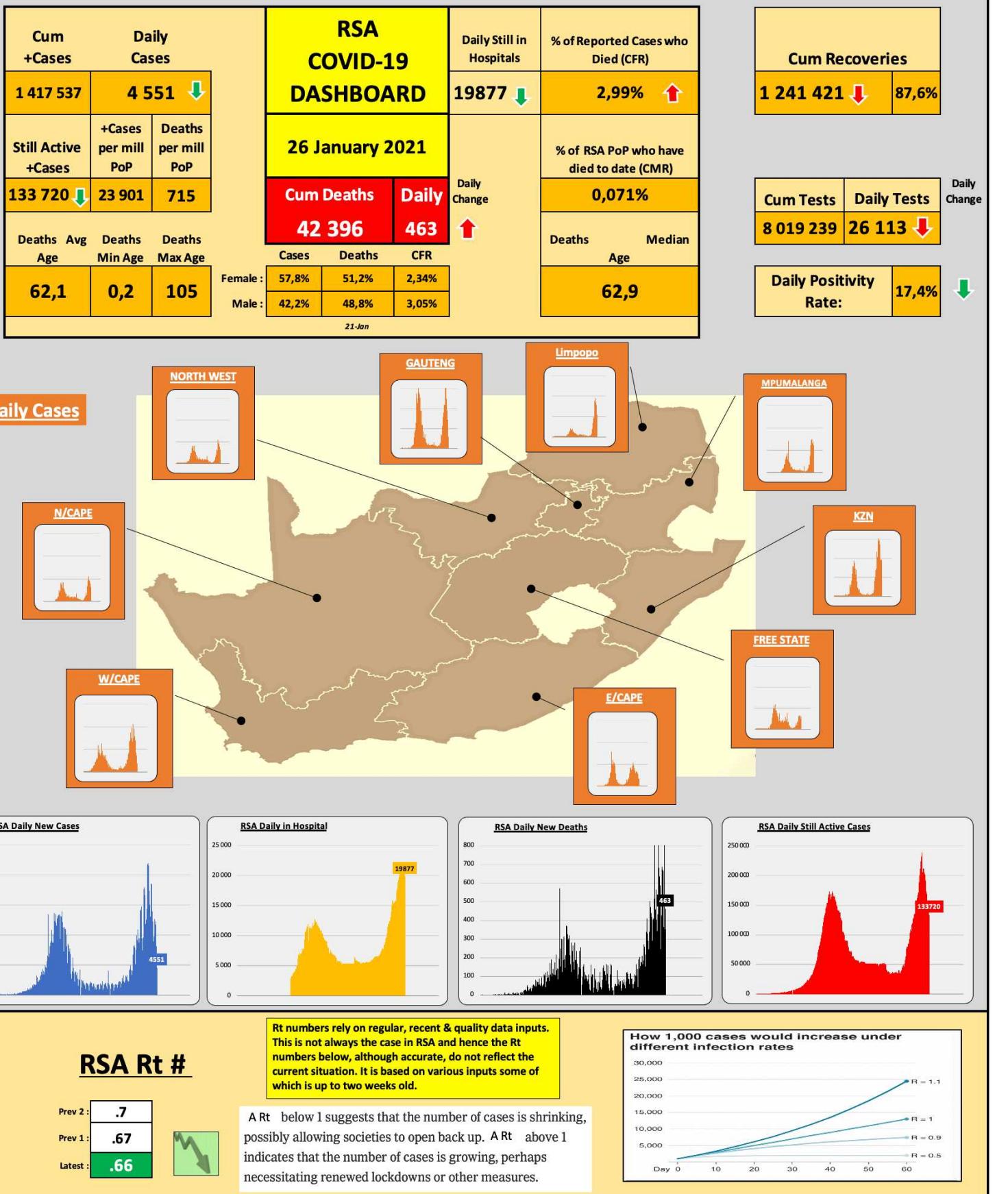
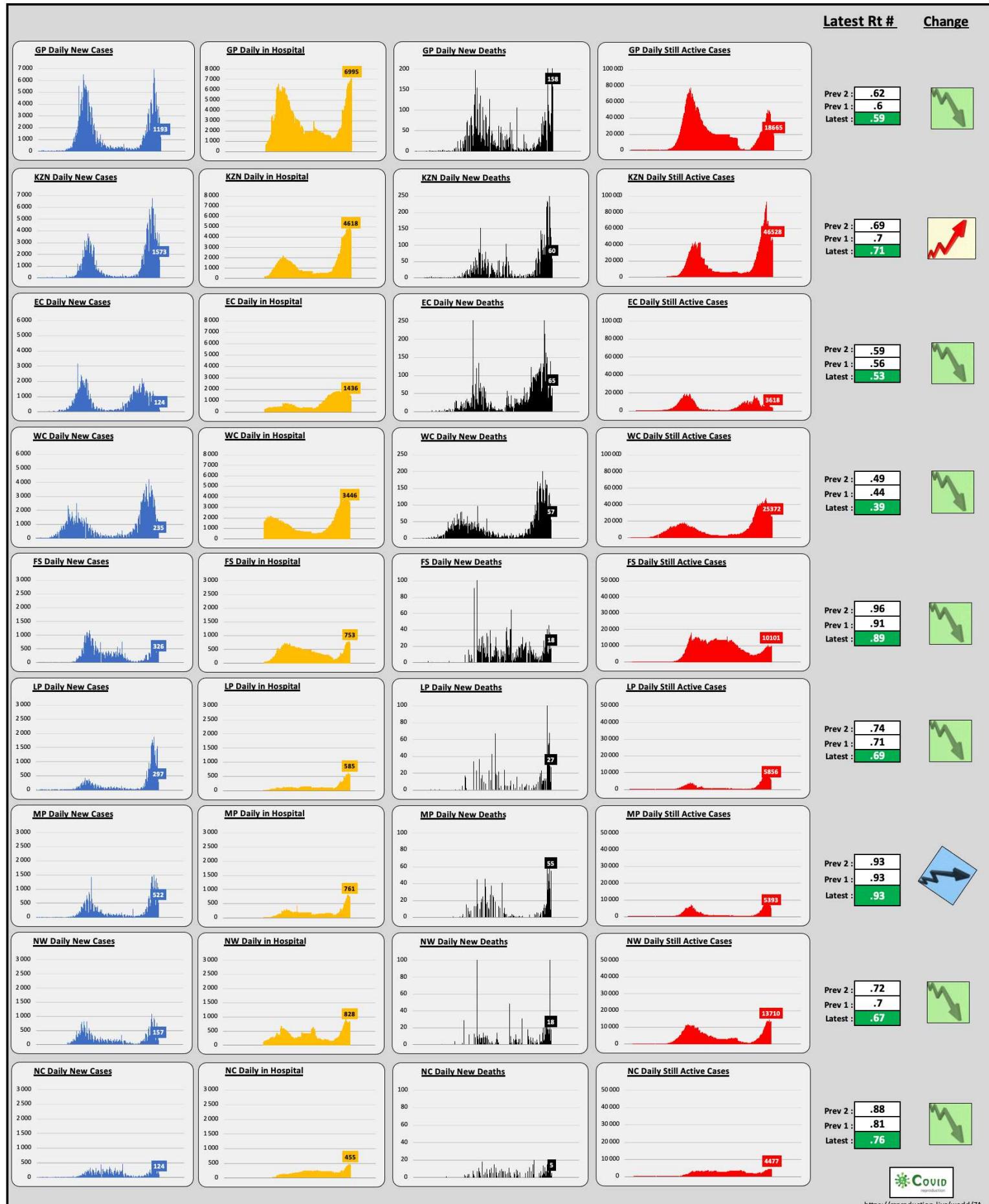


