

REPORT ON WEEKLY DEATHS IN SOUTH AFRICA

1 JANUARY - 28 APRIL 2020
(WEEK 17)

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UCT Centre
for Actuarial
Research

Data Source

Basic demographic information for all deaths registered on the National Population Register are provided to the SAMRC on a weekly basis. Since the weekly number of deaths has a seasonal trend, historical data from 2018 and 2019 have been used to predict the number of deaths that could be expected during 2020.

The excel forecast function¹ has been used to predict values for each week of 2020 based on a linear annual trend, allowing for a seasonal effect over the year. In addition, 95% confidence intervals have been estimated for the predicted weekly number of deaths for 2020 to give a basis to assess fluctuations.

Graphs in this report have been prepared of the weekly number of deaths up till epidemiological **week 17** covering the period from **1 January 2020** till **28 April 2020** based on the data received on 4 May 2020. *The figures plot the numbers at the start date of each week.*

Data for both the most recent week and the week before that have been scaled up to account for the lag in registrations, exacerbated by the fact that no processing took place on Monday 27 April and Friday 1 May as these were public holidays. Factors of 1.20 and 1.02 have been applied respectively. Because there is limited information on the impact of public holidays in the delay in processing of death data the uncertainty about estimate for the most recent week is greater than in previous reports.

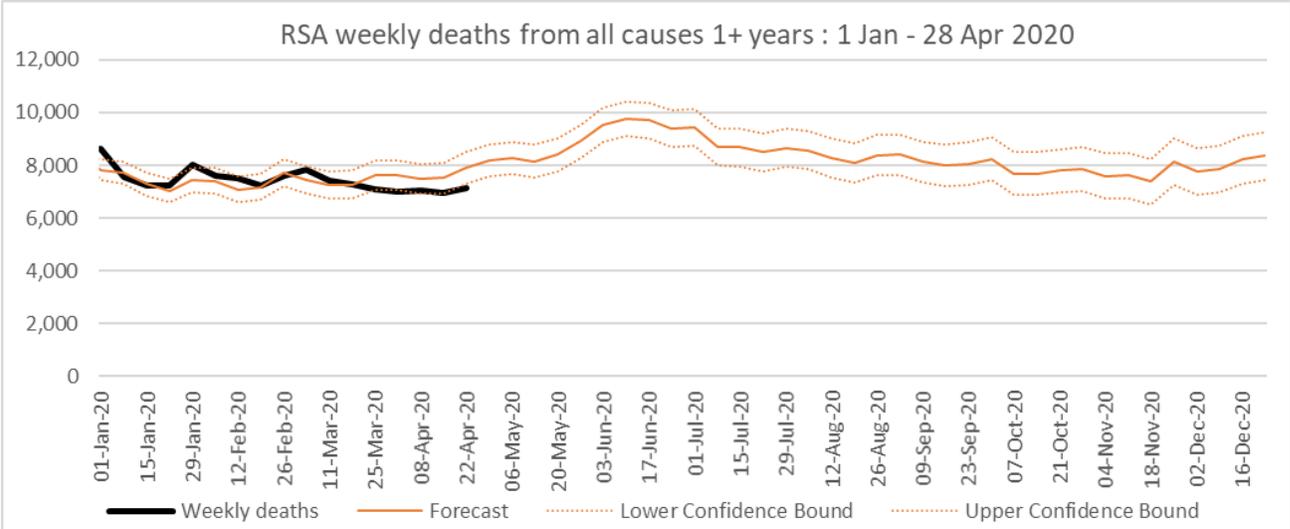
It must be noted that the National Population Register only includes deaths of persons with a national ID number. Unregistered deaths as well as the registered deaths of persons without a national ID number are not recorded.

It was discovered this week that births were not registered by the Department of Home Affairs during lockdown stage 5. This means they are not on the National Population Register and thus that the deaths of these births have not been captured. **This report presents weekly deaths of persons 1 year and older.**

