

National Core Studies

May 2022

This is a monthly update from the [National Core Studies](#) programme with our latest news, key findings and things to look out for.

The COVID-19 National Core Studies (NCS) are a crucial part of the UK's ongoing pandemic response. They are enabling the UK to use health data and research to inform both our near and long-term responses to COVID-19, as well as accelerating progress to establish a world-leading health data and research infrastructure for the future.

This month we publish a new [quarterly impact report for January - March 2022](#) exploring the impact National Core Study insights are having on COVID-19 response and recovery

We ask an NCS public advisory group to review each of our reports - here's their **commentary for this quarter**:

*"We've seen a lot of great impact across this quarter's NCS Impact Report. Our highlight is the **Transmission & Environment NCS** review that explored all of the different COVID-19 virus transmission and control measures that have been trialled on public transport. This work is important given the variety of measures that have been trialled and put into place. Most importantly, they're now working with the National Union of Rail, Maritime and Transport Workers policy teams.*

Not only will this be beneficial for future outbreaks but also for everyday infections such as colds and coughs. This is so important because it means we can actually put our learnings into practice and see real change and protection for the public."

[Read the latest report here](#)

News from the National Core Studies

COVID-19 Infection Survey going digital

Epidemiology & Surveillance NCS COVID-19 Infection Survey continues its transition from face-to-face to online delivery, while tracking cases of the BA.2 sub-variant of Omicron.

5 things we learned from working with national COVID-19 data

In December 2020 **Data & Connectivity NCS** funded 12 project teams to answer key COVID-19 research questions using data made available through NCS. They investigated topics including COVID-19 vaccine real-world effectiveness, methods to identify long-COVID in medical records and ethnic group differences in COVID-19 outcomes and vaccine uptake. 5 of the teams talk about project outcomes and what they learned completing the work [in this blogpost](#).

Apply now to access linked data for more than 20 cohort studies

Longitudinal Health & Wellbeing NCS' Longitudinal Linkage Collaboration platform is entering its second month open for researchers to enquire for access via [the UKLLC portal on the HDR Innovation Gateway](#).



Read about the UKLLC access review process here

How to design prisons to prevent transmission of diseases

PROTECT Transmission & Environment NCS researchers from the University of Strathclyde and the University of Cambridge are collaborating with the Ministry of Justice to assess [how ventilation levels in prisons affect the spread of respiratory particles](#), and the role ventilation monitoring can play. The aim is for the evidence produced to inform policy on how to mitigate risk, for example via design guidelines for future prisons.

Applying Covid clinical trial innovations to other diseases

Epidemiology & Surveillance NCS Covid Infection Survey principal investigator, Professor Sarah Walker, gave the [31st Bradford Hill Memorial Lecture](#) "Beyond

'Standard-of-Care': novel trial designs for old problems" on 17th May .

Watch the lecture here

95 NCS datasets now made available to access via the Health Data Research Innovation Gateway by Data & Connectivity NCS

Transparent information on the 272 research teams using these NCS datasets for research, in many cases including the outputs their research produced, is now captured in the Gateway [Data Use Register](#).



Browse the NCS datasets here

NCS research finding highlights this month:

The **Longitudinal Health and Wellbeing and Data & Connectivity NCS**-supported [OpenSAFELY](#) platform [conducted a federated analysis of 57 million patients' primary care records to explore changes in English medication safety indicators](#). In what the authors believe to be the most comprehensive assessment of medication prescribing safety during the SARS-CoV-2 pandemic in England to date, covering 95% of the population, they found prescribing safety was maintained during the pandemic across a diverse range of measures.

The **Data & Connectivity NCS**-supported Early Pandemic Evaluation and Enhanced Surveillance of COVID-19 platform ([EAVE-II](#)), which covers the entire Scottish population, published [their analysis of vaccine booster efficacy against Omicron infection](#). They found that Omicron is more likely to break through immune protection than Delta, but causes milder disease when it does.

Epidemiology & Surveillance NCS released [modelled estimates](#) of the number of

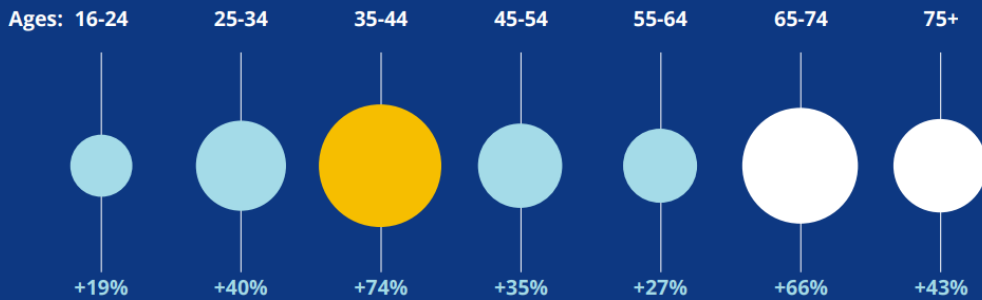
people who have had at least one COVID-19 episode since April 2020 - around 44 million people across the UK, which would be 66% of the population. In addition, their [special report on long Covid and omicron](#) found that, among triple-jabbed adults, rates of long Covid were similar following Delta or Omicron infection. For double-jabbed adults, where the absolute risk of long Covid is higher, persistent symptoms were 50% less common following Omicron compared to Delta.

