



# COVID Symptom Study Report

17 June 2020

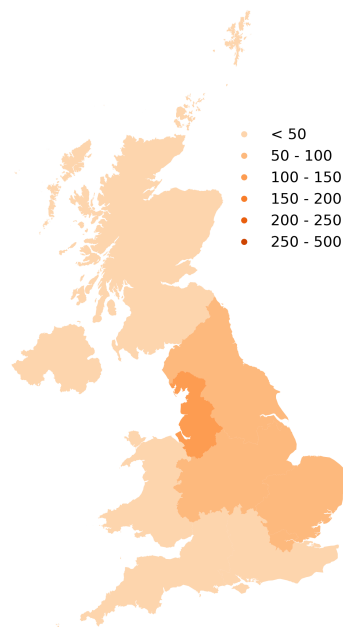
Analysis by ZOE and King's College London

[covid.joinzoe.com](https://covid.joinzoe.com)

## Daily new cases of COVID - Incidence (based on 2 weeks up to 13 June 2020)

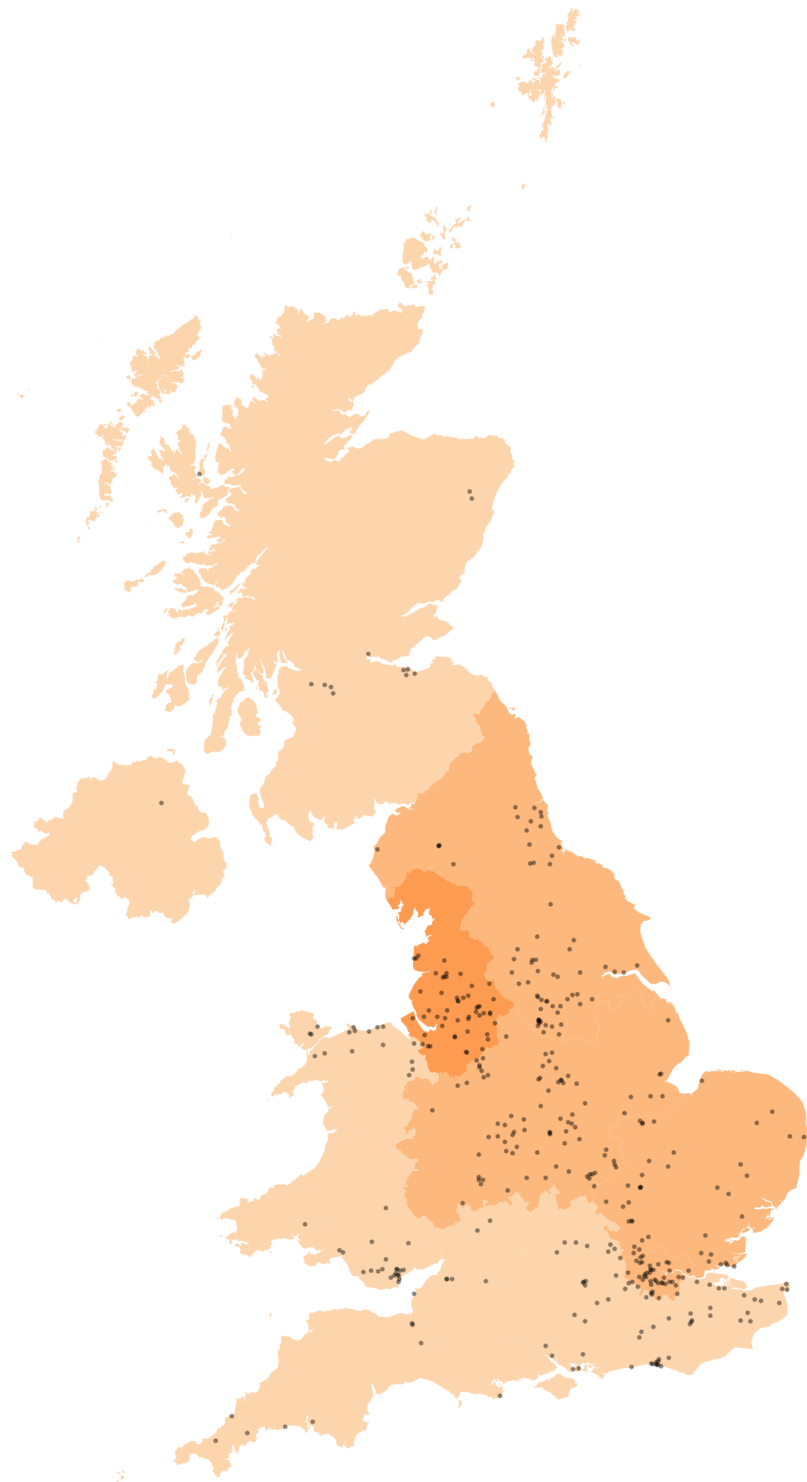
We estimate there have been 3612 daily new cases of COVID in the UK on average over the two weeks up to 13 June 2020. This is based on the number of newly symptomatic app users per day, and the proportion of these who give positive swab tests.