HarryG COVID-19 Dashboard

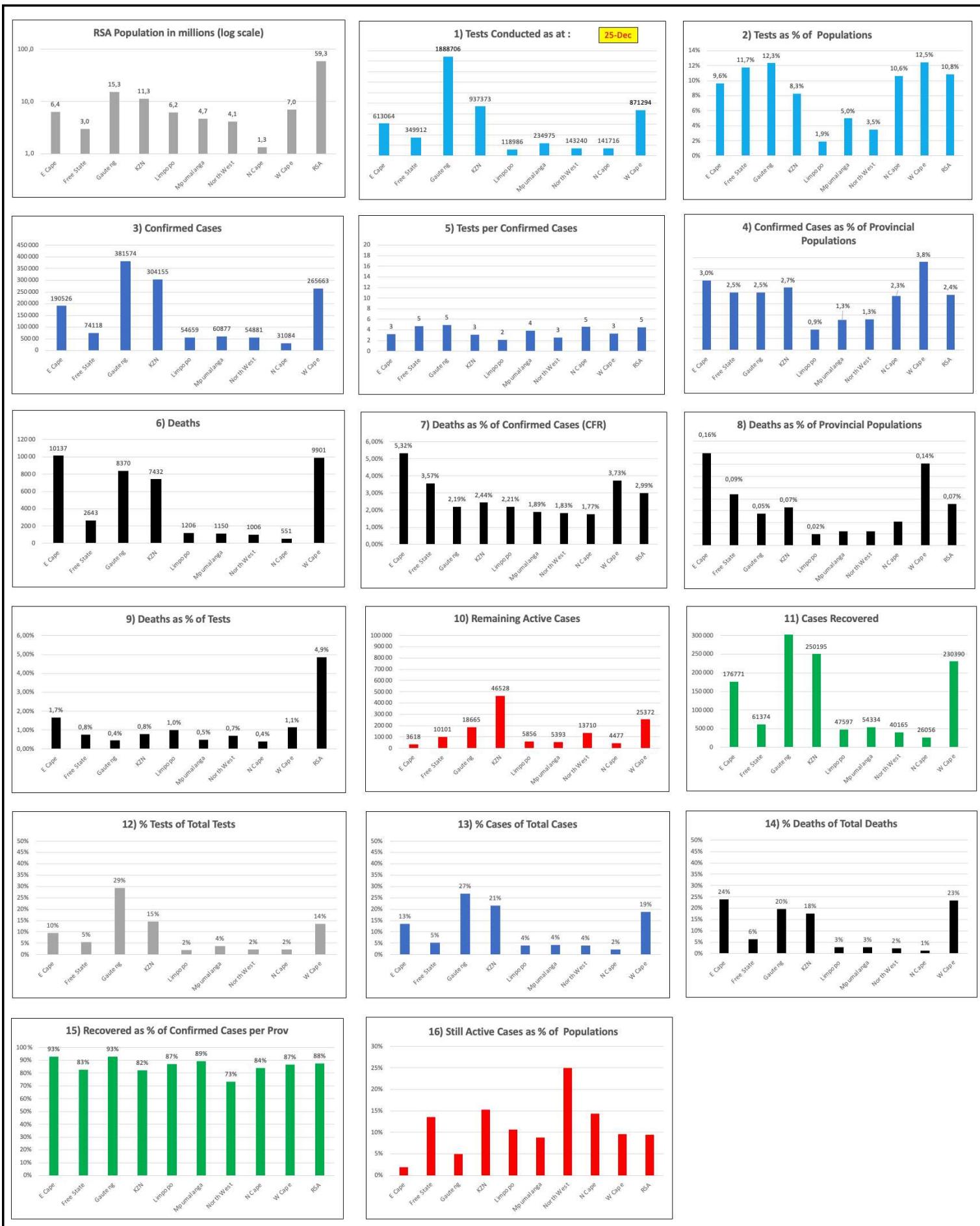


RSA Provinces detailed daily Data and Trends

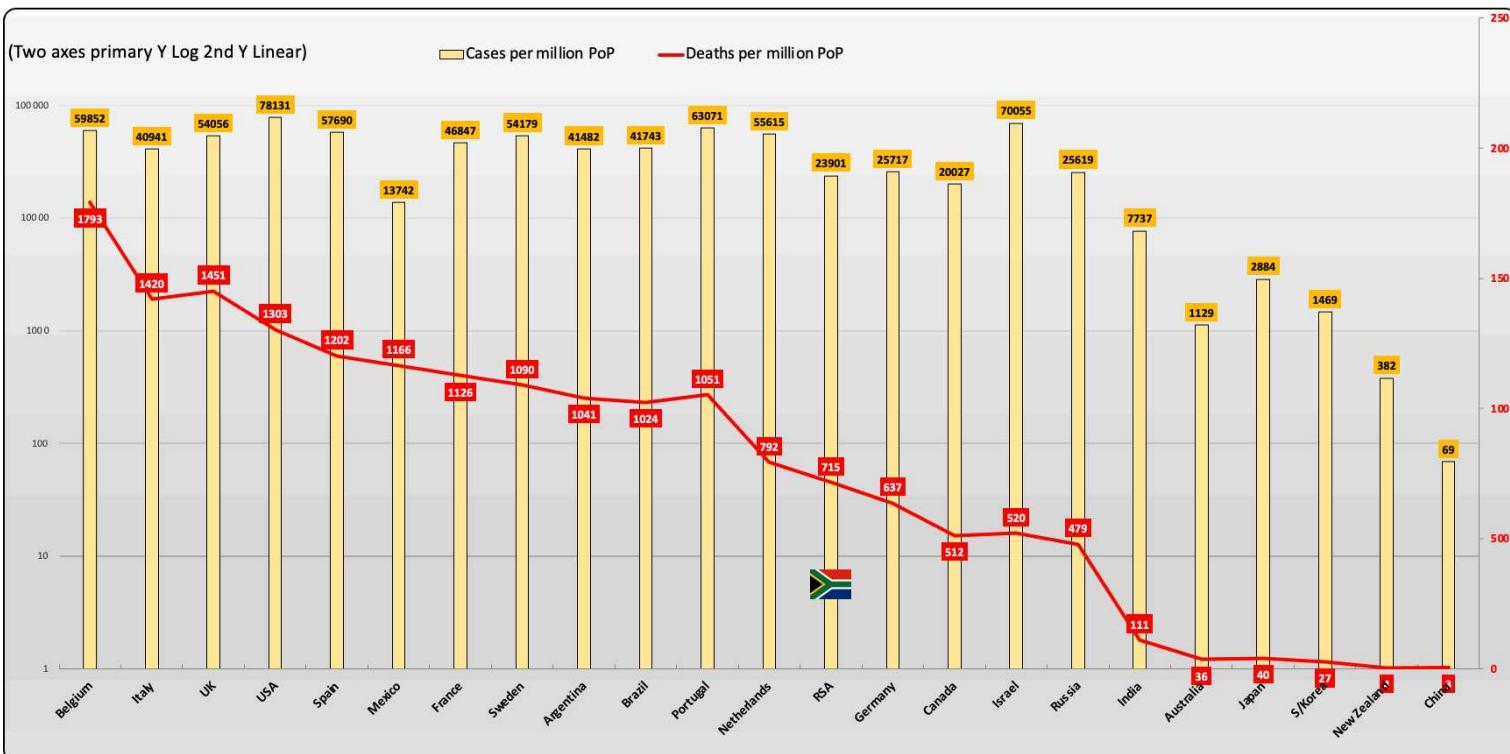
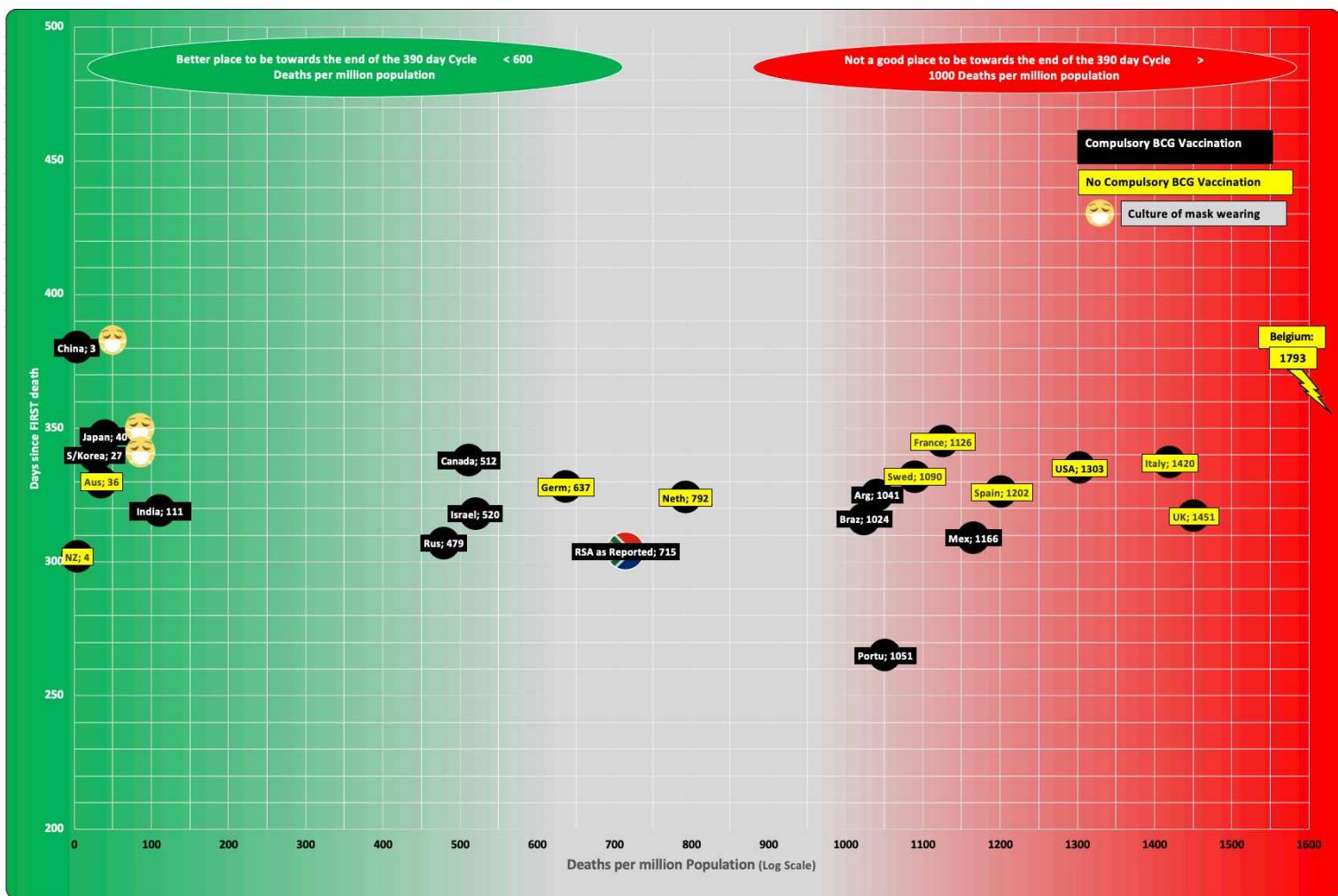
How old is the Data? : Cases 2-5 days, Hospitalisation 1-3 days, Deaths 4-10 days, Still Active Cases 4-10 days, Rt #'s 3-10 days



RSA Covid Stats: National & Provincial Data & Ratios



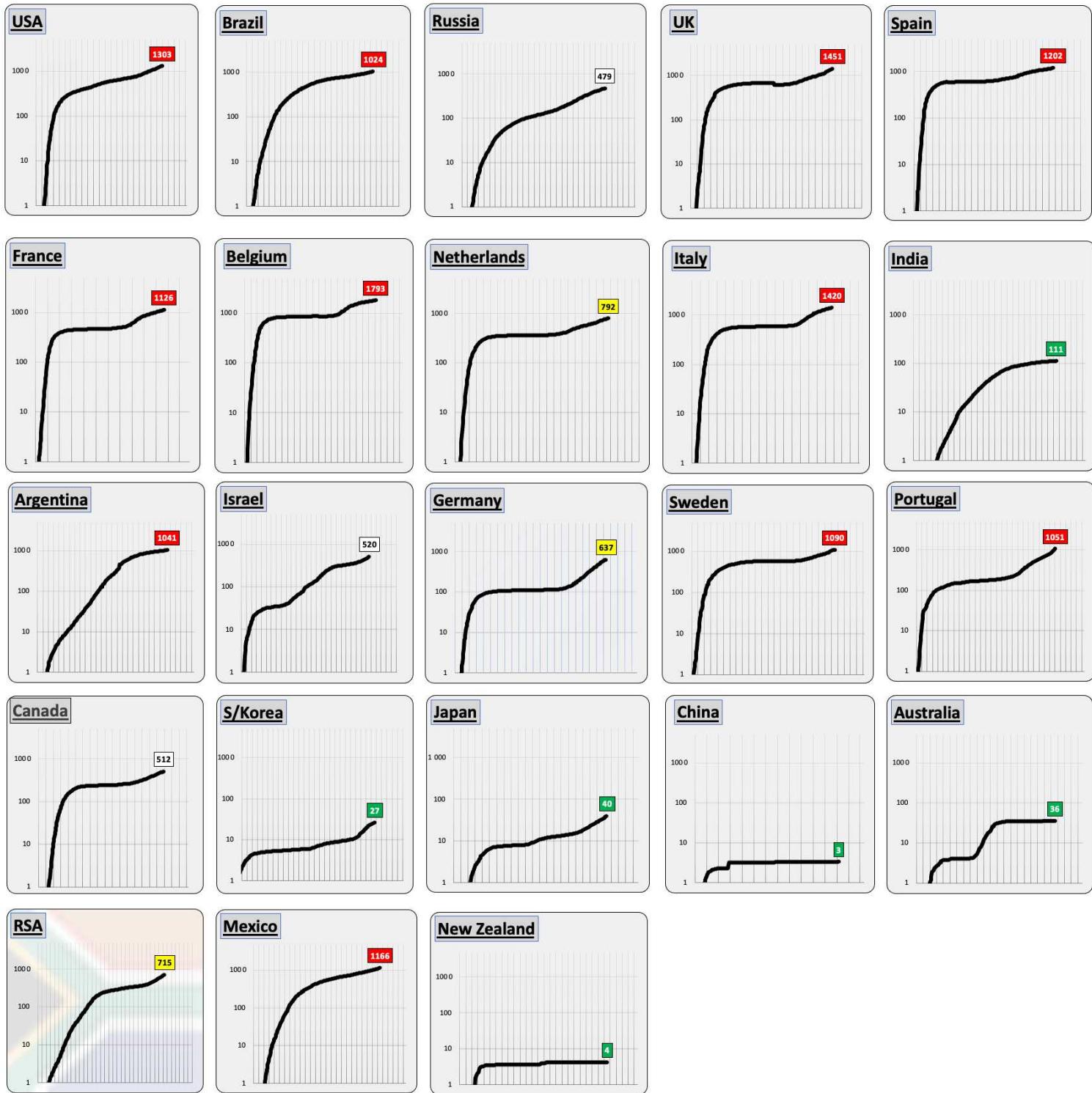
Selected Countries' Reported Cases & Deaths per mill PoP



Cum Deaths per mill PoP for selected countries

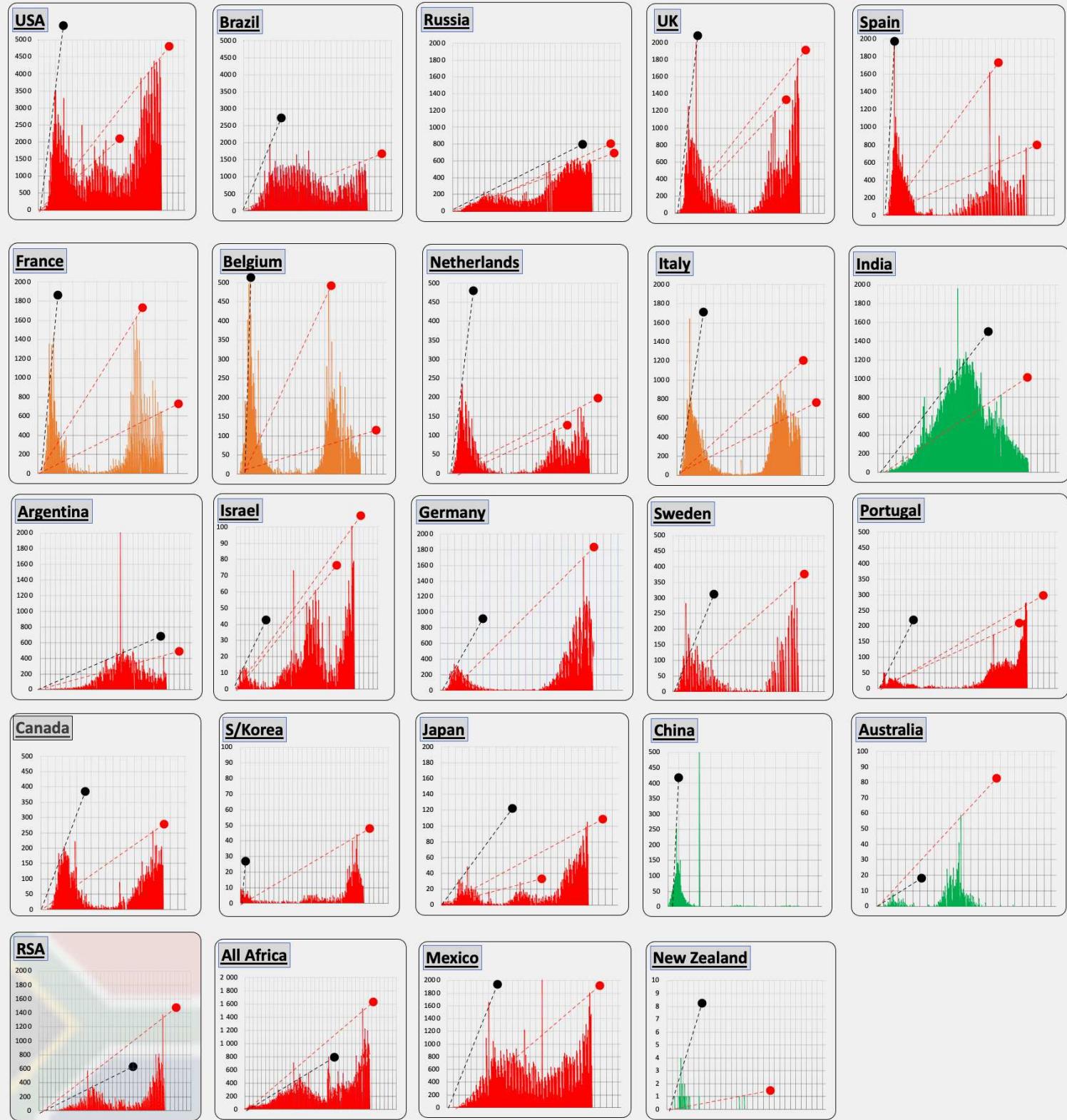
All on same Log Scale (compare Apples with Apples)