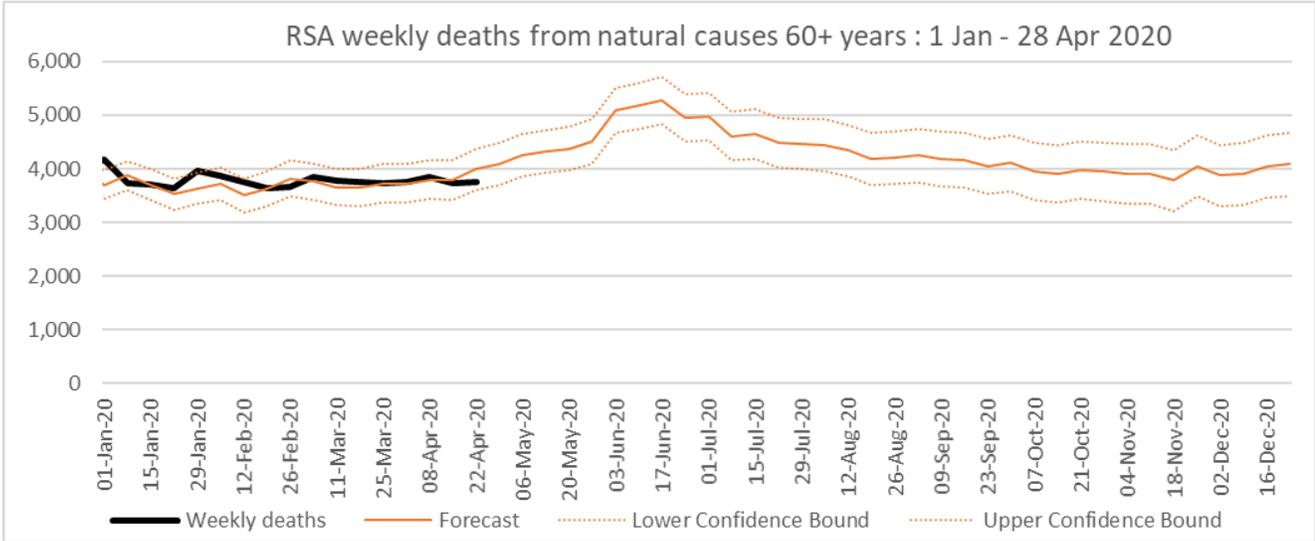
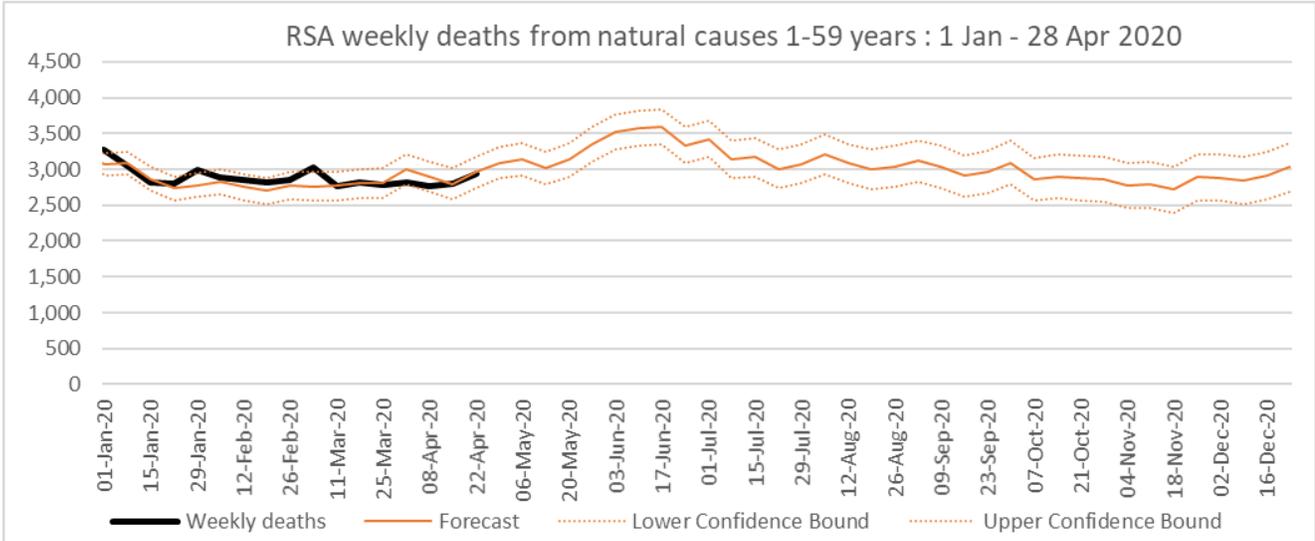
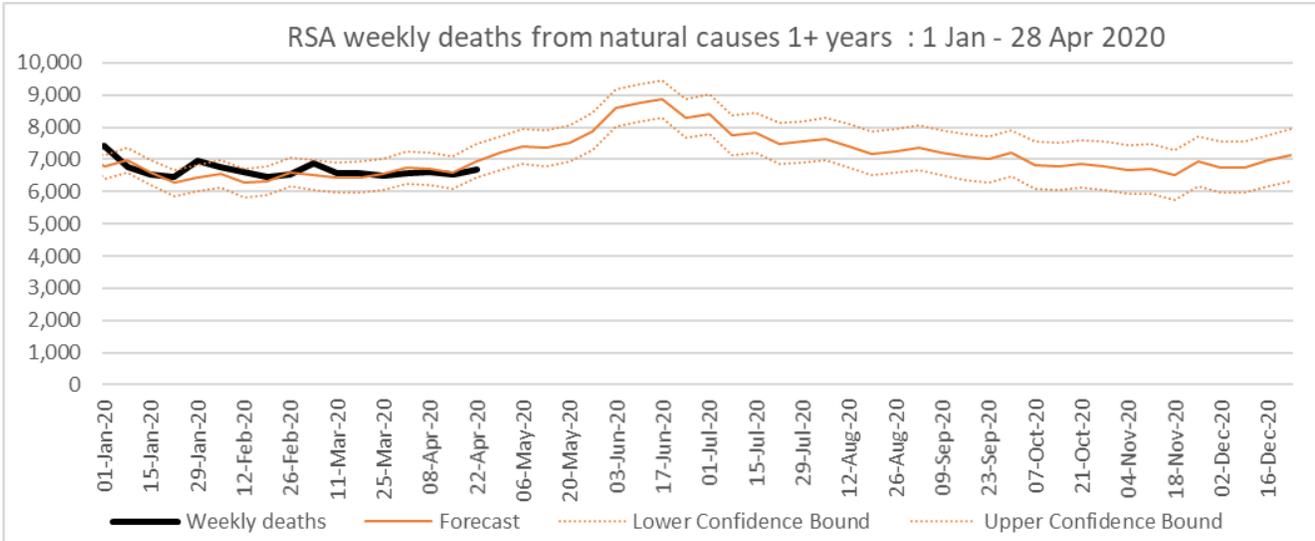
¹ The Excel function implements is the Holt-Winters triple exponential smoothing (the AAA sub-method).