### Daily new cases of COVID per million (13 June 2020)

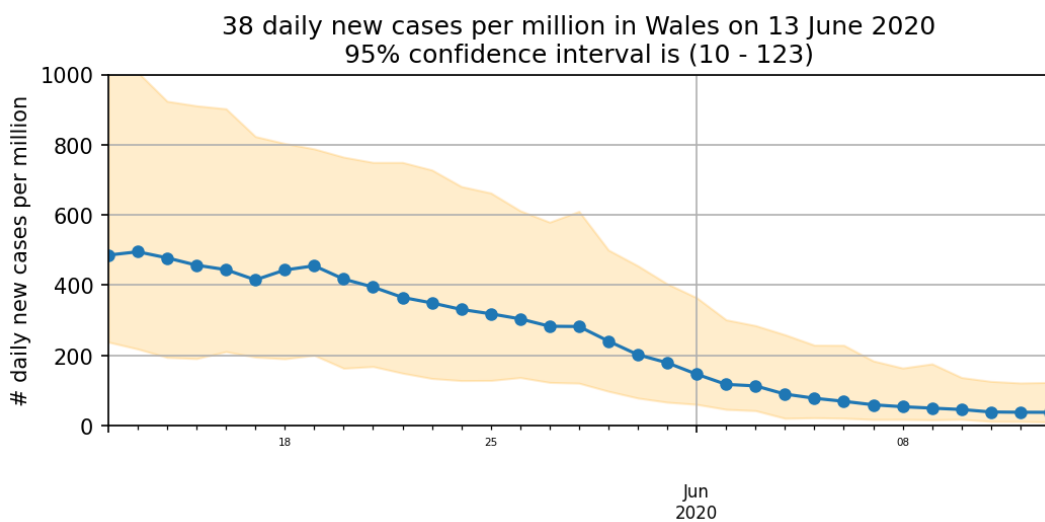
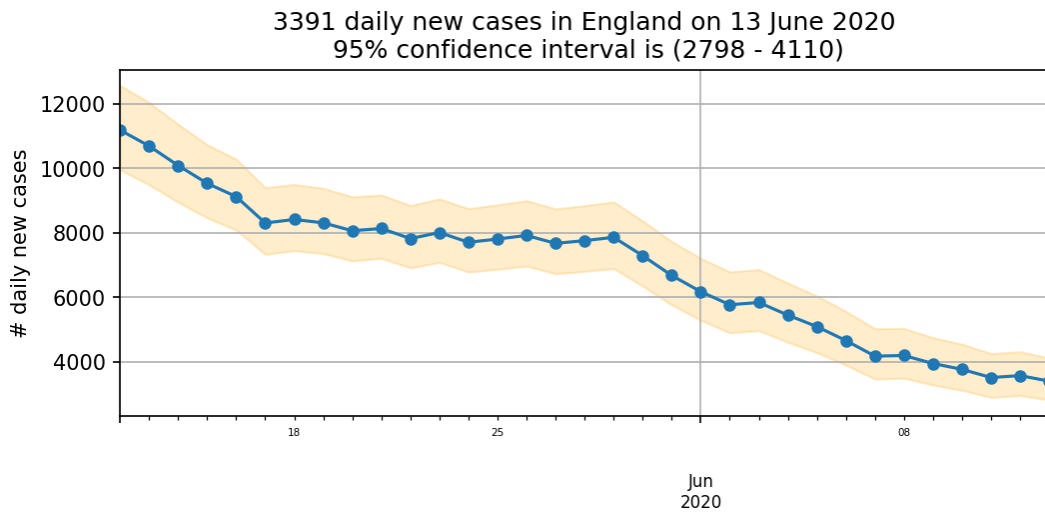
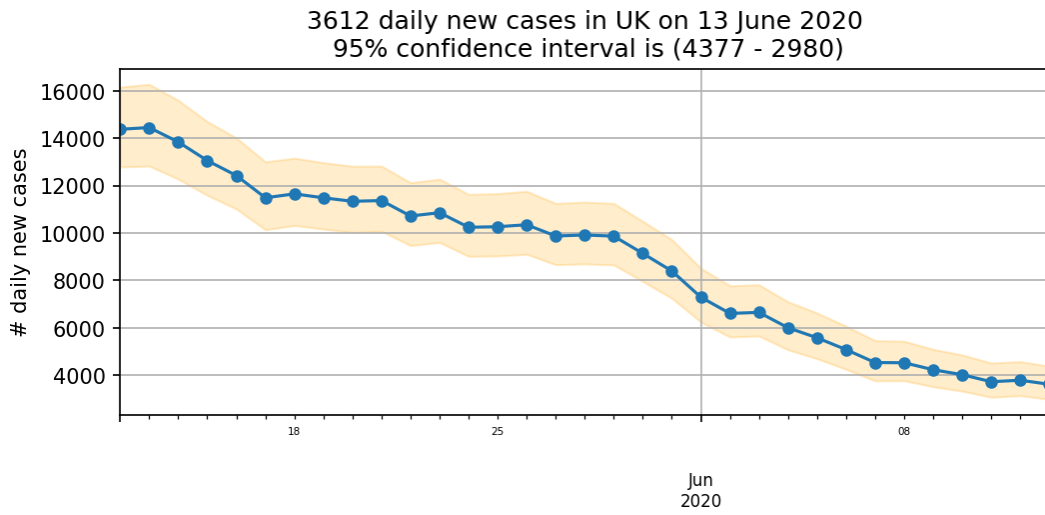


	Daily new cases per million	R
<b>England</b>	50 - 74	0.8 (0.6 - 0.9)
<b>South East</b>	23 - 63	0.9 (0.7 - 1.1)
<b>London</b>	54 - 125	0.9 (0.7 - 1.1)
<b>Midlands</b>	51 - 125	0.8 (0.6 - 1.0)
<b>East of England</b>	30 - 90	0.7 (0.2 - 0.9)
<b>South West</b>	12 - 58	0.9 (0.7 - 1.1)
<b>North East and Yorkshire</b>	39 - 113	0.7 (0.4 - 0.9)
<b>North West</b>	66 - 169	0.7 (0.4 - 0.9)
<b>Wales</b>	10 - 123	0.5 (0.1 - 0.9)
<b>Scotland</b>	3 - 91	0.6 (0.2 - 0.9)
<b>Northern Ireland</b>	0 - 296	- (- - -)

