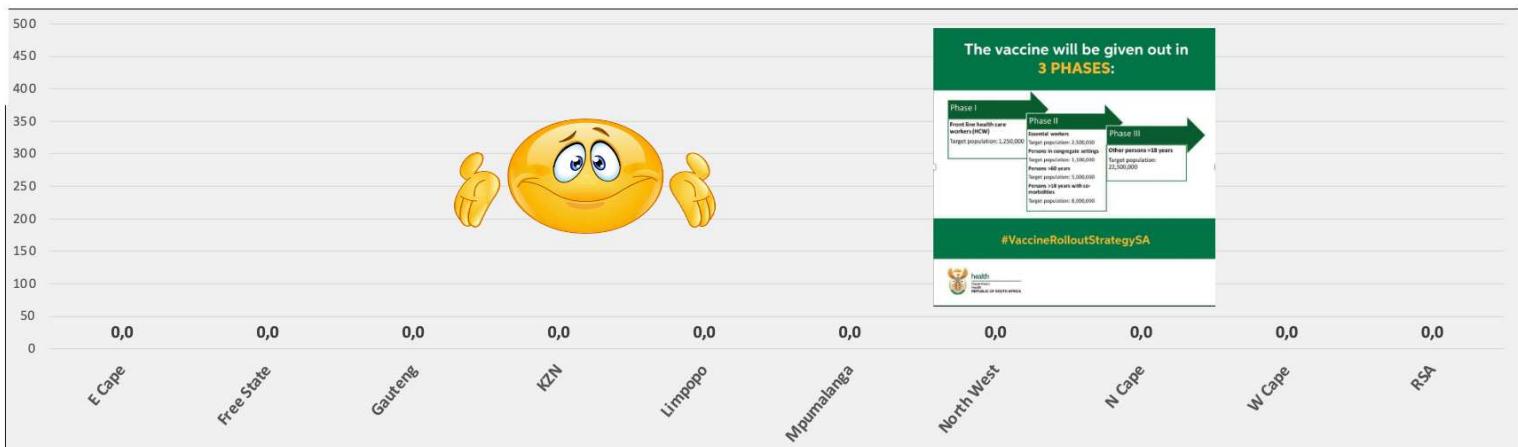
RSA & Major Prov's Daily Deaths:**1st Wave v 2nd Wave (Cont..) 7 Day MA's**

The X-axes scales have been adjusted in order to get the 1st & 2nd Wave Deaths aligned onto the same timeline. The unfolding 2nd Wave curves should therefore give a good indication of the 2nd Wave's rate of infection spread and severity resulting in fatalities.



Vaccination Data

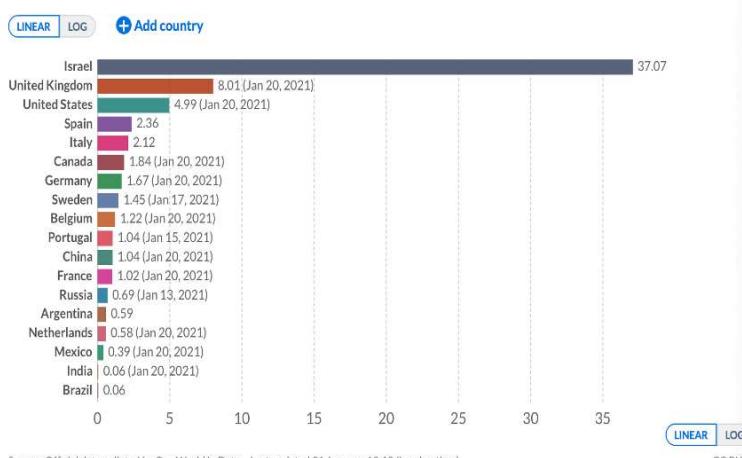
RSA: Vaccinations per 100k PoP :



Selected countries who publish their VAC data :