Trends

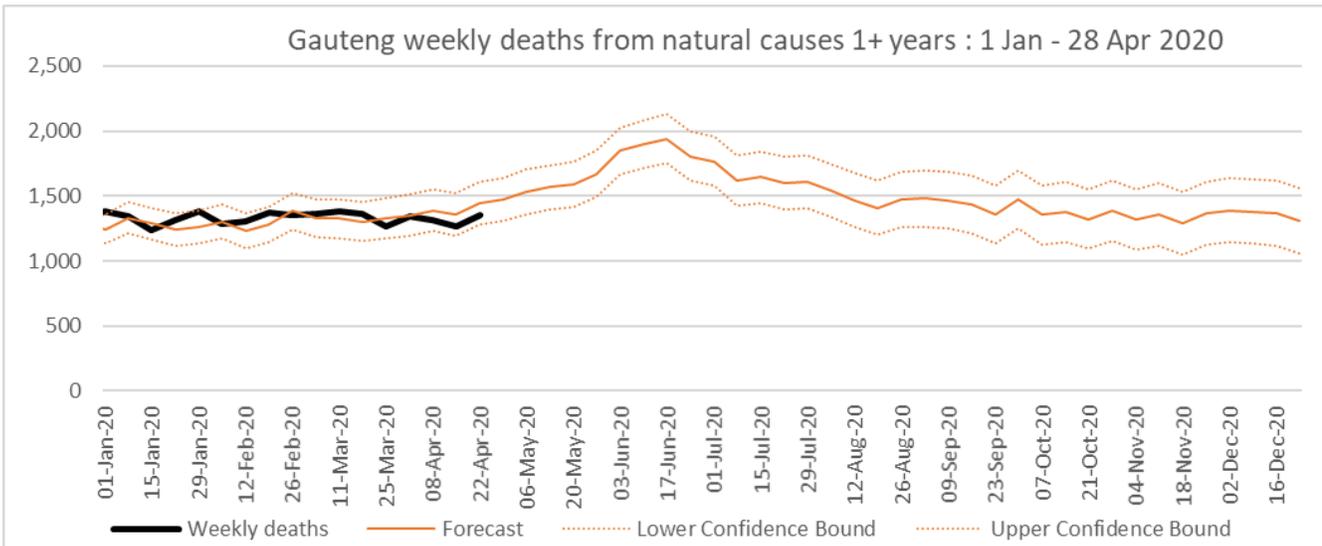
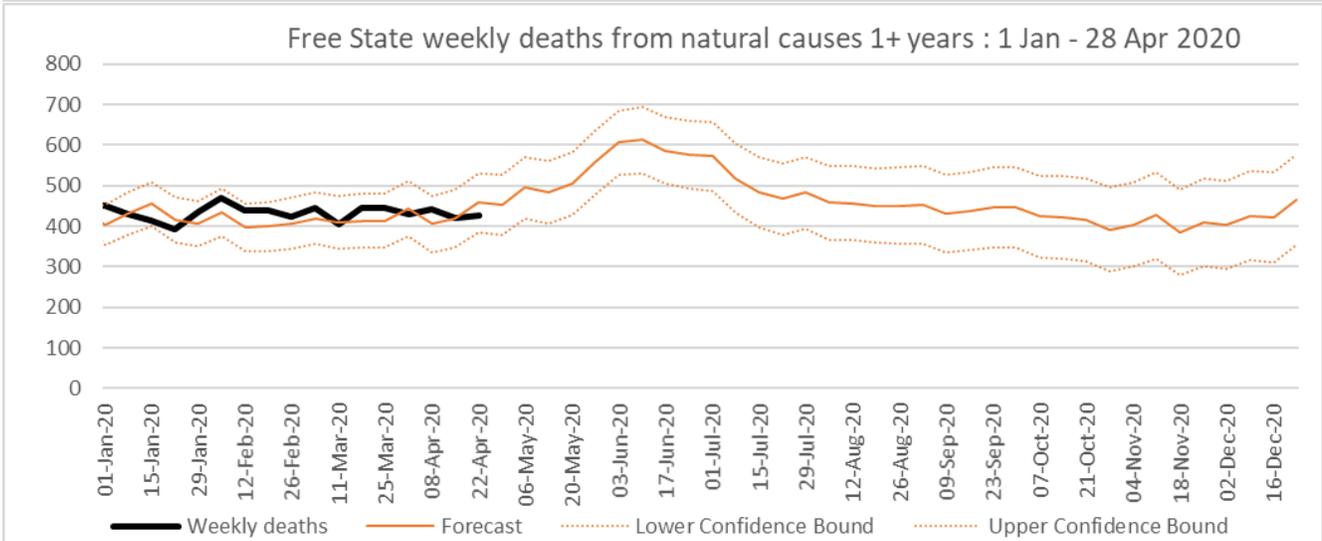
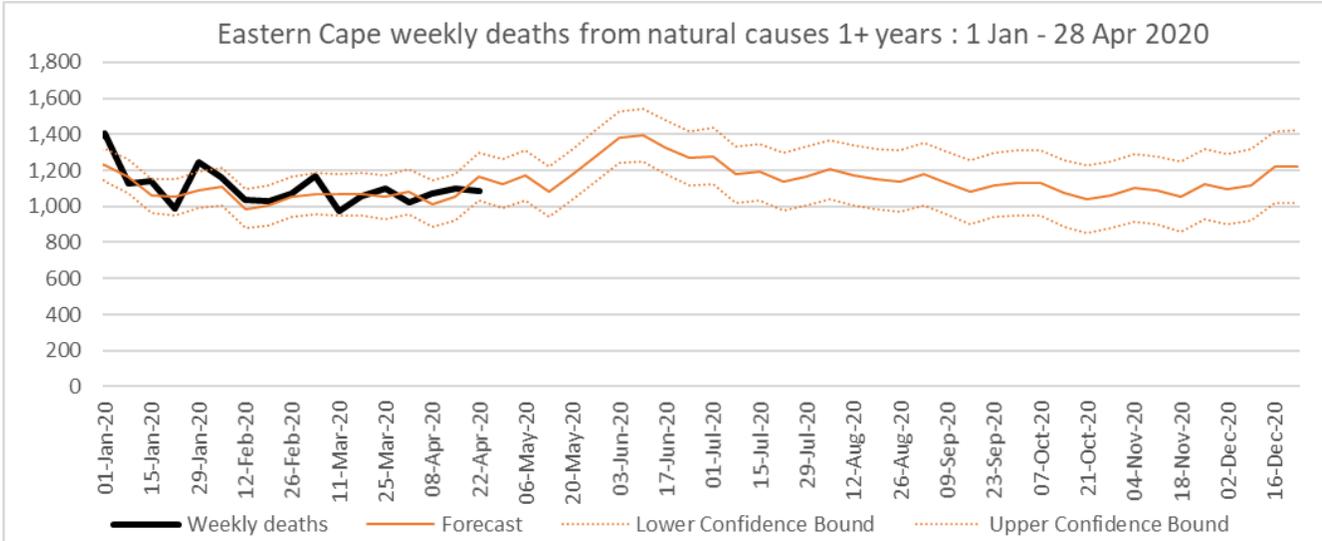
- The weekly number of deaths of persons 1+ years of age up till **28 April 2020** are generally within the bounds of expectation based on the historical data.
- The number of deaths in the most recent five weeks are lower than predicted as a result of a decline in the number of deaths from unnatural causes (e.g. road traffic fatalities and homicide).
- Deaths from natural causes show no unusual sign of increase by **28 April 2020** among people less than 1-59 years nor those 60 years and over.