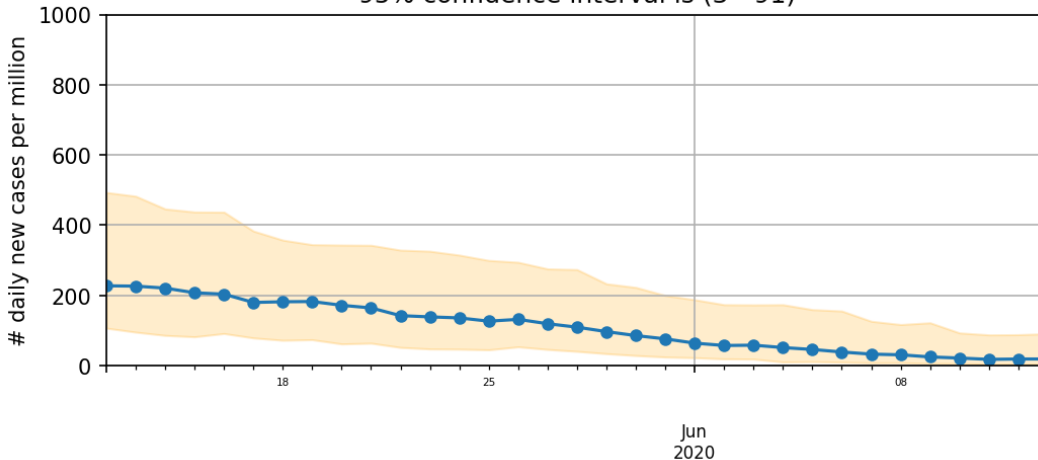
Location of positive test results reported in the UK  
in the 2 weeks up to 13 June 2020



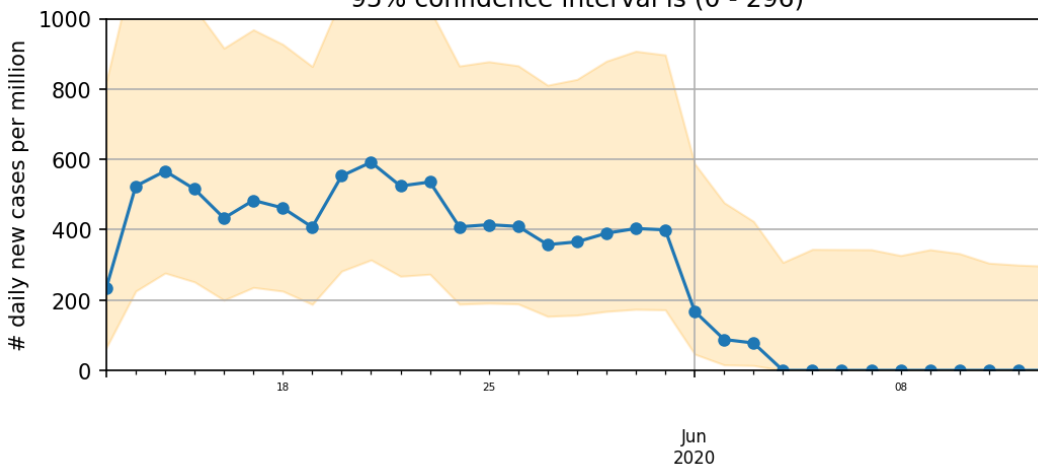
# Changes in daily new cases of COVID in UK (based on 2 weeks up to each date)



19 daily new cases per million in Scotland on 13 June 2020  
95% confidence interval is (3 - 91)

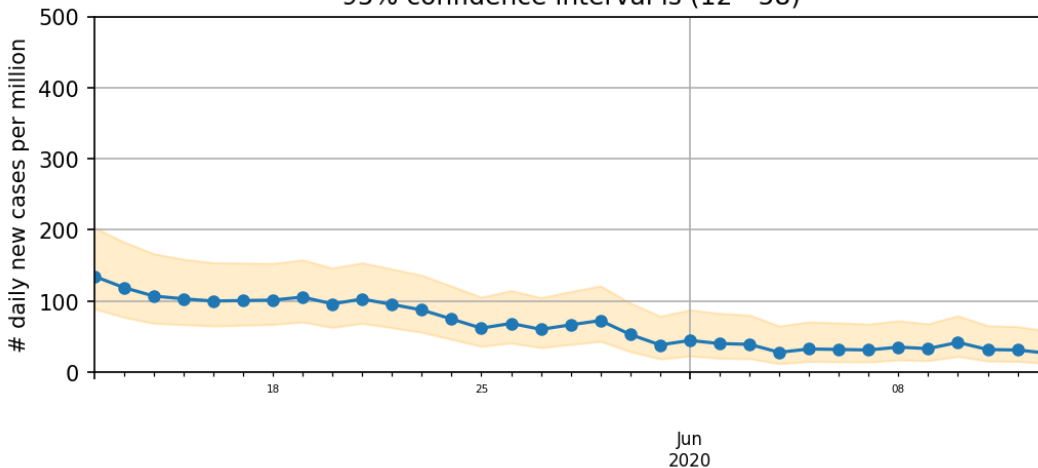


0 daily new cases per million in Northern Ireland on 13 June 2020  
95% confidence interval is (0 - 296)