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



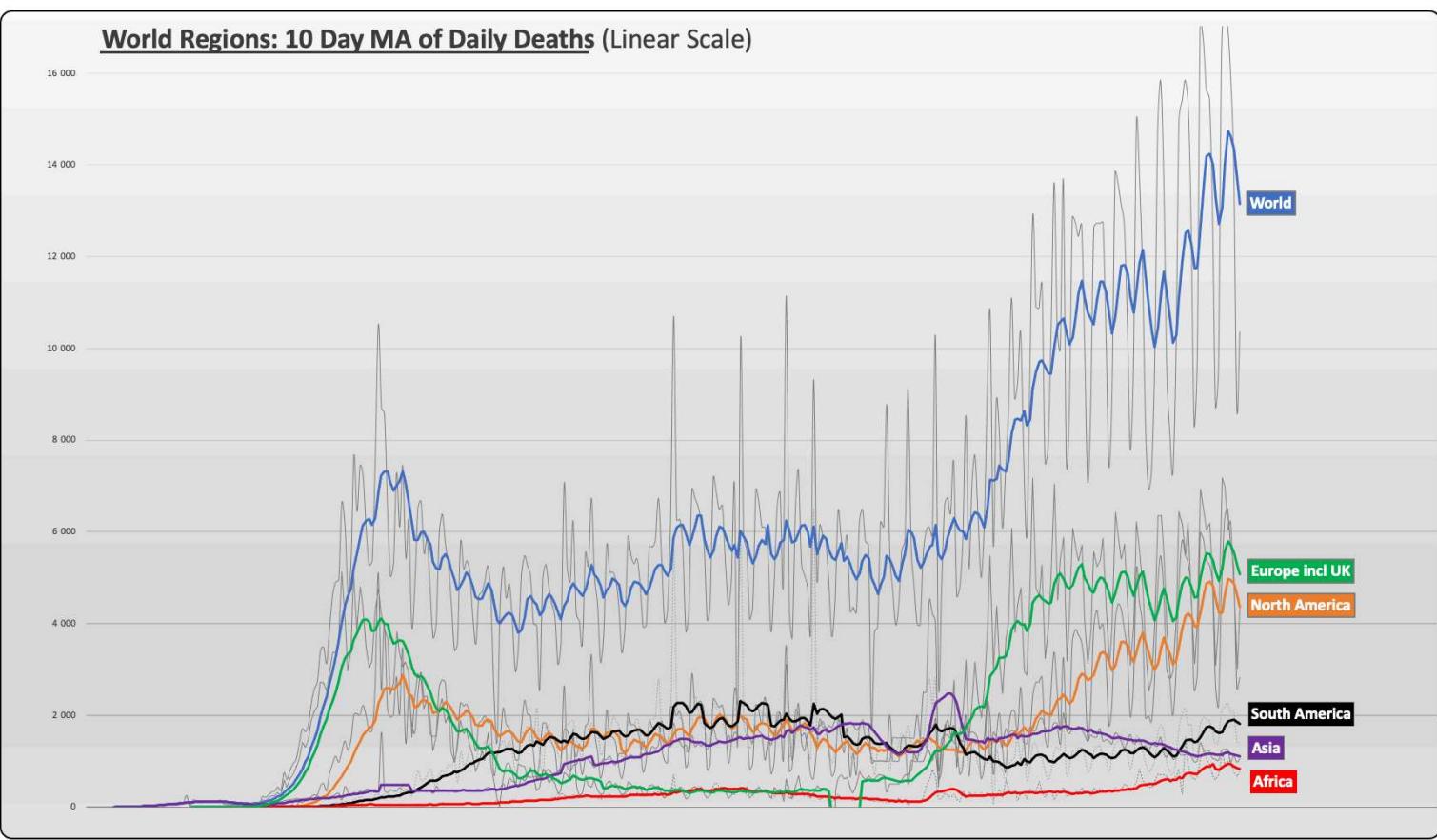
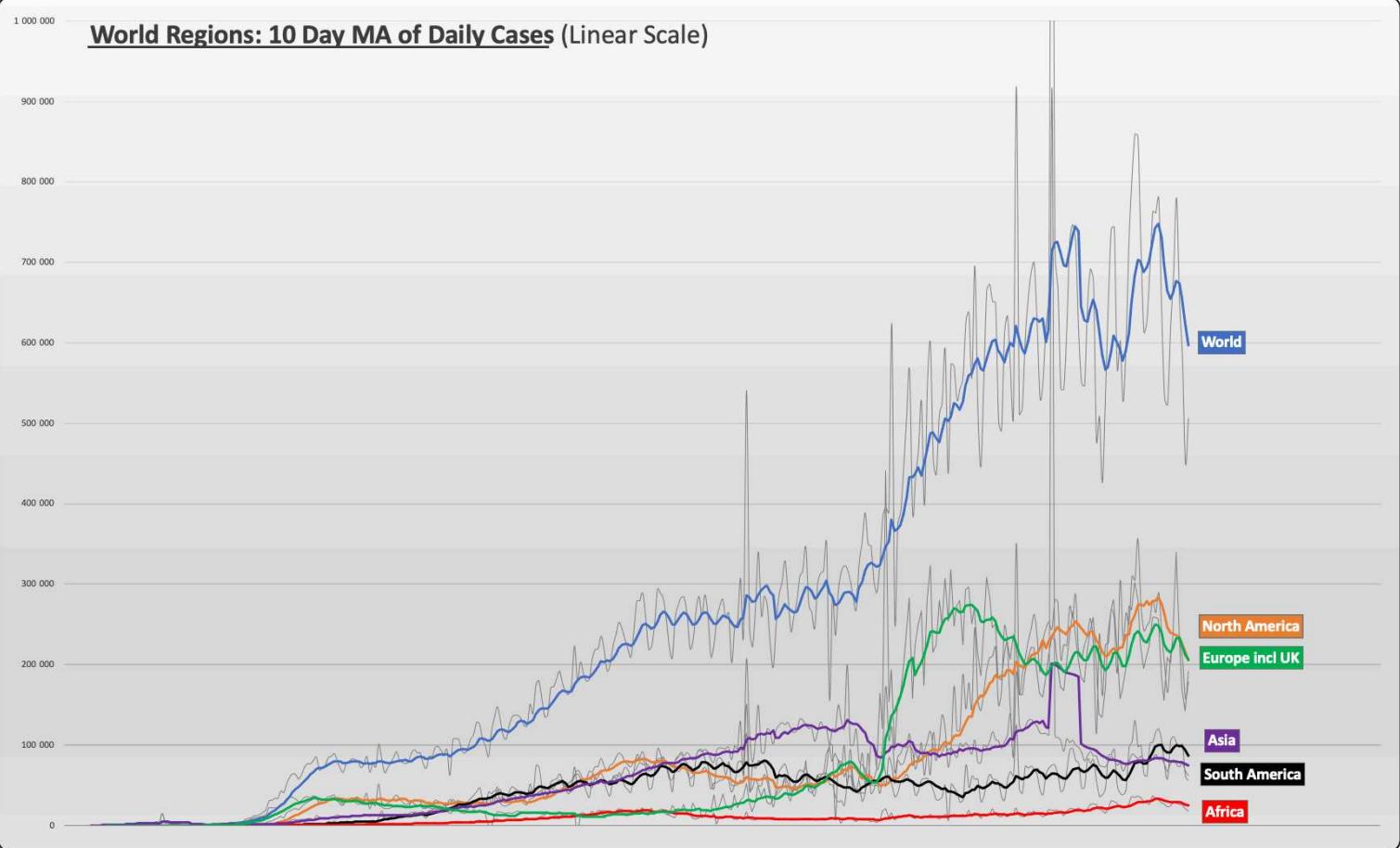
Daily Deaths Curves & Rate of Onset/Next Wave "Inclinometers" for selected countries

Daily Deaths from date of 1st death

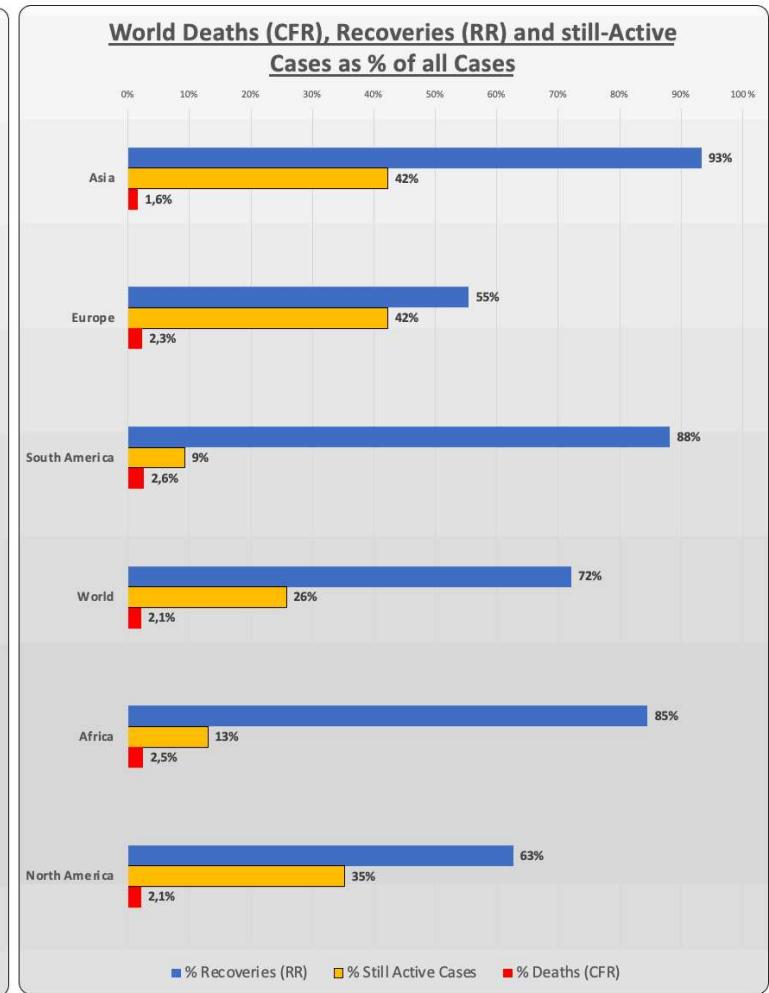
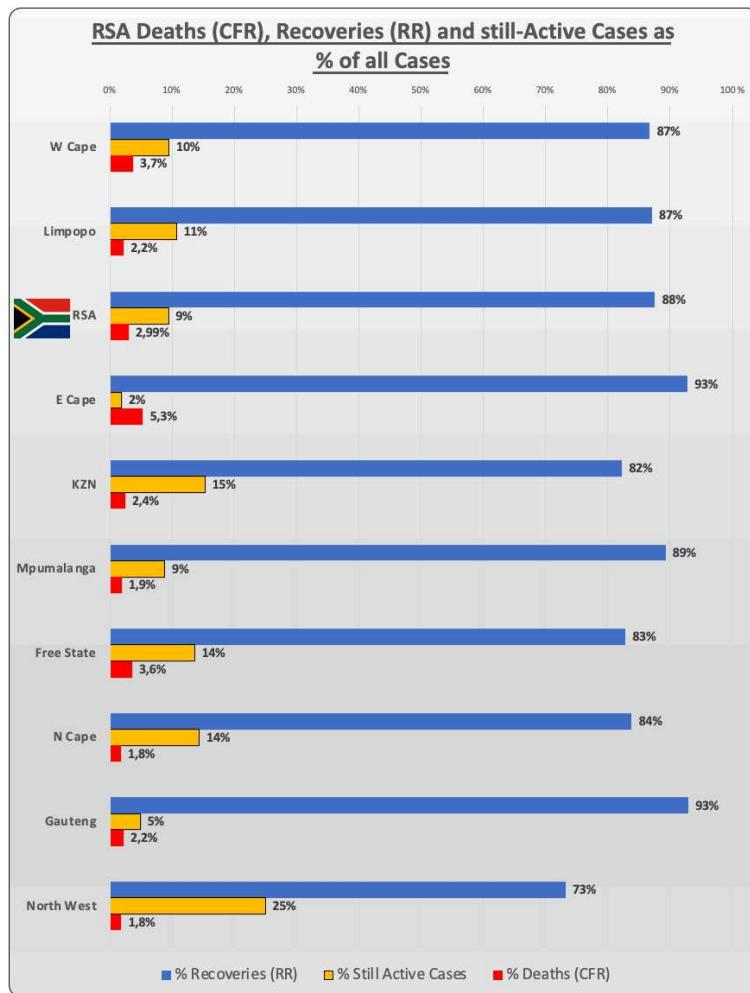
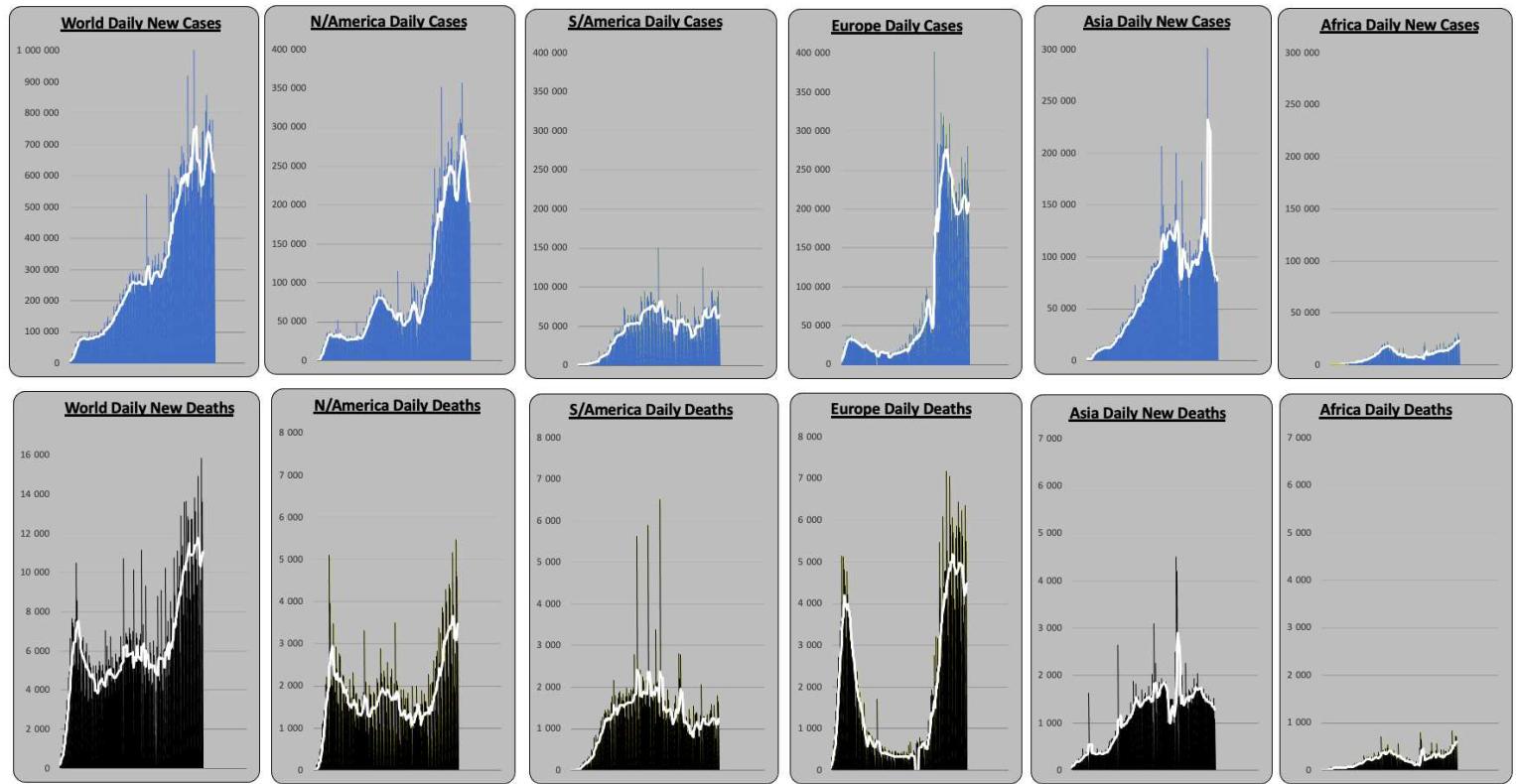


10 Day Moving Average of Daily Deaths & Cases by World Region

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: **5656**
 Highest Daily Covid Deaths 2020 to date: **17654**
 Latest Daily Covid Deaths 2020 to date: **10356**

Red line =
Reported Covid
Deaths.