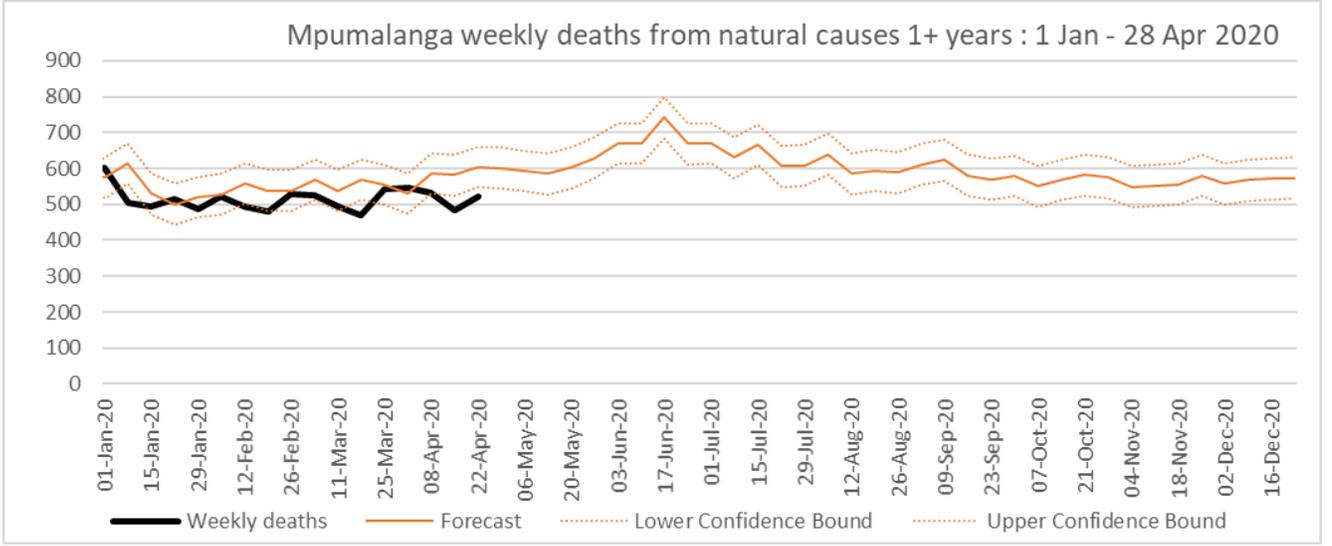
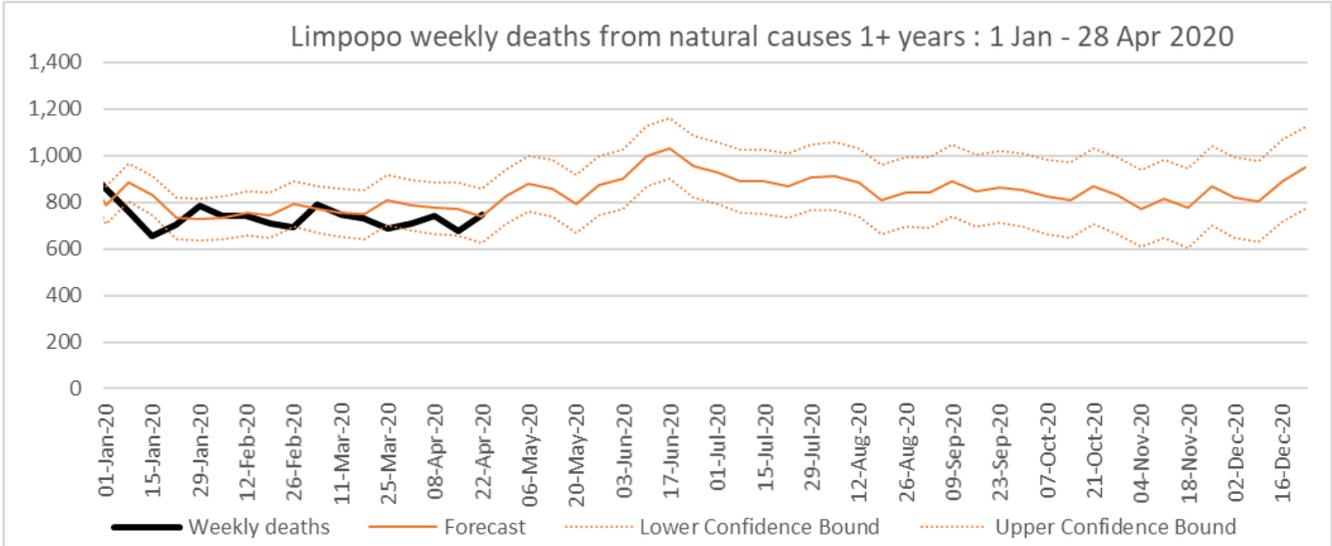
