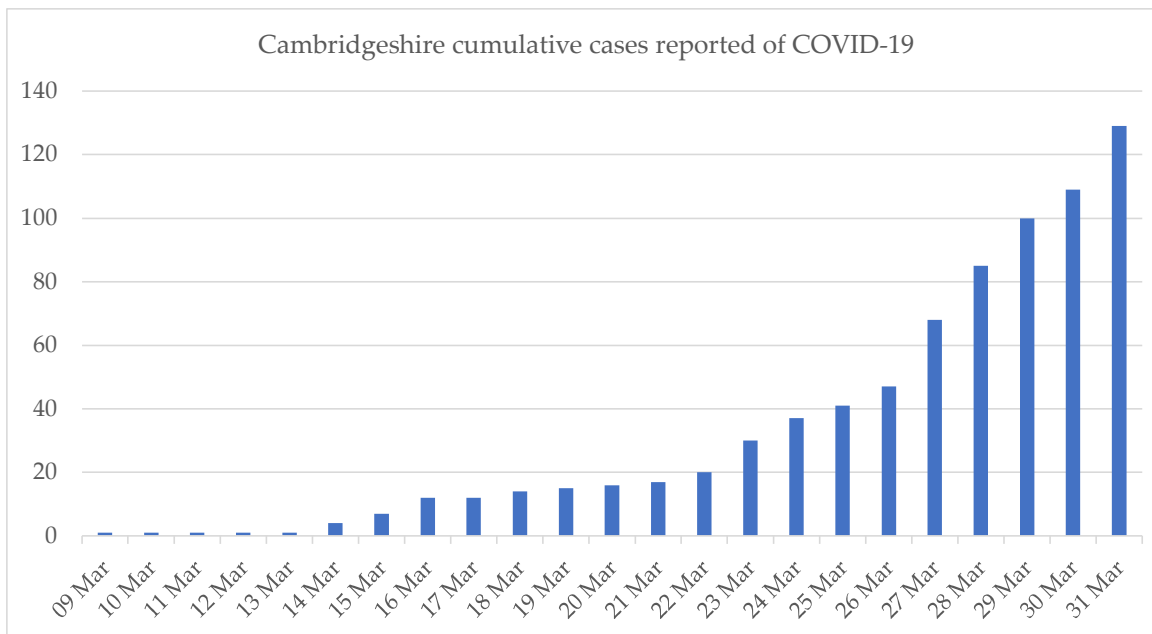


## COVID-19 CASES IN CAMBRIDGESHIRE

31st March 2020

Public Health England publishes detailed data on COVID-19 cases. I have been drilling down into the data to see what it means for Cambridgeshire.



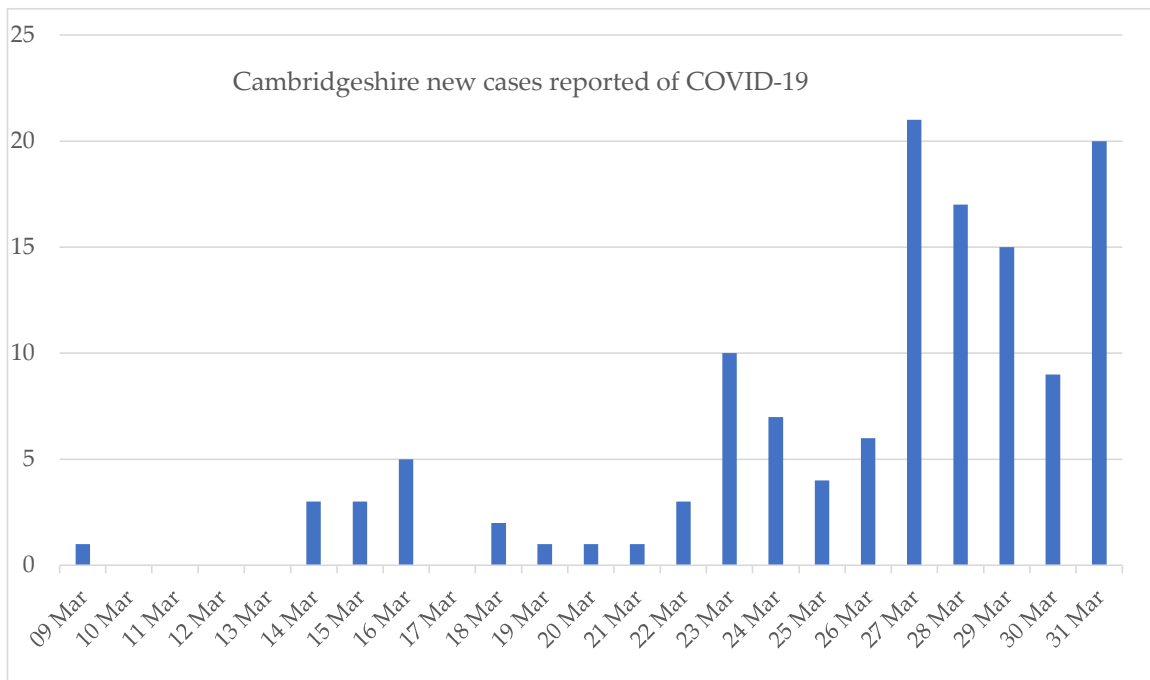
This chart shows the total number of COVID-19 confirmed cases in Cambridgeshire officially reported by Public Health England each day. The number of **reported** cases was at a low level until 22 March, when there were 20 cases, but has taken off since then, jumping to 129 on 31 March.