WHO_2018_World_Mortalities.pd

	146573
Cardio	48742
Cancer	26181
Respiratory incl Flu	17734
Digestive & Diarrheal	10040
Dementia	6869
Neonatal	4887
Diabetes	3753
Liver	3624
Traffic	3406
Renal	3370
TB	3243
HIV	2845
Suicide	2175
Malaria	1698
Malnutrition	1375
Homicide	1111
Parkinson's	933
Natural Disasters	835
Meningitis	789
Childbirth	531
Alcohol Abuse	507
Drug Abuse	456
Armed Conflicts	355
Hepatitis	346
Climatic	146
Terrorism	72



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.

The BLUE line in the bottom RSA graph shows the SAMRC Excess Deaths per week numbers.

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

Avg Daily Covid Deaths since 1st Death 2020 to date: **93**
 Highest Daily Covid Deaths 2020 to date: **1374**
 Latest Daily Covid Deaths 2020 to date: **463**

Excess Deaths
at
16 Jan

Red line =
Reported daily
Covid Deaths.

Blue line =
Excess Deaths
(see Pg 5)

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

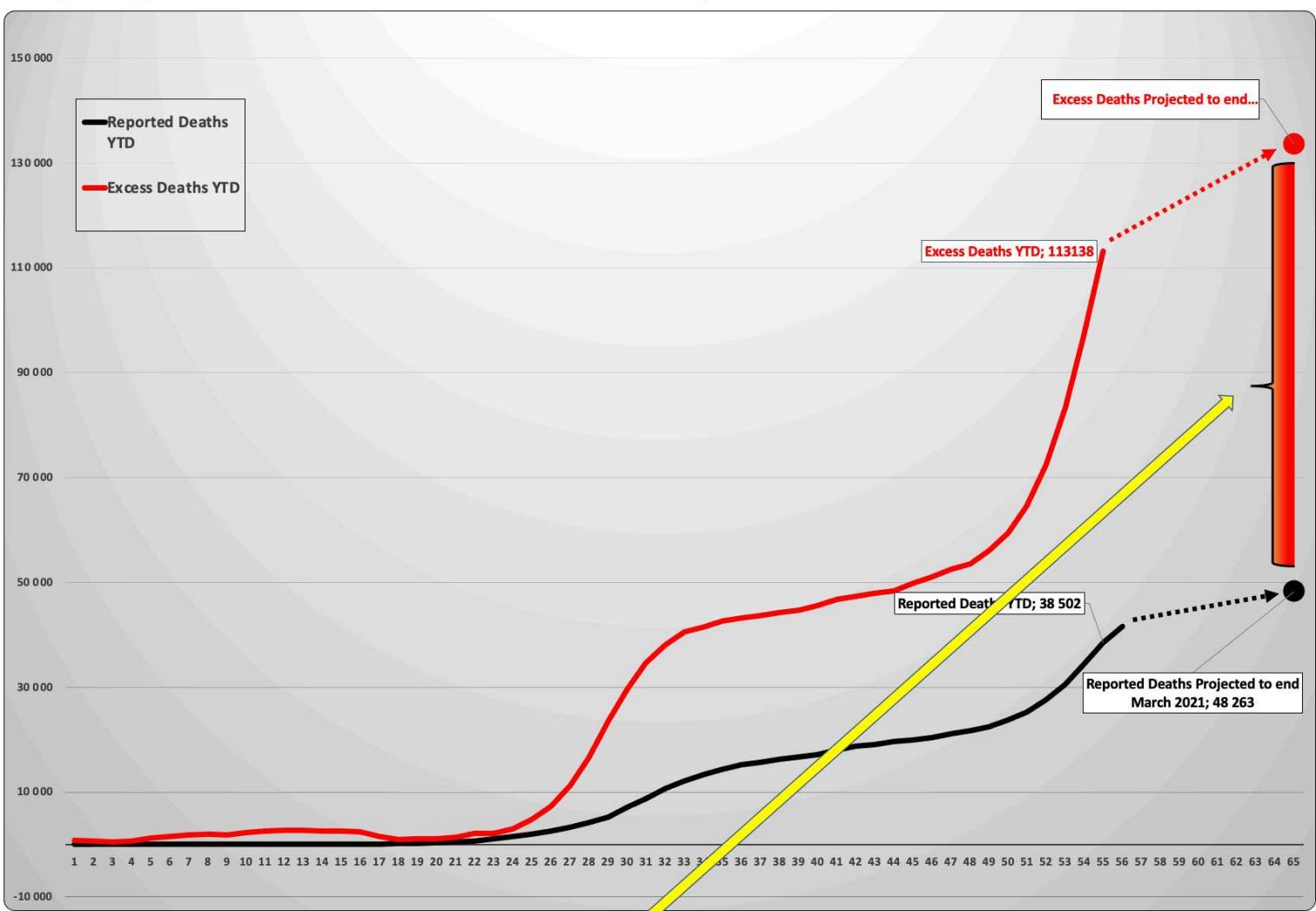
	1223
Natural Causes	543
Unnatural Causes	140
Cardio	96
Respiratory incl Flu	88
TB	79
Diabetes	69
Cancers	61
HIV	59
Hypertensive	55
Other Viral	46

Covid Deaths: Reported and Excess Deaths

Page 3.3

Trends & Projections for end March 2021

(See Pg 4.1 for more details on RSA Excess Deaths)



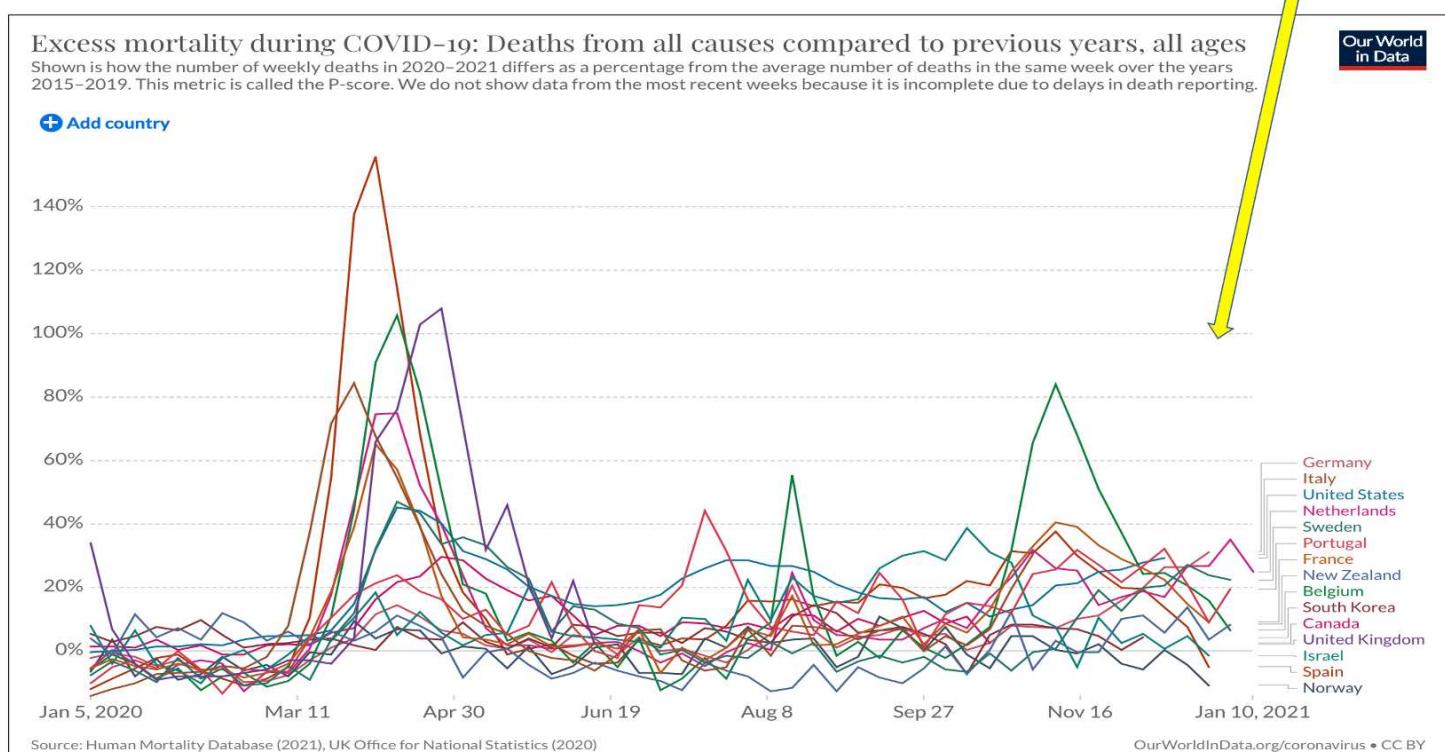
Excess Deaths %'s :

RSA

193,8%

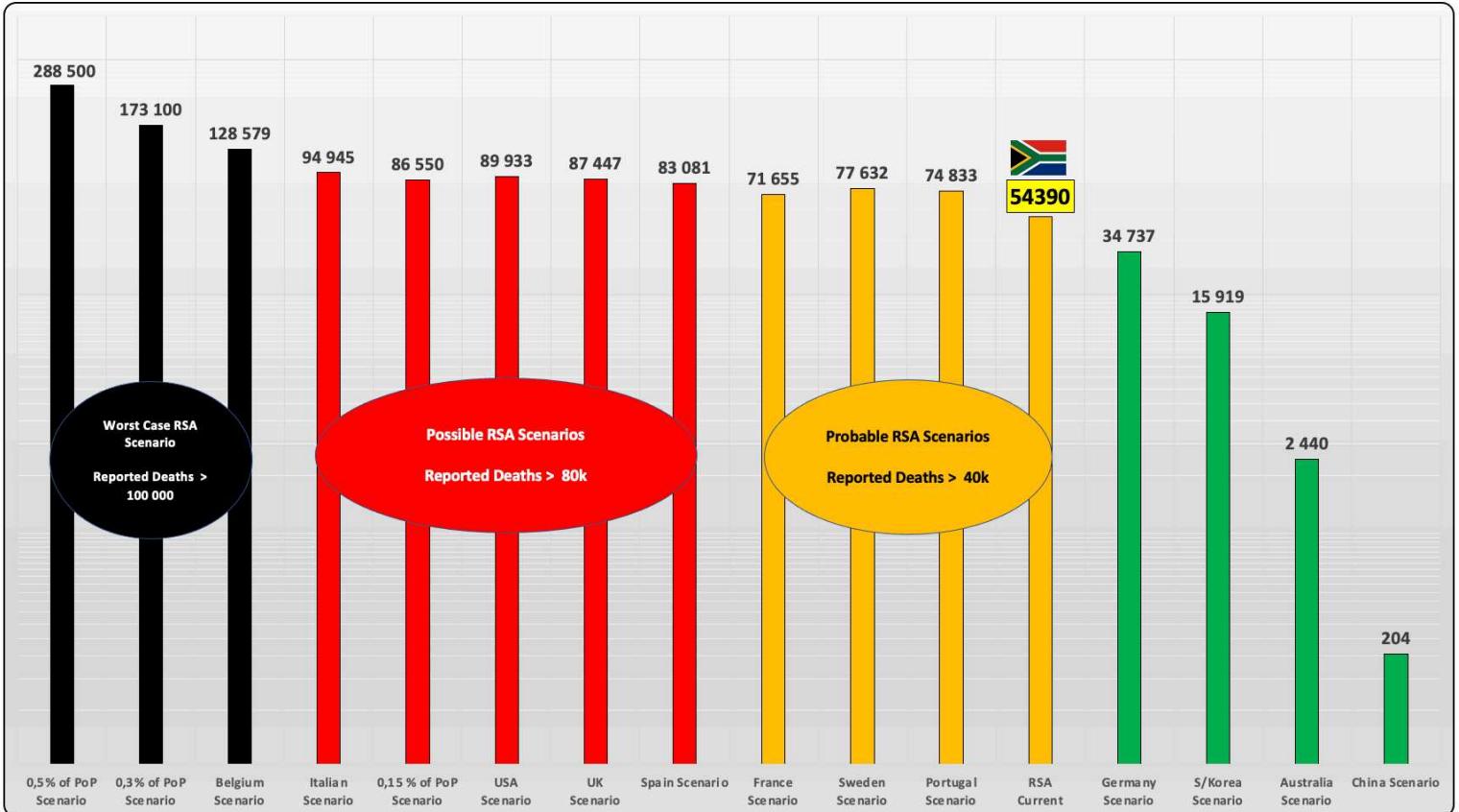
Selected Countries

avg approx 15%



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

15 Scenarios and 1 Projection (Log Scale)

**Key:**

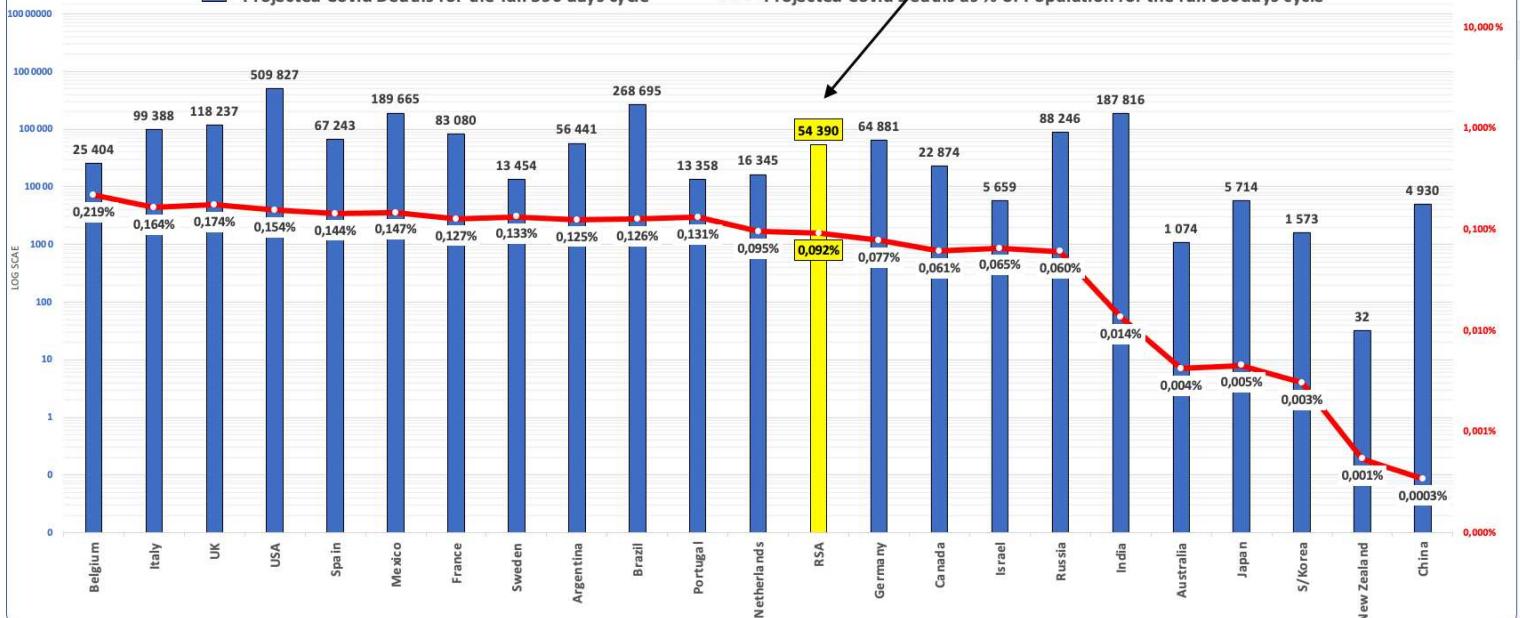
All Scenarios duly adjusted daily for population size and for the different timelines into the deemed 390 day pandemic cycle.