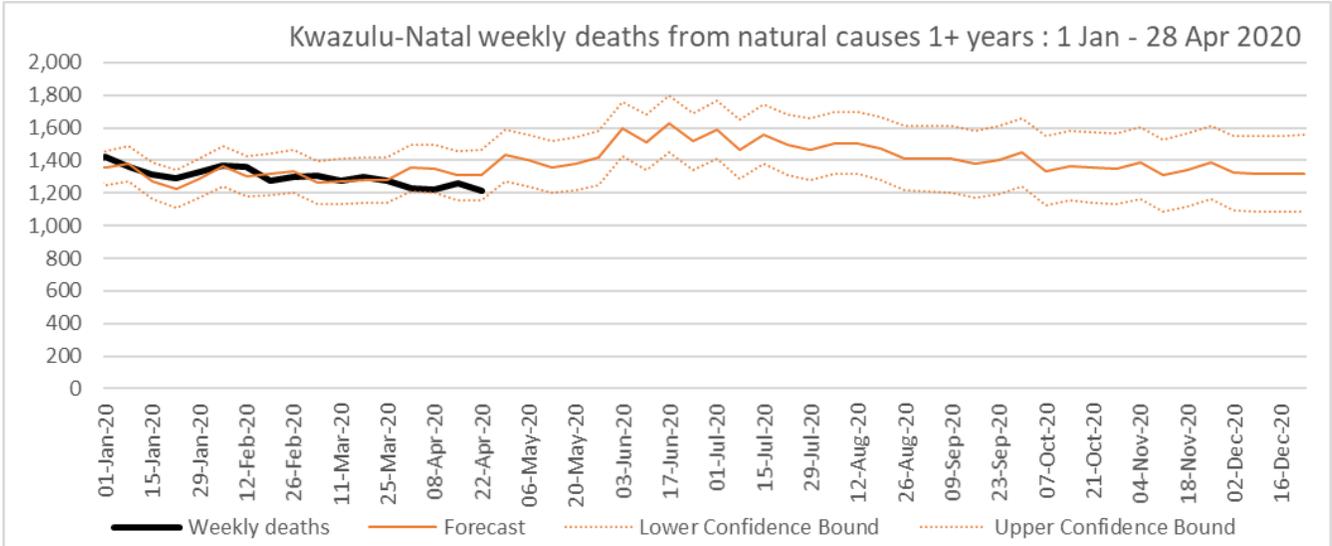
Numbers for the last two weeks have been adjusted for delayed registrations.