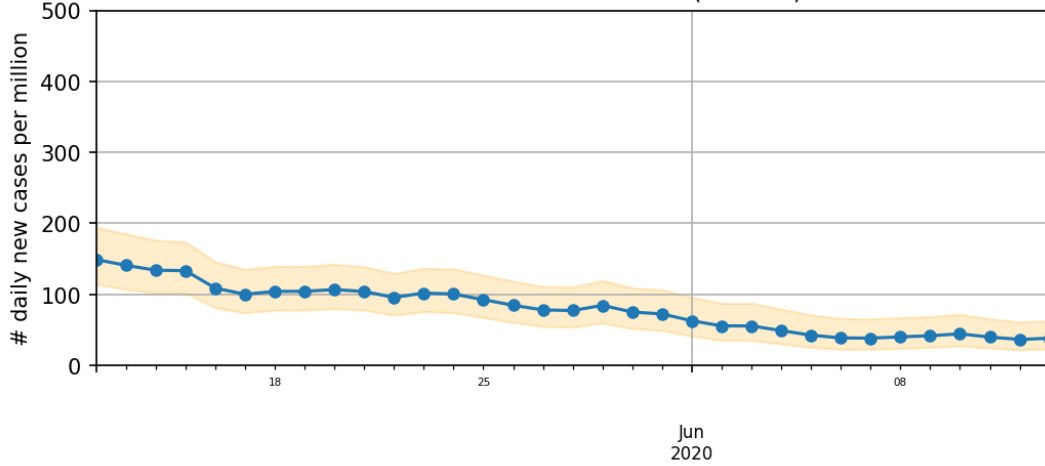


**Changes in daily new cases of COVID in England's NHS regions (based on 2 weeks up to each date)**

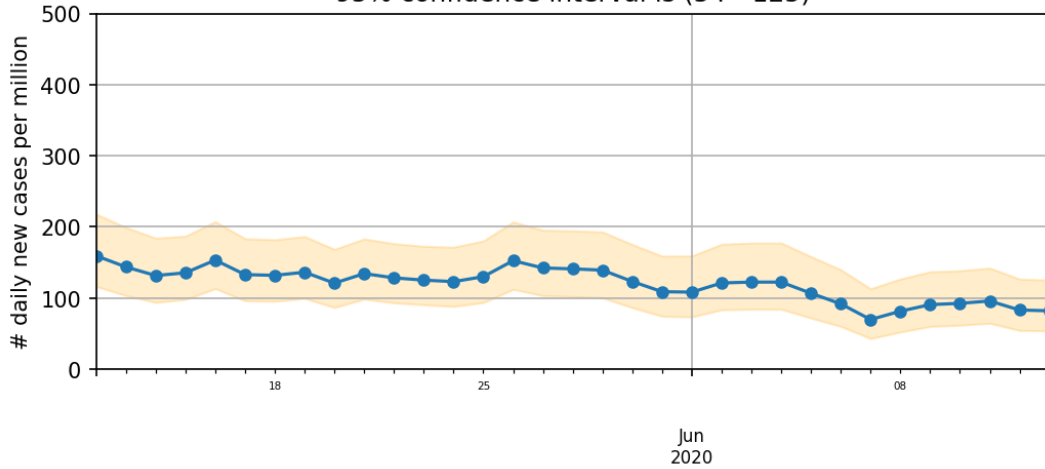
27 daily new cases per million in South West on 13 June 2020  
95% confidence interval is (12 - 58)



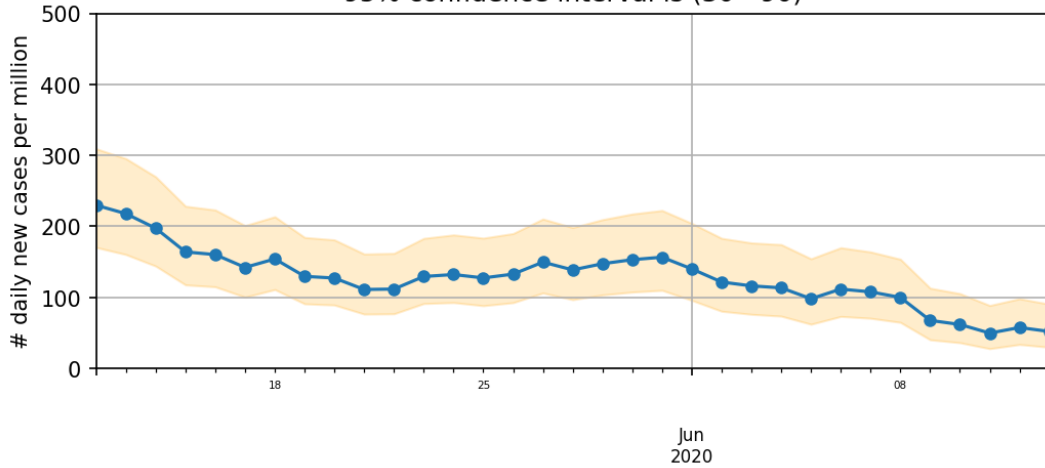
38 daily new cases per million in South East on 13 June 2020  
95% confidence interval is (23 - 63)