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



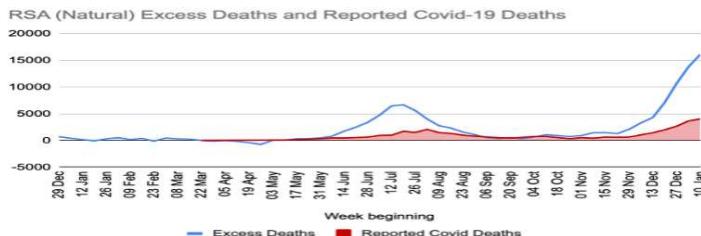
Note: Above Mortality %'s are overall projected mortality of the populations (PMR), NOT deaths of only those infected (CFR).

RSA Excess Deaths as per SA Medical Research Council

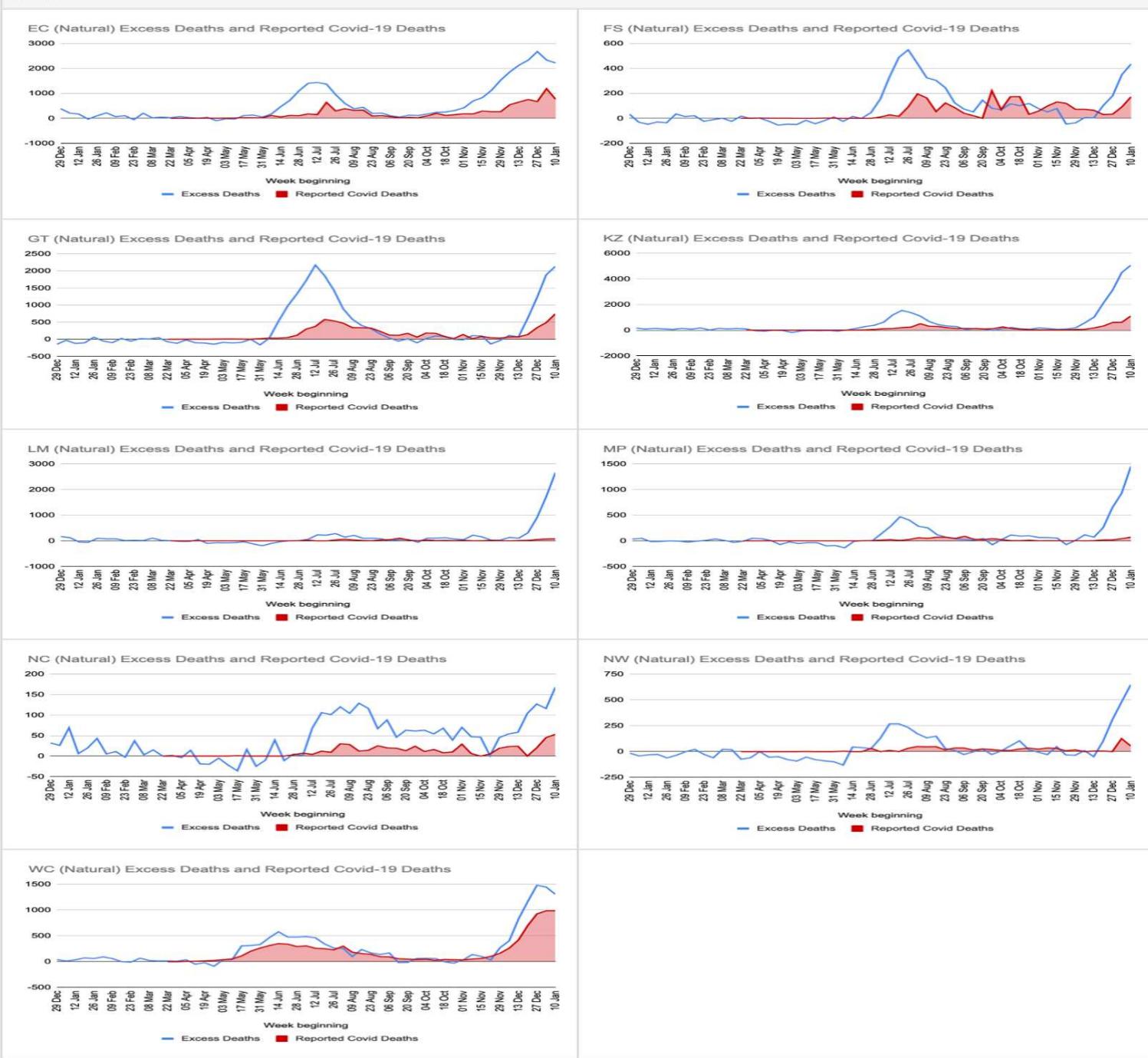
Data as at:

16 January 2021

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 socalled "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).

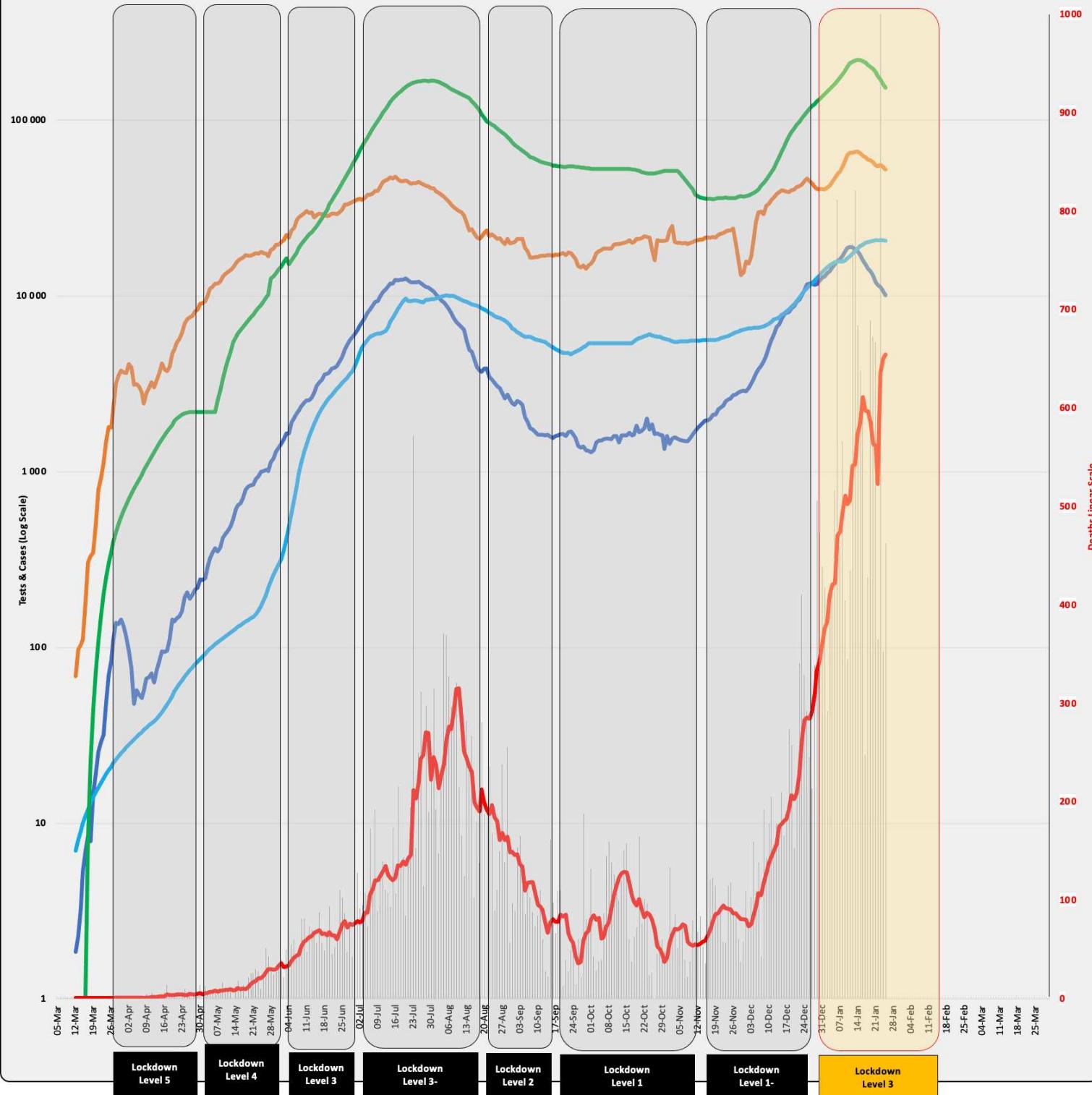
Data as at:

Latest Available

hdg 26 January 2021

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

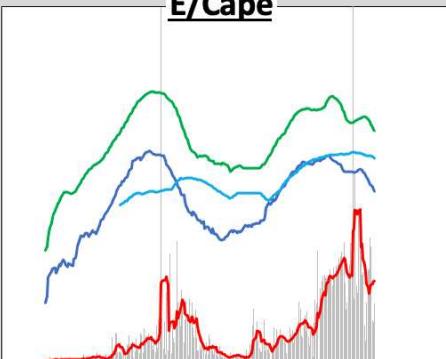
— Daily Tests — Daily Cases — In Hospital — Active Cases — Daily Deaths



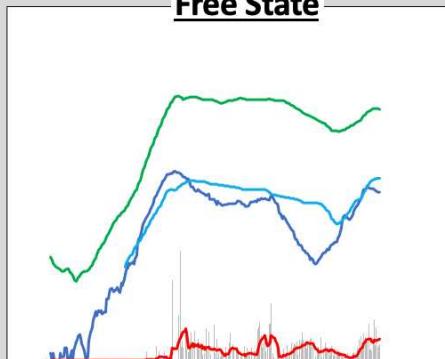
RSA Provinces Daily Cases/Hospitals/Actives/Deaths (7 Day MA)