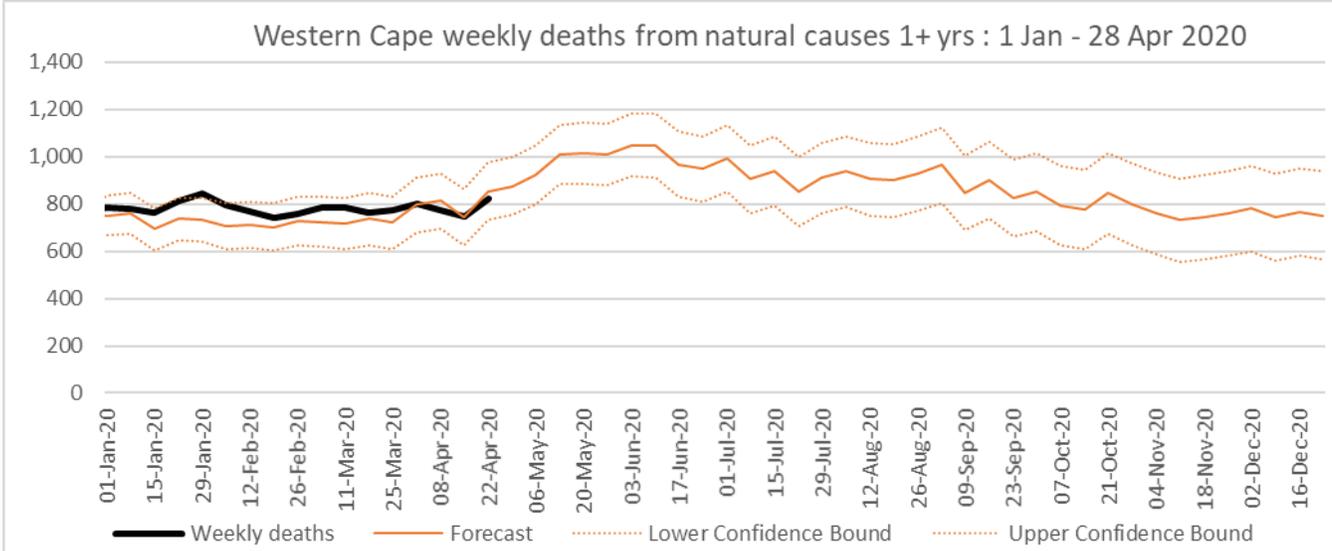
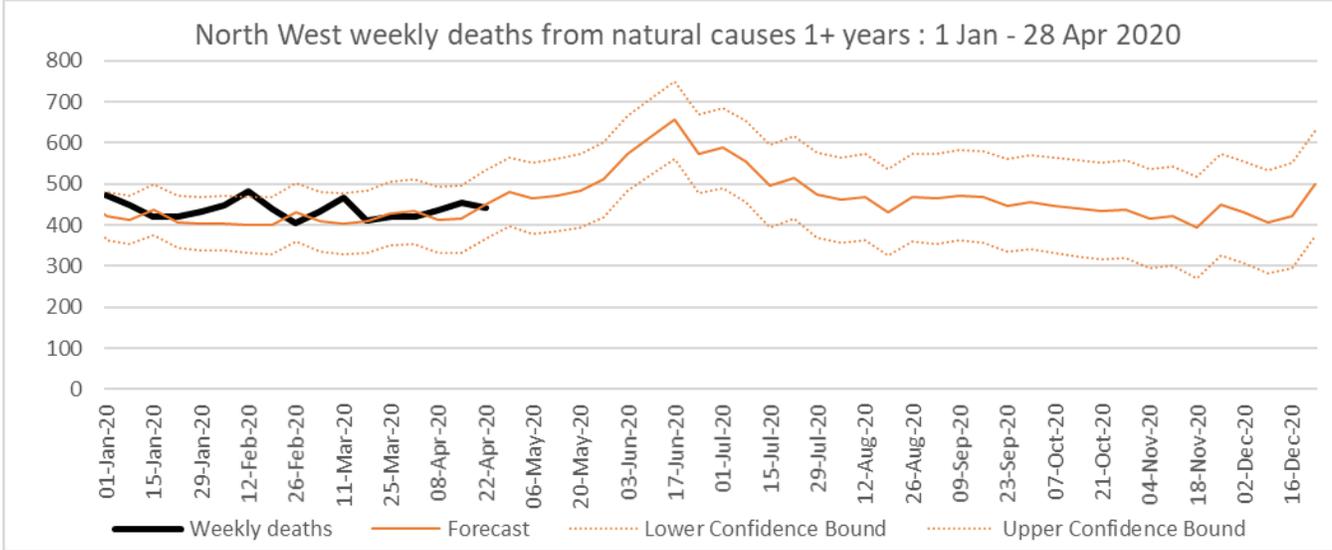
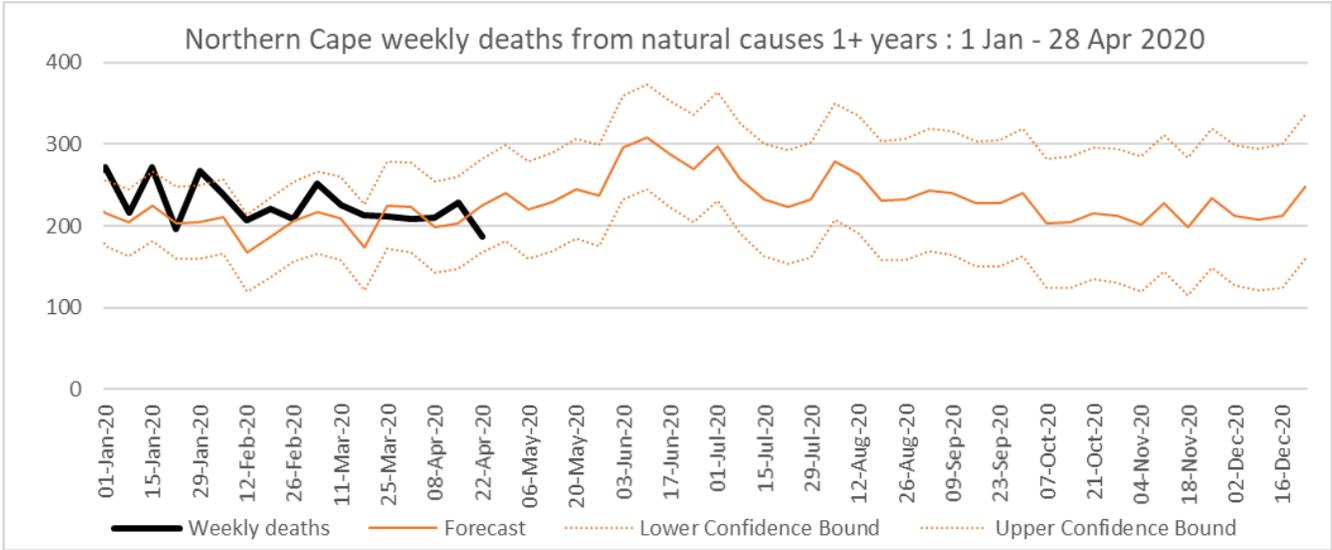