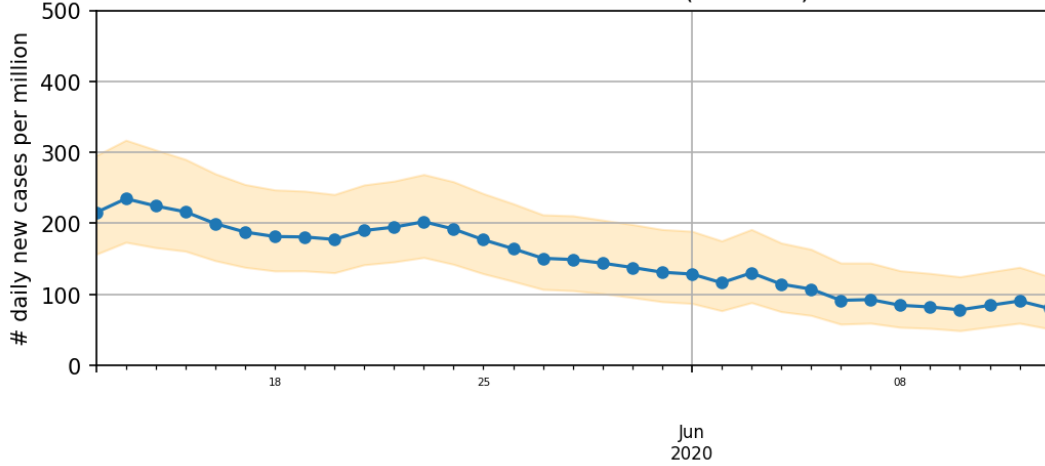
82 daily new cases per million in London on 13 June 2020  
95% confidence interval is (54 - 125)



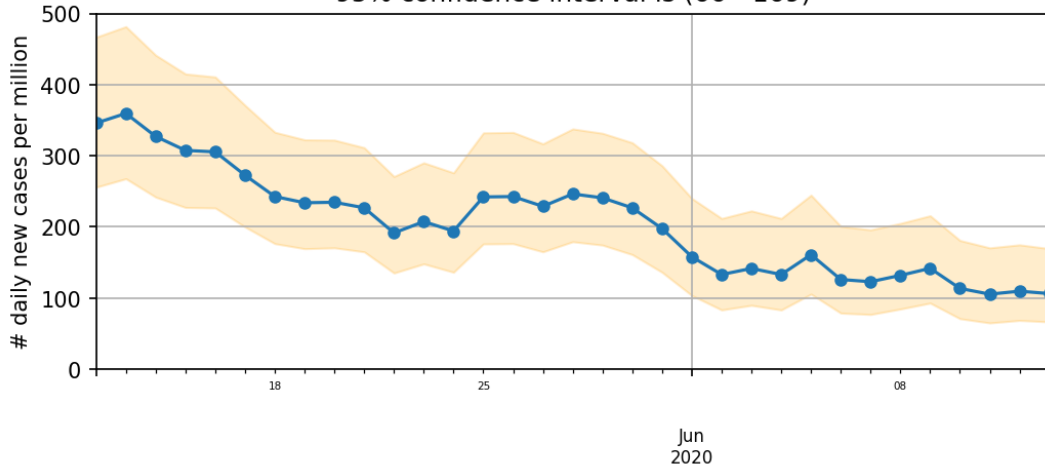
52 daily new cases per million in East of England on 13 June 2020  
95% confidence interval is (30 - 90)



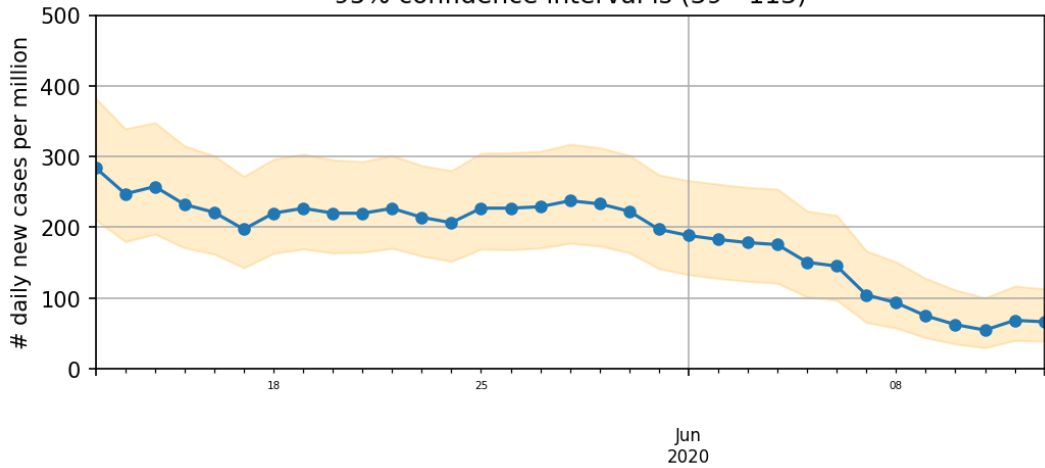
80 daily new cases per million in Midlands on 13 June 2020  
95% confidence interval is (51 - 125)



106 daily new cases per million in North West on 13 June 2020  
95% confidence interval is (66 - 169)



66 daily new cases per million in North East and Yorkshire on 13 June 2020  
95% confidence interval is (39 - 113)