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

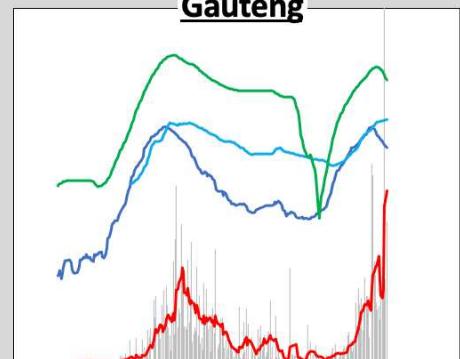
E/Cape



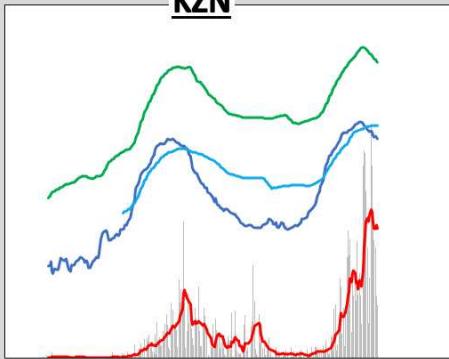
Free State



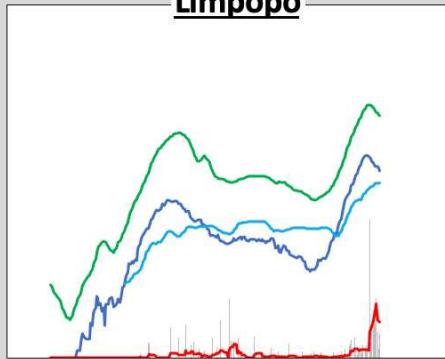
Gauteng



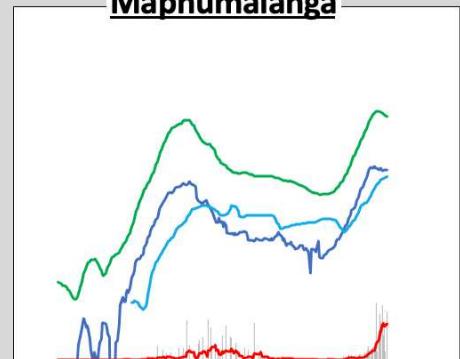
KZN



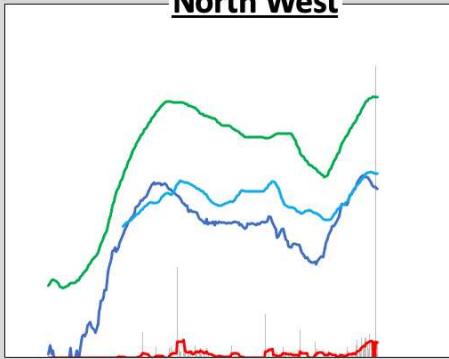
Limpopo



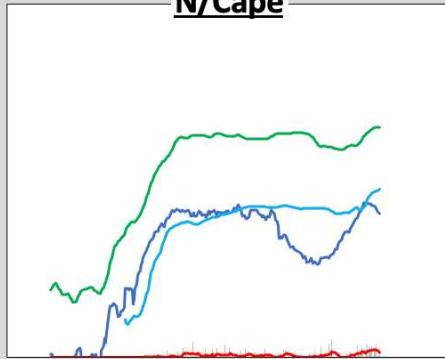
Maphumalanga



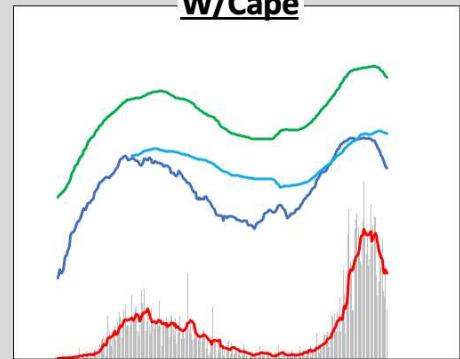
North West



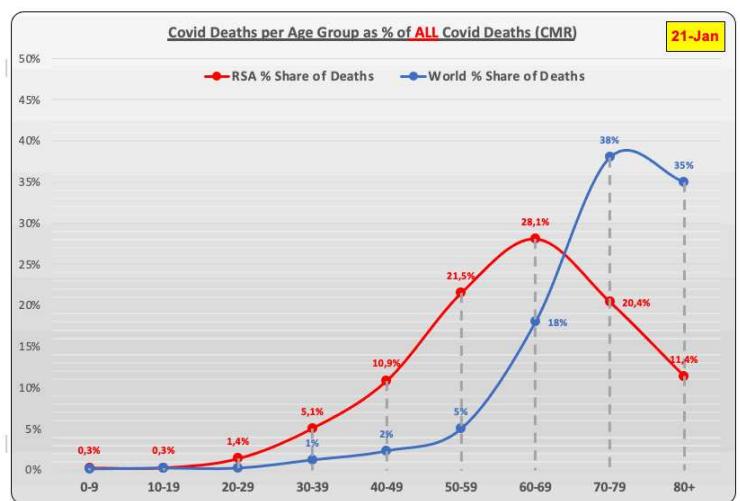
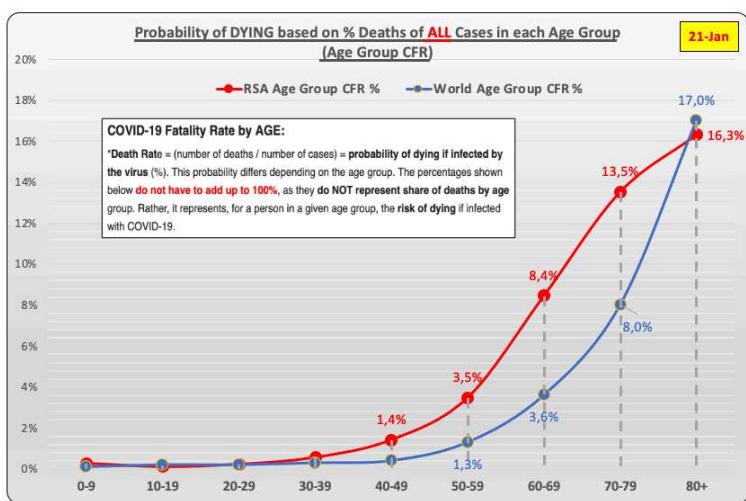
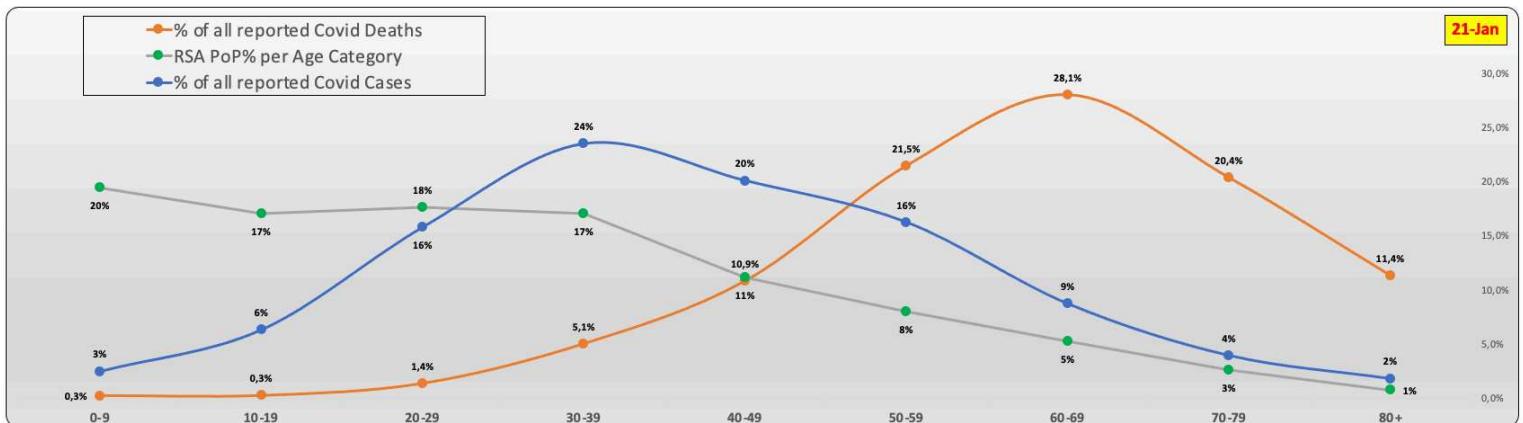
N/Cape



W/Cape

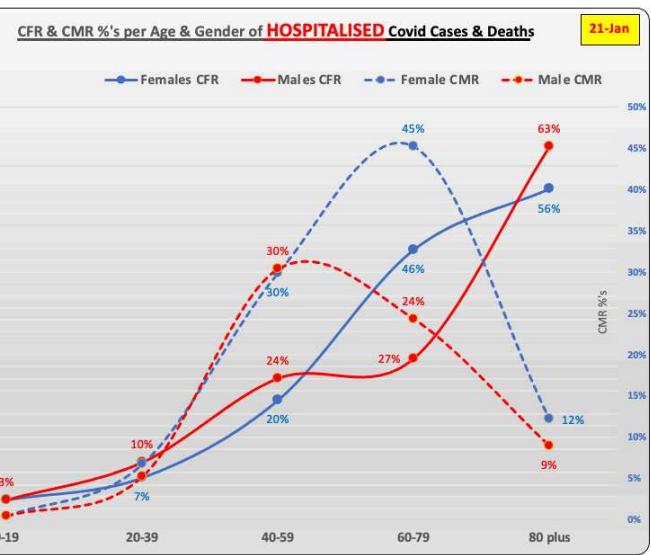
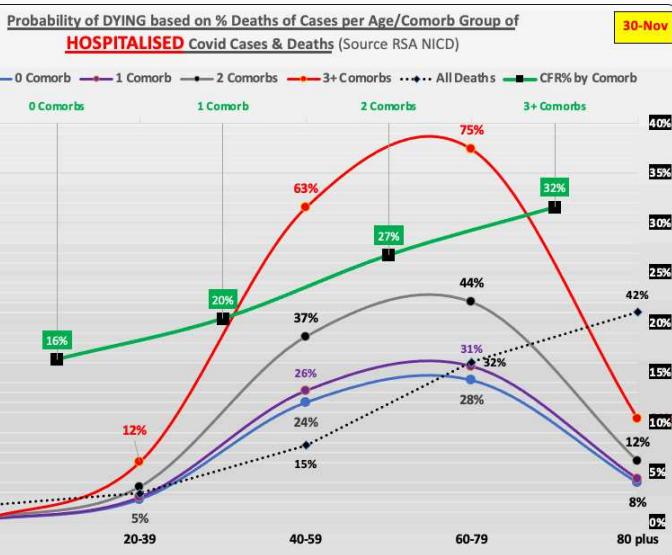


RSA Age & Gender Stats



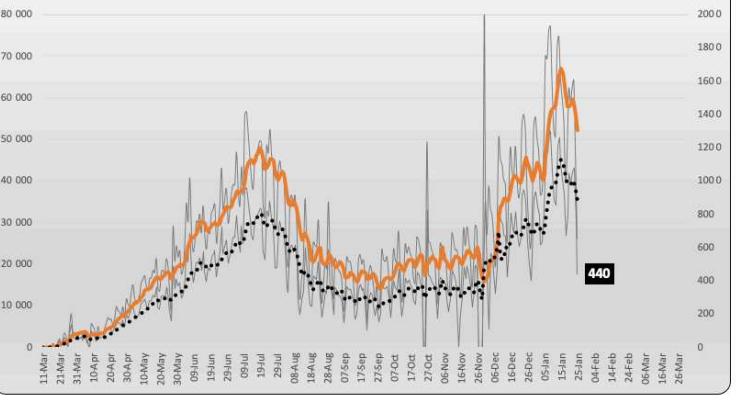
COVID-19 Fatality Rate by AGE:

*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.



RSA: Daily Tests per million PoP

— 10 per. Mov. Avg. (DailyTests) ••••• 10 per. Mov. Avg. (TpmpoP)



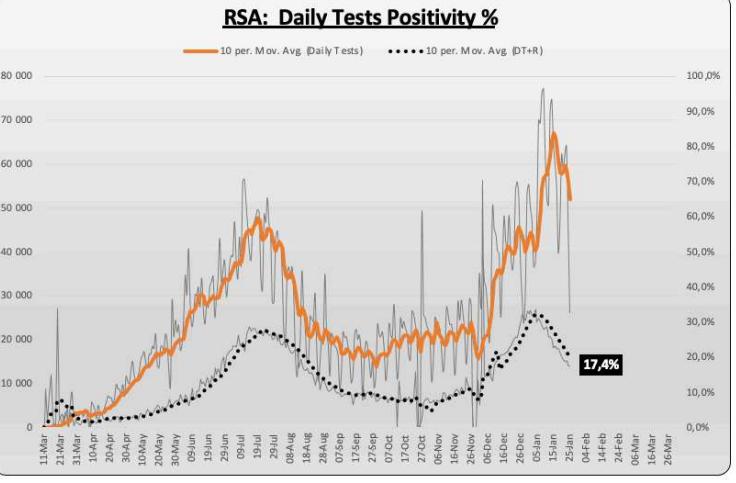
RSA: Daily Tests per +Case

— 10 per. Mov. Avg. (DailyTests)



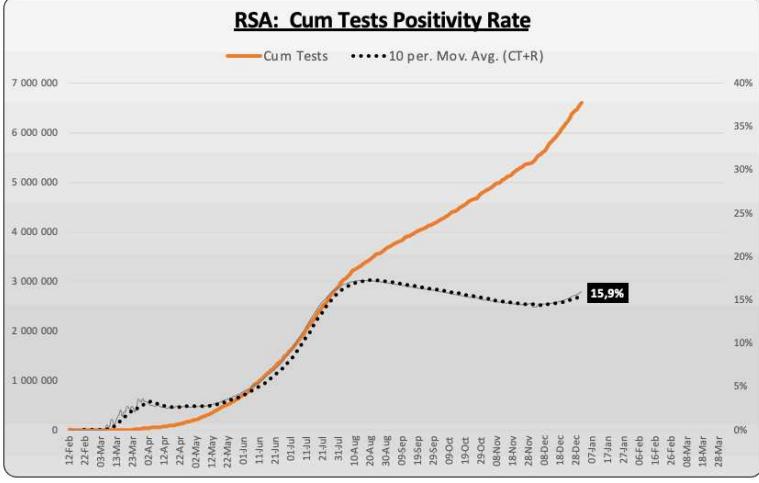
RSA: Daily Tests Positivity %

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

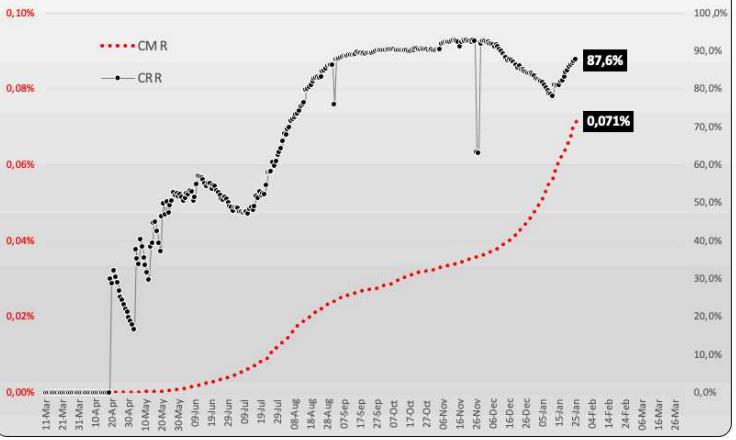


RSA: Cum Tests Positivity Rate

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

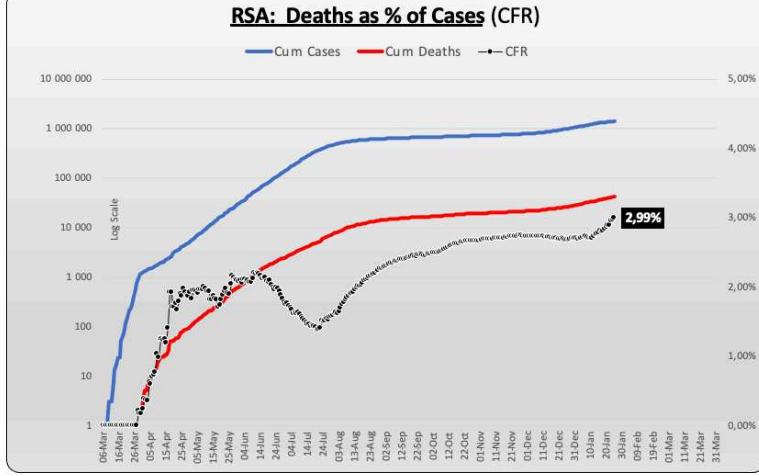


RSA: Case Recovery Rate (CRR) & PoP Mortality Rate (CMR)



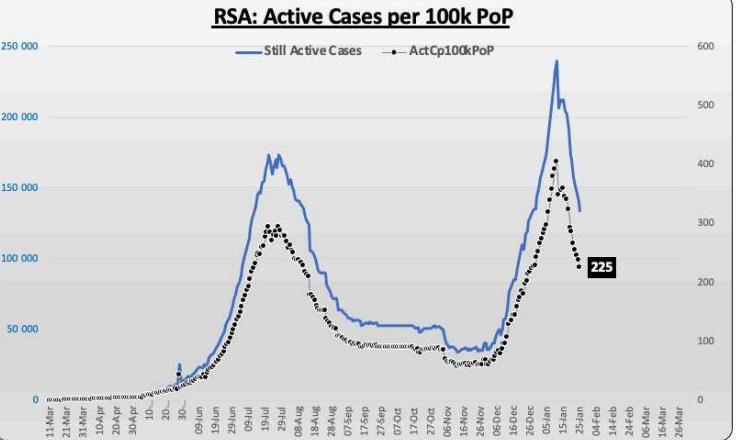
RSA: Deaths as % of Cases (CFR)