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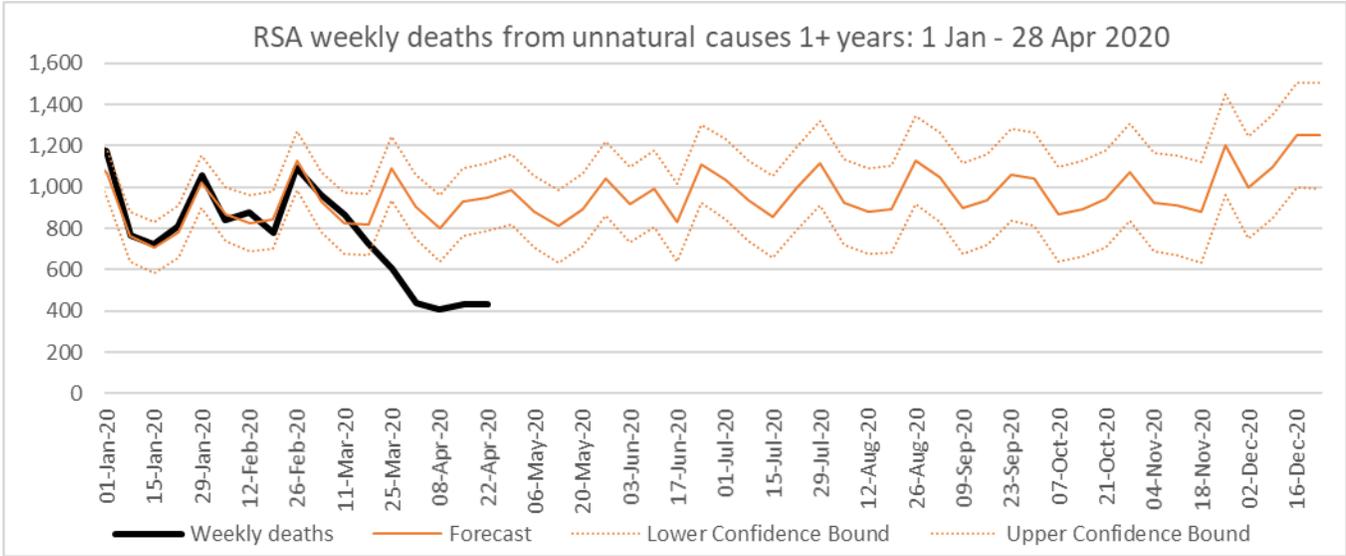
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