The **actual** number of cases will be significantly higher than this because:

- 1) Only hospital patients with laboratory confirmation are reported.
- 2) Up to 30% of people will be asymptomatic (ie. not show any symptoms).
- 3) Others will have very mild symptoms.
- 4) The average incubation period is 5 days. People will carry the virus for 5 days on average before displaying any symptoms.

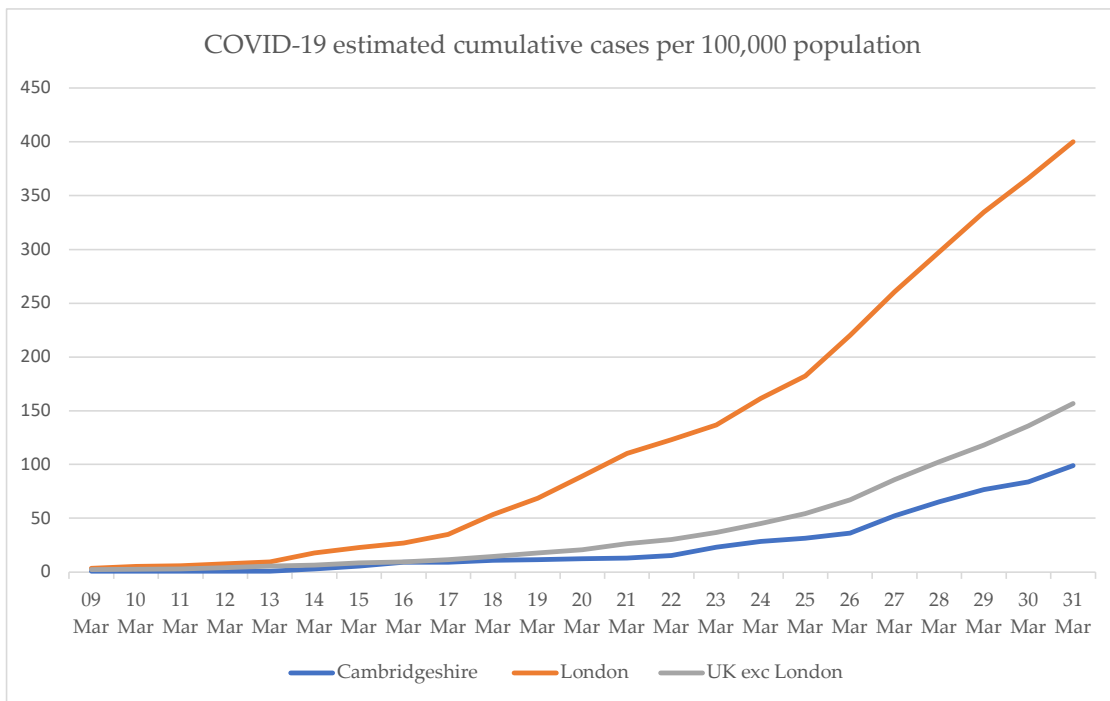
The latest experience in Italy is that there are **5 actual cases for every case reported**. On this basis, I estimate there were 645 actual cases on 31 March (ie.  $129 \times 5 = 645$ )

Note that the figures are for Cambridgeshire, which includes Cambridge but excludes Peterborough. We don't know how the cases are spread around the county and how many are in Cambridge.



I have analysed the cumulative figures to show the number of new cases reported each day.

To start with, there were only a few new cases each day. However, there has been a significant increase since 27 March - including 21 new cases on that day.



This chart shows my estimate of the cumulative number of COVID-19 cases per 100,000 population.

The blue line for Cambridgeshire demonstrates that the number of cases per 100,000 population has increased from 1 on 9 March to 99 on 27 March. Although there has been a dramatic increase, at present only 0.1% of the population has the virus.

Cambridgeshire has been consistently below London and the rest of the UK. On 31 March, there were 99 cases per 100,000 in Cambridgeshire but 400 cases in London and 157 in the rest of the UK.

The number of reported cases is still relatively low. If we strictly follow the government instructions, we can hopefully slow down the spread of the virus.

James Berry  
31st March 2020