— Cum Cases — Cum Deaths — CFR

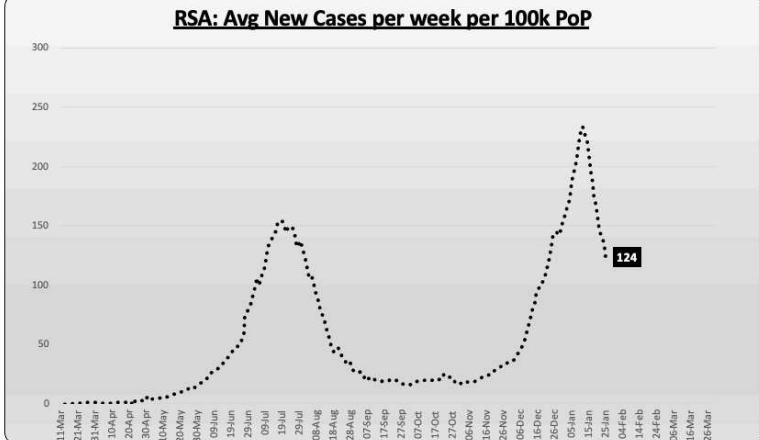


RSA: Active Cases per 100k PoP

— Still Active Cases — ActCp100kPoP



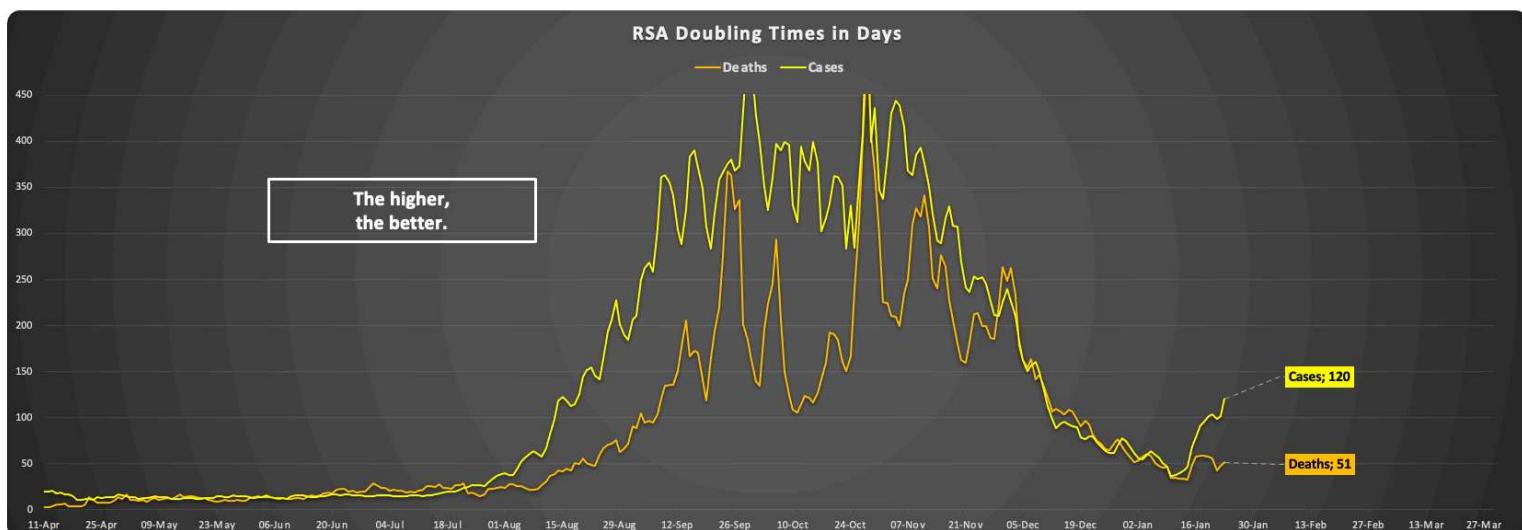
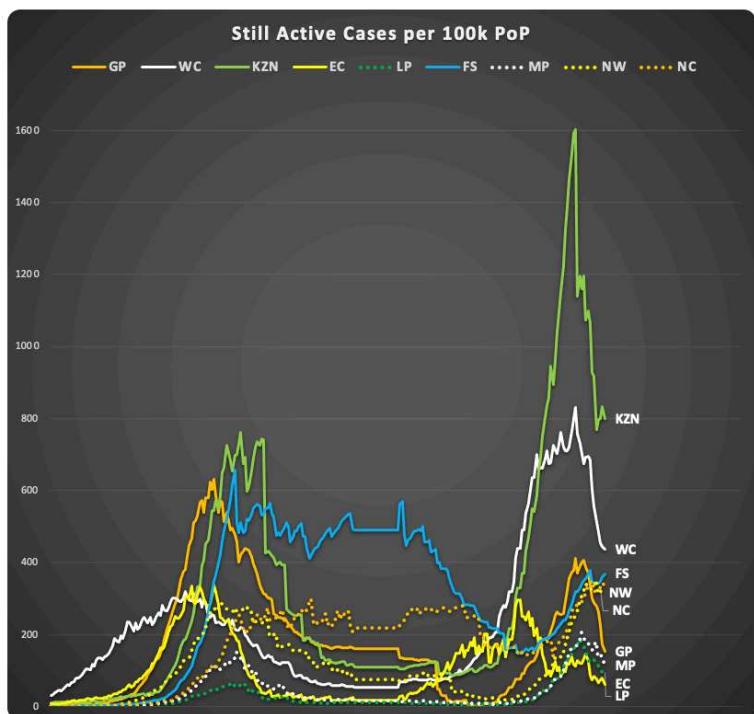
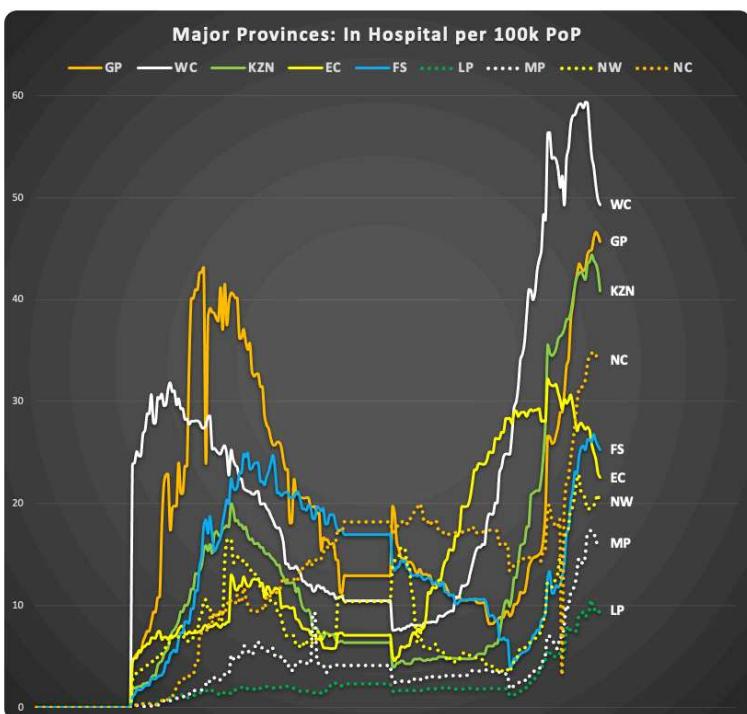
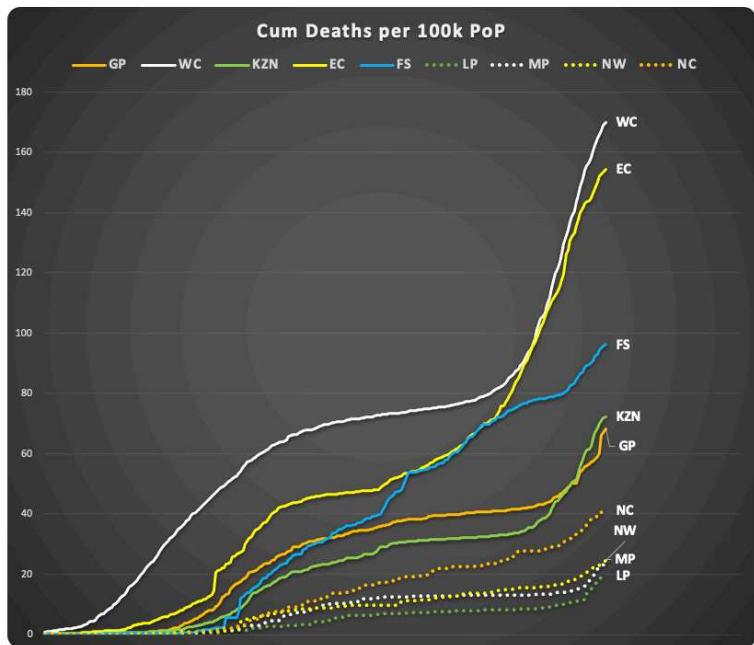
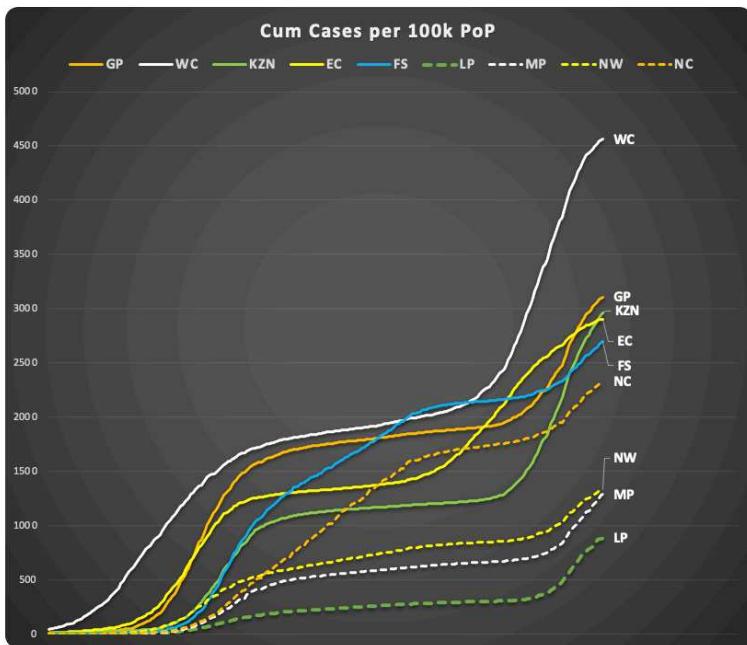
RSA: Avg New Cases per week per 100k PoP



RSA & Provinces Key Data Sets

Page 5.5

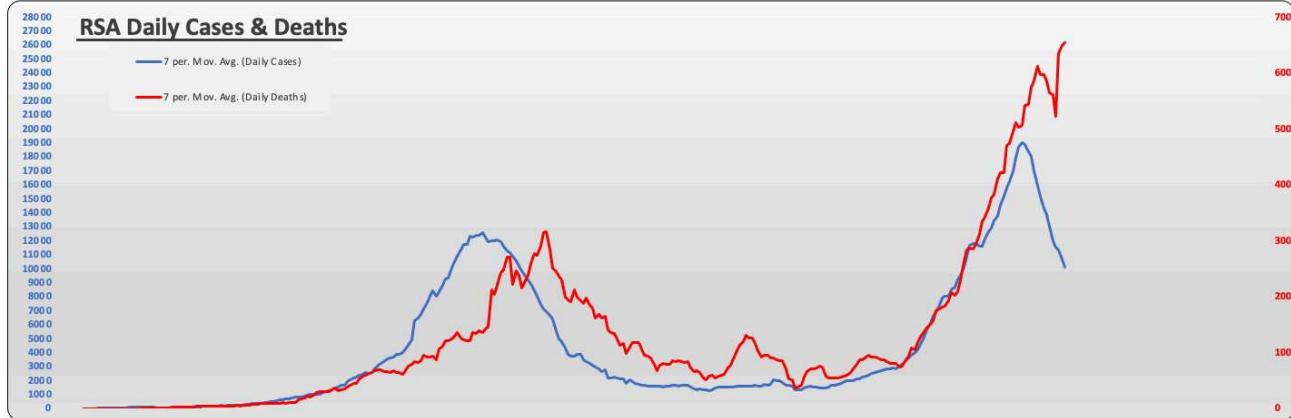
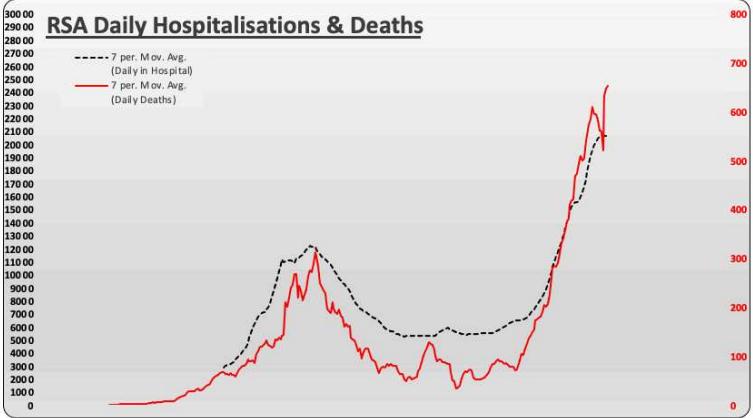
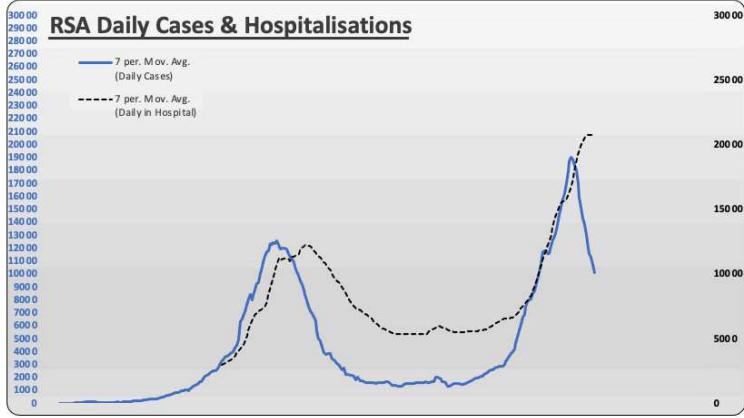
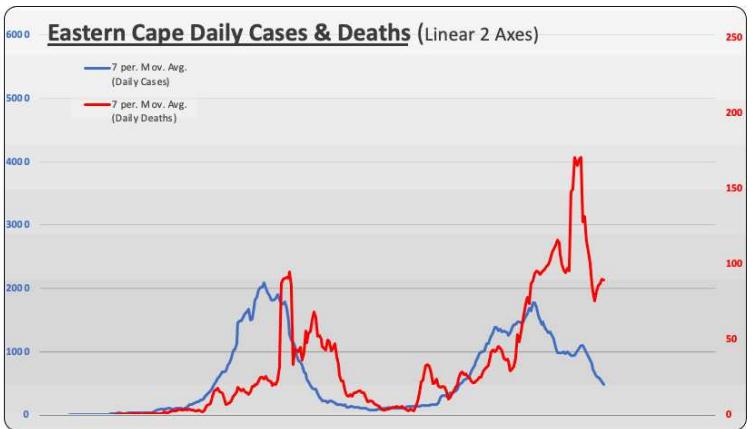
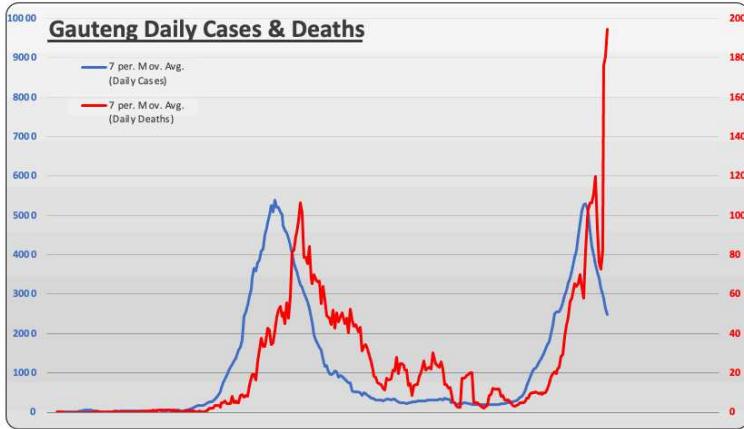
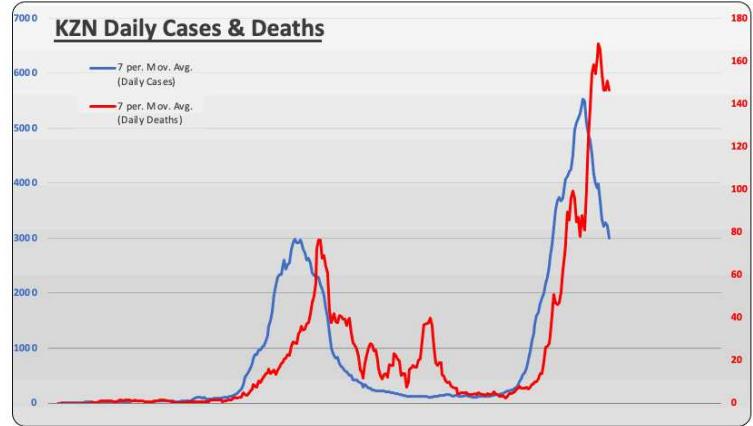
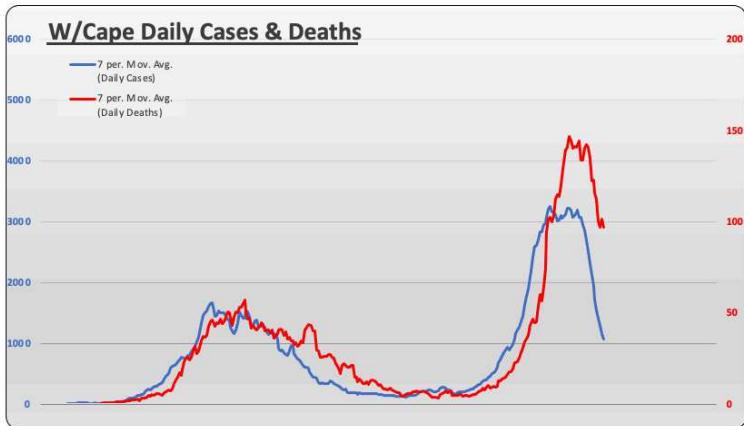
All linear scales