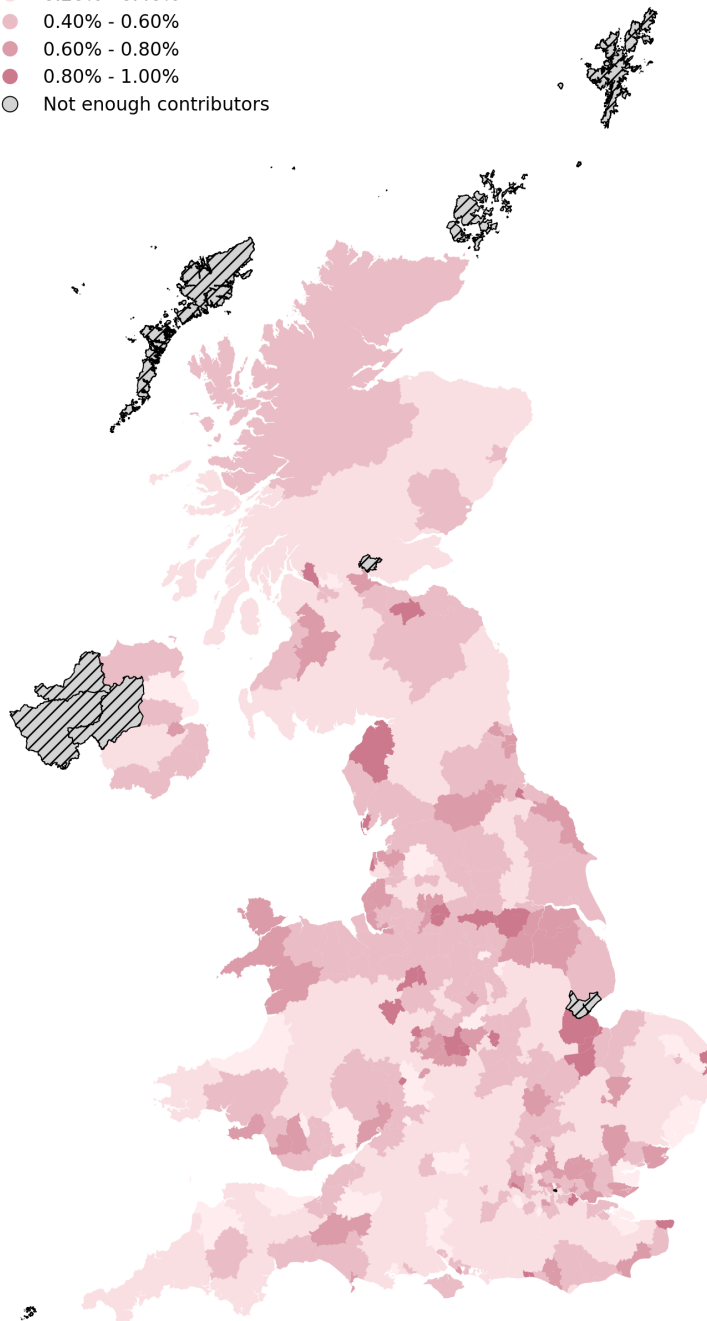
# COVID active cases - Prevalence (on 16 June 2020)

The COVID active cases (prevalence) or Symptomatic COVID estimate is based on the most recent report for each contributor that logged during the previous 7 days.

## Estimate of the % people with Symptomatic COVID (age 20-69)

Based on data from 1060400 contributors that logged from 9 June 2020 to 16 June 2020

- 0.00% - 0.20%
- 0.20% - 0.40%
- 0.40% - 0.60%
- 0.60% - 0.80%
- 0.80% - 1.00%
- Not enough contributors





## Symptomatic COVID by Region

### Symptomatic COVID cases

East of England	15362
London	23535
Midlands	25182
North East and Yorkshire	20880
North West	18109
Northern Ireland	2614
Scotland	8743
South East	18839
South West	11589
Wales	9036
<b>TOTAL</b>	<b>153893</b>

## Symptomatic COVID by Socio-economic status (IMD)

### Symptomatic COVID percentage

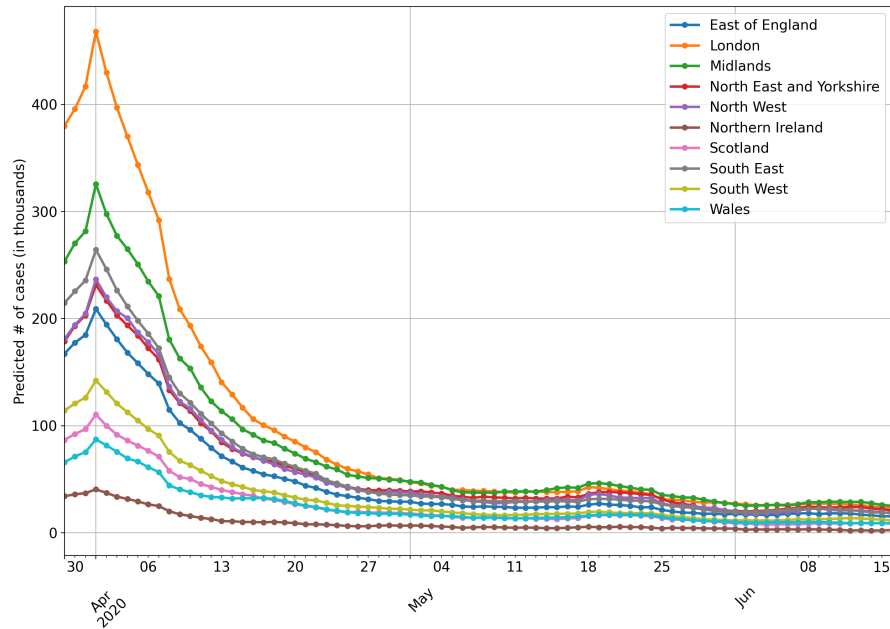
LOW (1st - 3rd decile )	0.58 %
MEDIUM (4th - 6th decile)	0.43 %
HIGH (7th - 10th decile)	0.32 %
<b>TOTAL</b>	<b>0.41 %</b>