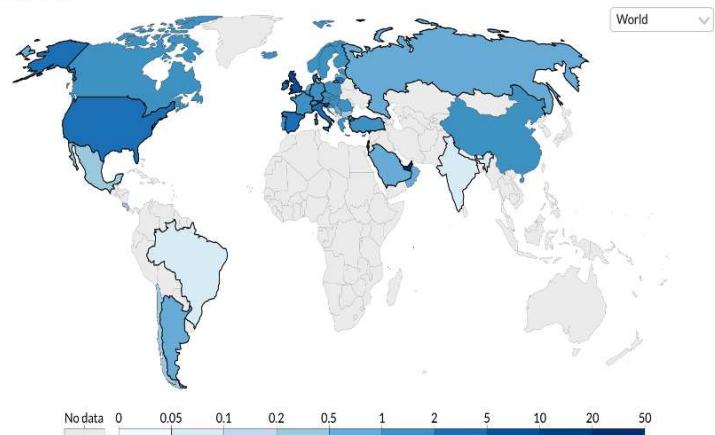
COVID-19 vaccine doses administered per 100 people, Jan 21, 2021

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

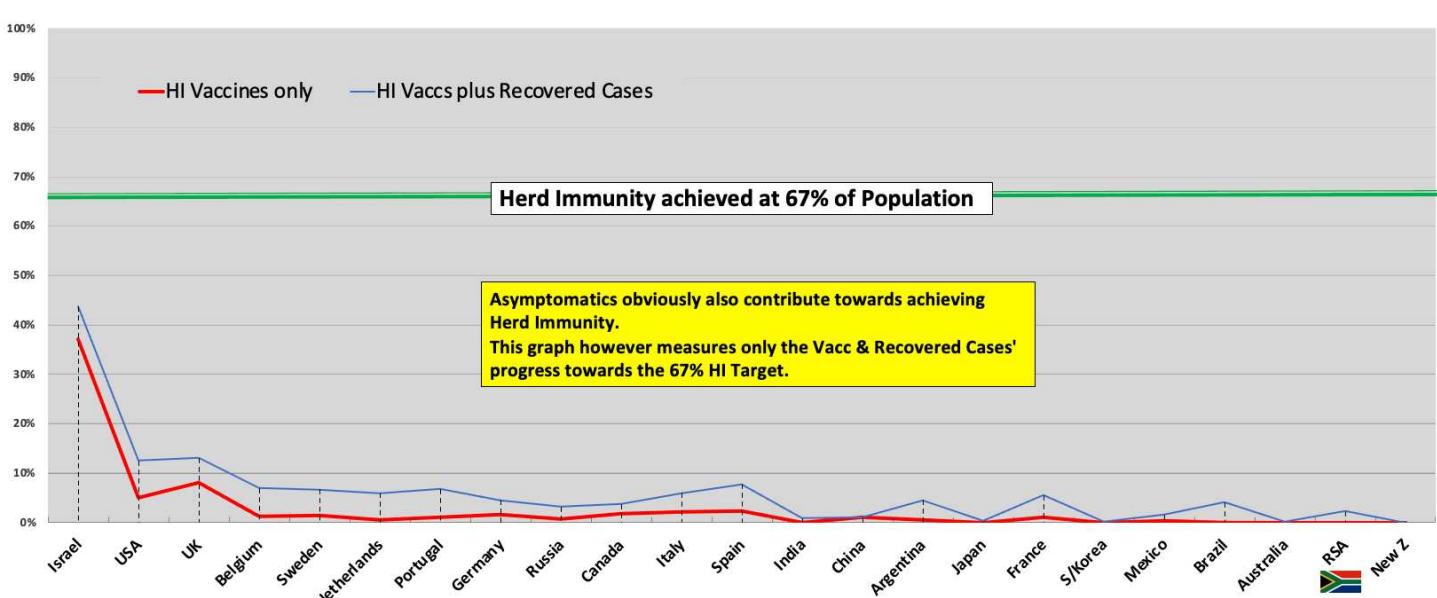


COVID-19 vaccine doses administered per 100 people, Jan 21, 2021

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



Selected Countries' Progress towards Herd Immunity (HI) :



Laughter is the best vaccine....



Rollout

