

Largest testing programme for coronavirus shows virus continued to decline in June

- Findings show a continued reduction in the virus as some restrictions were eased, with the virus spreading even less than in May
- Study suggests measures taken to limit transmission in care homes and hospitals are working more effectively

The [second report from the country's largest study on coronavirus rates of infection has been published](#), showing further decline in COVID-19 in late June and early July. The study involved 150,000 volunteers tested across England between 19 June and 8 July.

The research, which examines levels of infection in the general population in England, has been published by Imperial College London and will undergo peer review before a final report is published.

The findings show the virus continued to decline across the country even when some restrictions had been lifted. Despite people having more interaction with people outside their households and non-essential shops reopening, the virus continued to halve every 8 to 9 days during this period.

Today's report shows there were no significant differences between the prevalence of infection for key workers and non-key workers. This is in contrast to the findings from Imperial's first study, which looked at infection in May, and showed care workers and healthcare workers had increased risk of infection compared with those who were not key workers.

This demonstrates the positive impact of infection control measures in care homes and hospitals. With increased testing for patients, residents and staff, more contact tracing, and improved isolation of positive cases, we have been able to limit the spread of the virus among health and social care settings while wider restrictions were eased.

Health and Social Care Secretary Matt Hancock said:

This research highlights how, thanks to everyone's efforts and sacrifice, alongside targeted measures to counter the spread of this virus in health and care settings, we were able to keep rates of infection low as some restrictions were lifted.

However, we must not be complacent. I urge everyone to get a test if you have symptoms, self-isolate and provide your contacts to NHS Test and Trace so we can continue to keep the virus at bay and get back to normal.

Today's report provides an insight into who was infected with the virus between 19 June and 8 July, comparing geography, age, sex, ethnicity, key worker status and symptoms.

It shows rates of infection fell even further to just under 8 positive cases per 10,000 people between 19 June and 8 July, when some lockdown restrictions had eased. Out of the 159,199 swab tests carried out in those 2 weeks, 123 were positive.

This second report builds upon the first which looked at infection during May and showed there were on average 13 positive cases for every 10,000 people during national lockdown.

The key findings from the second report include:

- over those 2 weeks in June and July, the rates of infection halved every 8 to 9 days, similar to that measured during May, with an overall reproduction number of 0.58, compared to 0.57 during May
- at any one point in those 2 weeks there were 39,000 people with COVID-19 compared to 74,000 in May
- no significant differences in the rates of infection by age – a contrast to the May results where higher rates of infection were seen in the 18 to 24 years age group
- Black, Asian and other ethnic minority individuals were more likely to test positive than those of white ethnicity. Work is underway between the Department of Health and Social Care (DHSC), local directors of public health and local authorities to understand and mitigate risks of transmission for BAME communities at a local level

Professor Paul Elliott, FMedSci, Director of the programme at Imperial College London, said:

Through our community testing programme, we're beginning to build a more informed picture of COVID-19 across England. This surveillance programme is showing us the prevalence of infection between different demographics, age groups and ethnicities as well as giving us insight into how easing lockdown restrictions are affecting the infection rate.

Kelly Beaver, Managing Director- Public Affairs at Ipsos MORI said:

The second report from this hugely significant study has underlined the importance of random, at-home testing to determine the prevalence of COVID-19 throughout England as we go through the different stages of this pandemic. Ipsos MORI is incredibly grateful to all those members of the public who agreed to take part in the study.

The Real-time Assessment of Community Transmission (REACT-1) programme is the

largest, most significant piece of research looking at how the virus is spreading across the country.

The study was commissioned by DHSC and carried out by a world-class team of scientists, clinicians and researchers at Imperial College London, Imperial College Healthcare NHS Trust and Ipsos MORI.

In the second part of the programme (REACT-2), a number of different fingerpick antibody tests that provide a result within 15 minutes have been assessed for their accuracy and ease of use at home. These tests look for evidence that someone has been infected with coronavirus in the past. One test has since been rolled out to 100,000 people to identify the levels of antibodies against the virus that causes COVID-19 in the general public and a report is expected this month.

Other key findings include:

- there were no significant differences seen between males and females
- measured levels were highest in London and lowest in the South West
- 81% of people testing positive reported no symptoms on the day of the test or the previous week. However, they may have developed symptoms later on and it doesn't show how infectious they might have been at this time

In the second report from REACT-1, the study was upscaled with over 150,000 randomly selected people over the age of 5 from across England volunteering to provide nose and throat swabs. These were tested for antigens indicating the presence of the virus to show whether someone is currently infected with COVID-19.

In line with government guidance, those with positive test results and their household were asked to self-isolate and they were contacted by NHS Test and Trace to provide details of their contacts.

The [pre-print report](#) can be accessed on Imperial's website.

The report was commissioned by DHSC and carried out by a world-class team of scientists, clinicians and researchers at Imperial College London, Imperial College Healthcare NHS Trust and Ipsos MORI.

Read more information on the [REACT programme of work](#).

This study falls under the surveillance workstream of NHS Test and Trace, which focuses on mass surveillance in the general population. This is the second study which looks at a representative cross section of the whole population.