## Symptomatic COVID by Age

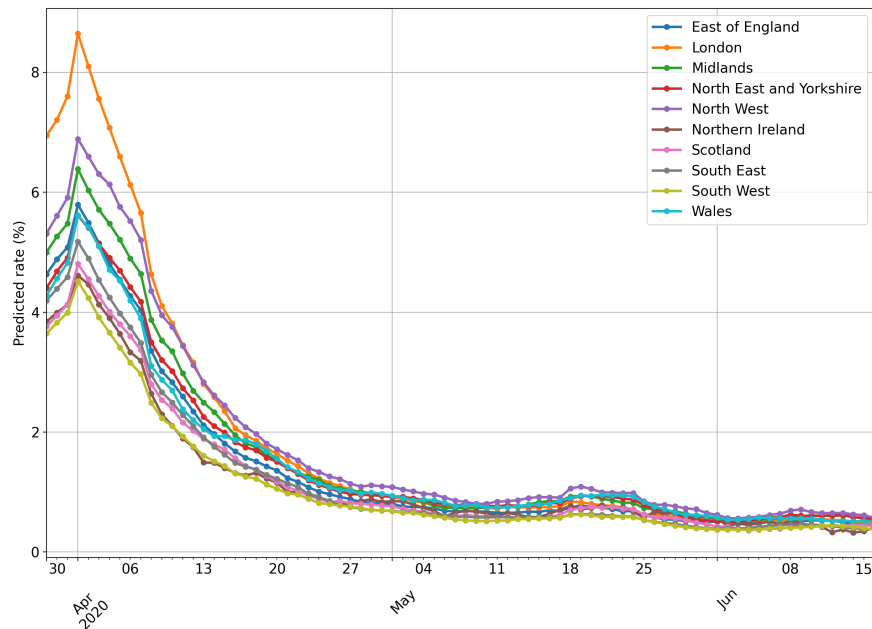
### Symptomatic COVID percentage

Age 0 - 9	0.06 %
Age 10 - 19	0.22 %
Age 20 - 29	0.49 %
Age 30 - 39	0.48 %
Age 40 - 49	0.53 %
Age 50 - 59	0.51 %
Age 60 - 69	0.33 %
Age 70 - 79	0.20 %
Age 80 - 89	0.23 %
<b>TOTAL</b>	<b>0.41 %</b>

## Estimate of people with Symptomatic COVID in Nations and NHS regions



## Rate (%) of people with Symptomatic COVID in Nations and NHS regions



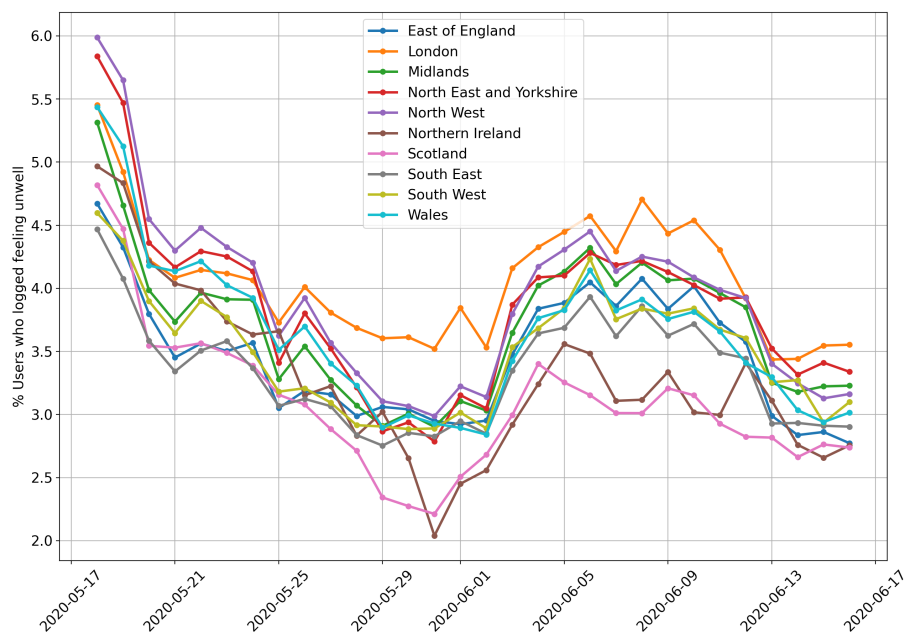
## Raw Data (up to 16 June 2020)

This section reports raw data by day, with no temporal averaging or rebalancing/ extrapolation to the UK population.

### Users who logged feeling unwell in the last 24 hours

	# users who logged feeling well	# users who logged feeling unwell	% users who logged feeling unwell
<b>East of England</b>	83326	2376	2.77 %
<b>London</b>	97558	3594	3.55 %
<b>Midlands</b>	85428	2850	3.23 %
<b>North East and Yorkshire</b>	70767	2444	3.34 %
<b>North West</b>	57838	1889	3.16 %
<b>Northern Ireland</b>	5293	150	2.76 %
<b>Scotland</b>	46218	1301	2.74 %
<b>South East</b>	139272	4165	2.90 %
<b>South West</b>	80194	2565	3.10 %
<b>Wales</b>	45955	1429	3.02 %
<b>TOTAL</b>	<b>711849</b>	<b>22763</b>	<b>3.10 %</b>