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.



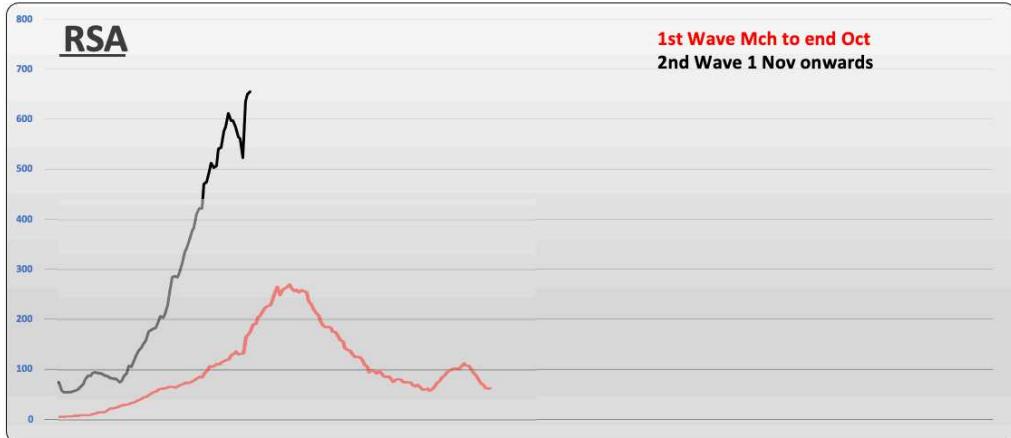
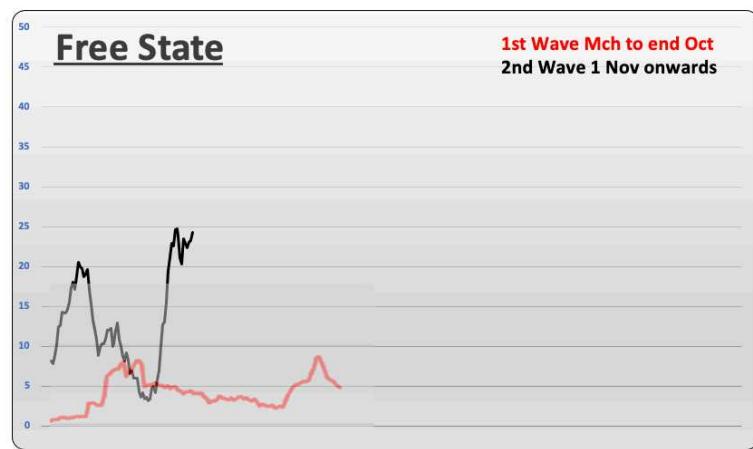
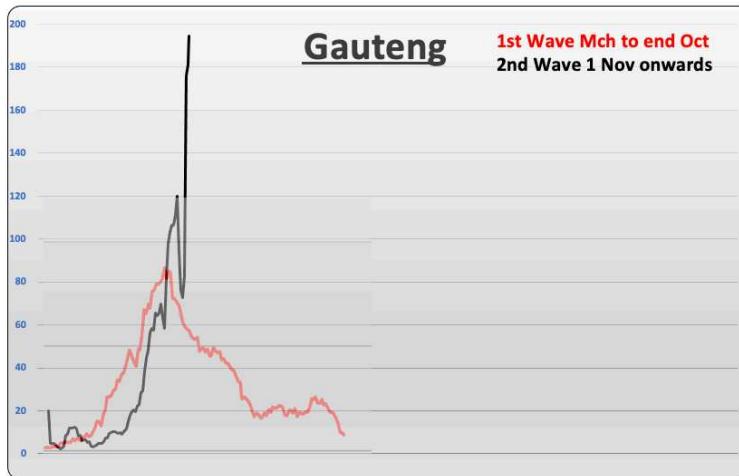
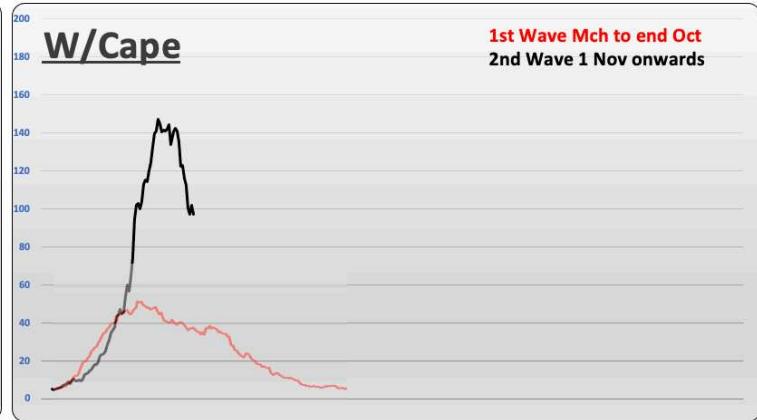
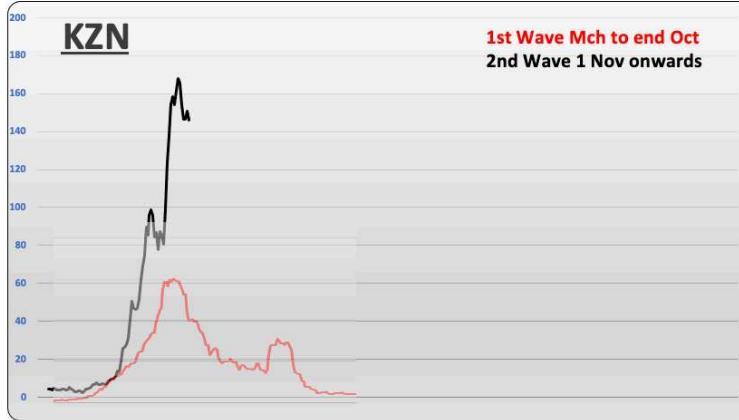
What are these graphs telling us ? (Ignore the numbers, look purely at the inclines and amplitudes).

- 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/or 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 :

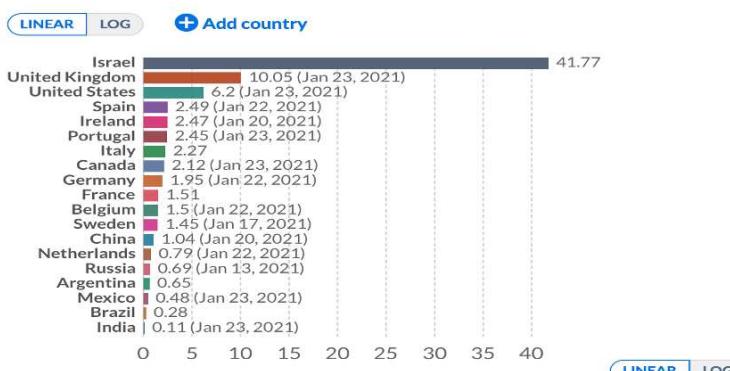


Selected countries who publish their VAC data :

COVID-19 vaccine doses administered per 100 people, Jan 24, 2021

Our World in Data

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).

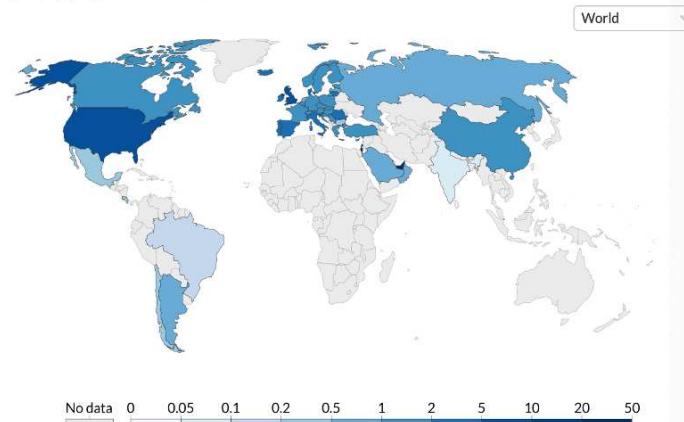


Source: Official data collated by Our World in Data – Last updated 24 January, 20:00 (London time)
CC BY

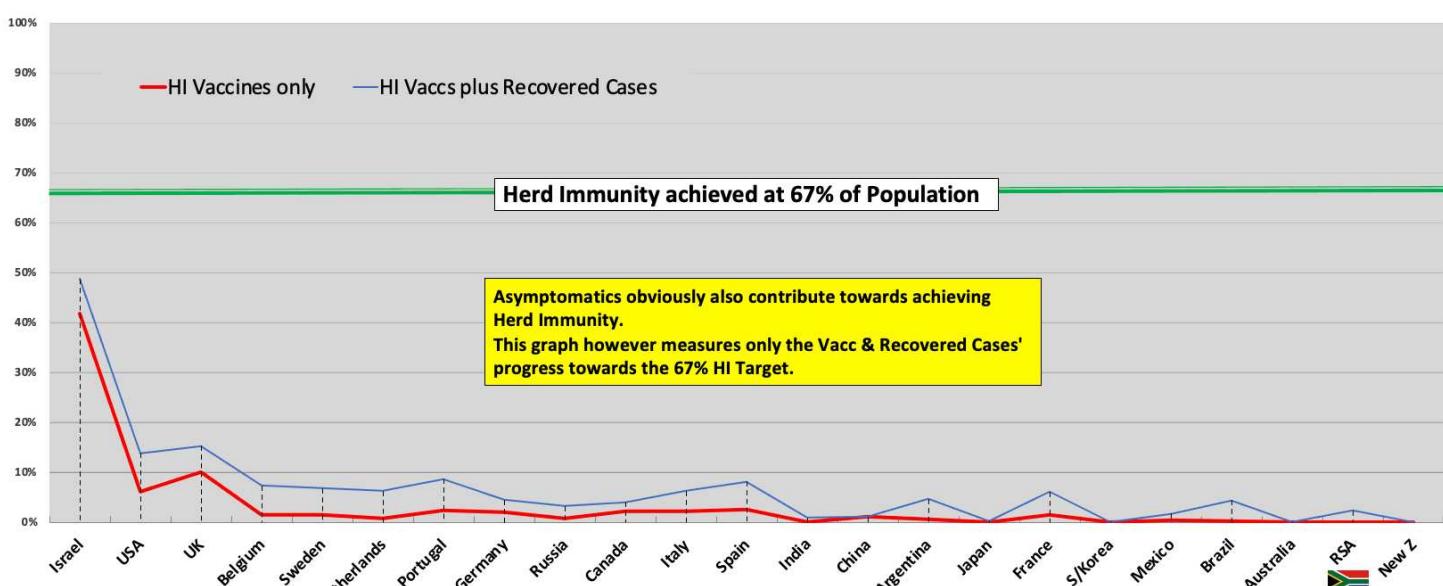
COVID-19 vaccine doses administered per 100 people, Jan 22, 2021

Our World in Data

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....