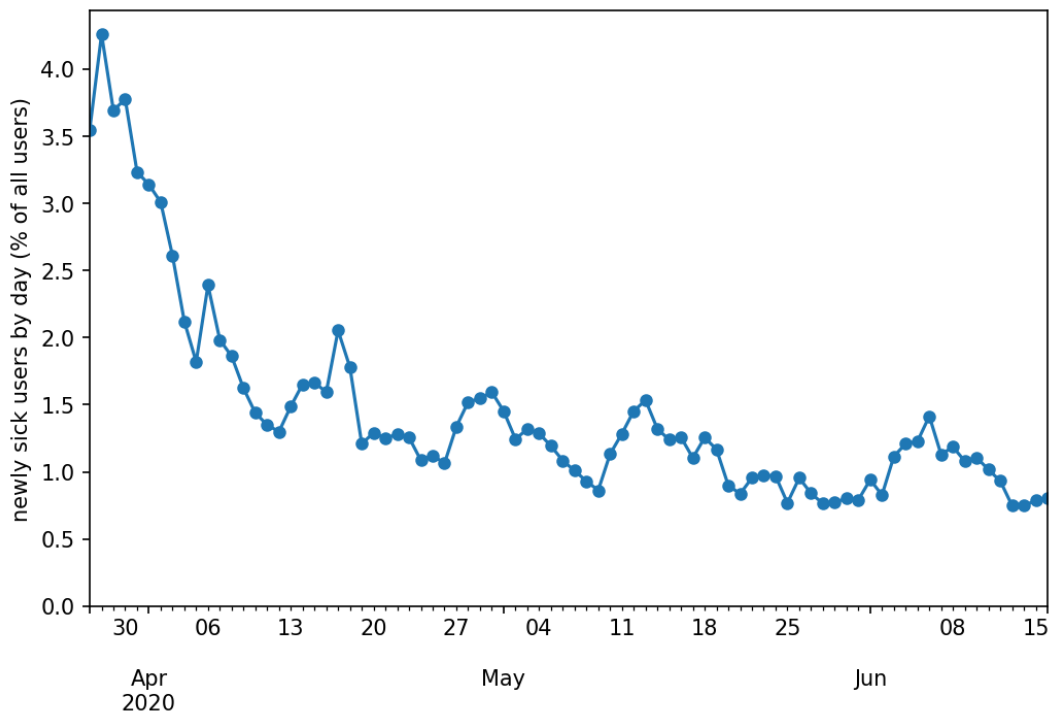
### Users who logged feeling unwell by day



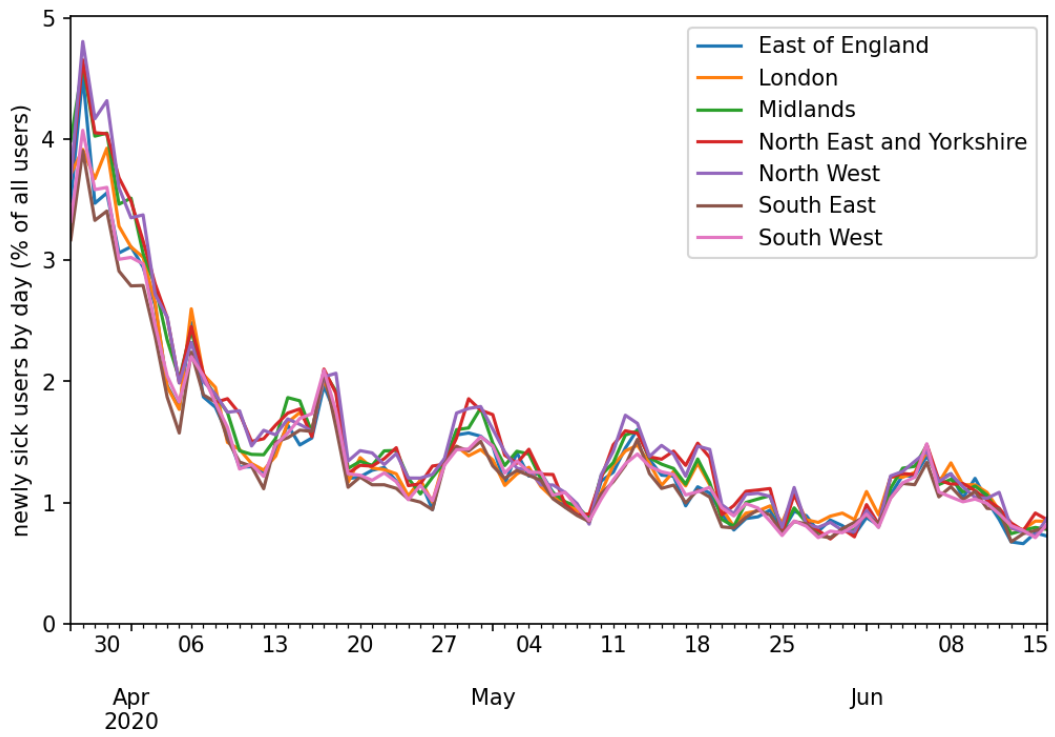
## Newly Sick Users by Day (% of Active Users)

Active users are those who have been logging regularly in the past 10 days. Newly sick users are active users who haven't reported any symptoms for at least 9 days before reporting one of the following symptoms:

Persistent cough, Shortness of breath, Fever, Fatigue, Skipped meals, Hoarse voice, Sore throat, Delirium, Chest pain, Abdominal pain, Diarrhoea, Headache, Unusual muscle pains, Loss of smell, Chills or shivers, Eye soreness, Nausea, Dizzy light headed, Red welts on face or lips, Blisters on feet or any other symptom that makes them feel unwell



### Newly Sick Users by Day in NHS England Regions (% of Active Users)



### Positive Test Results by Day (% of Invited Test Takers)