PROTECT Transmission & Environment NCS commissioned the survey company NatCen to undertake a survey of COVID-19 and the workplace involving 5866 participants. They found that sectors with least infections were agriculture, arts/entertainment and construction. Most infections were seen in individuals employed by a household, education and health and social care settings. PROTECT NCS are now using this data set to address other key issues in relation to COVID and work.

This **Longitudinal Health & Wellbeing NCS** study used data from over 50,000 participants in 11 longitudinal population studies to show that [women, those with higher degrees, and those aged 35 to 44 years experienced greater pandemic mental health decline than other groups](#). A 30% increase in people reporting mental health decline was present throughout the first year of the pandemic – with no apparent recovery when social restrictions were eased. The researchers explain their findings in [this video](#).

Age Middle-aged people (35-44) and older people (65 and over) saw the highest increase in their distress levels.

% Increase Apr-June 2020 (from zero/ pre-pandemic baseline)



35-44

year olds are the most likely to have had primary school aged children to care for and home school during lockdown.



Over 65

Distress levels may have been higher for those 65 and over in the first lockdown as they were the most at risk from COVID-19.



90%

of people who died in Covid's first wave were 65 and over².

More NCS research publications for the month:

- [How the data revolution and the fight against COVID are changing UK stats forever.](#)
- [The relationship between COVID-19 infections and antibodies: What do the data show?](#)
- [Improving the evidence on ethnic health disparities.](#)
- [Lineage replacement and evolution captured by the United Kingdom Covid Infection Survey.](#)
- [Omicron-Associated Changes in SARS-COV-2 Symptoms in the United Kingdom](#)
- [The challenge of limited vaccine supplies: impact of prior infection on anti-spike IgG antibody trajectories after a single COVID-19 vaccination](#)
- [SARS-CoV-2 anti-spike IgG antibody responses after second dose of ChAdOx1 or BNT162b2 and correlates of protection in the UK general population](#)
- [Genetic Landscape of the ACE2 Coronavirus Receptor.](#)
- [Severity of omicron variant of concern and effectiveness of vaccine boosters against symptomatic disease in Scotland \(EAVE II\): a national cohort study with nested test-negative design.](#)
- [Impact of the SARS-CoV-2 pandemic on female breast, colorectal and non-small cell lung cancer incidence, stage and healthcare pathway to diagnosis](#)

- [during 2020 in Wales, UK, using a national cancer clinical record system.](#)
- [Healthcare contacts with self-harm during COVID-19: An e-cohort whole-population-based study using individual-level linked routine electronic health records in Wales, UK, 2016-March 2021.](#)
- [Psychological Distress Before and During the COVID-19 Pandemic Among Adults in the United Kingdom Based on Coordinated Analyses of 11 Longitudinal Studies](#)
- [The UK Coronavirus Job Retention Scheme and diet, physical activity, and sleep during the COVID-19 pandemic: evidence from eight longitudinal population surveys](#)
- [BNT162b2 and ChAdOx1 nCoV-19 vaccinations, incidence of SARS-CoV-2 infections and COVID-19 hospitalisations in Scotland in the Delta era](#)
- [Impact of First UK COVID-19 Lockdown on Hospital Admissions: Interrupted Time Series Study of 32 Million People](#)
- [Risk factors for long COVID: analyses of 10 longitudinal studies and electronic health records in the UK](#)
- [Risk of severe COVID-19 outcomes associated with immune-mediated inflammatory diseases and immune modifying therapies: a nationwide cohort study in the OpenSAFELY platform](#)
- [Impact on emergency and elective hospital-based care in Scotland over the first 12 months of the pandemic: interrupted time-series analysis of national lockdowns](#)
- [Evaluation of antithrombotic use and COVID-19 outcomes in a nationwide atrial fibrillation cohort](#)

Regular ONS reporting of

- [Coronavirus \(COVID-19\) Infection Survey technical article: Characteristics associated with third vaccination uptake: 21 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey technical article: Cumulative incidence of the number of people who have tested positive for COVID-19, UK: 22 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey, UK: antibody and vaccination data, 6 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey: UK: 8 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey, UK: characteristics of people testing positive for COVID-19, 13 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey, UK: 14 April 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey, UK: antibody and vaccination data, 20 April 2022](#)

- [Coronavirus and self-isolation after testing positive in England: 17 to 26 March 2022](#)
- [Coronavirus \(COVID-19\) Infection Survey technical article: Analysis of characteristics associated with booster vaccination uptake](#)
- [Coronavirus \(COVID-19\) Infection Survey technical article: cumulative incidence of the number of people who have tested positive for COVID-19, 14 March 2022'](#)
- [Coronavirus \(COVID-19\) Infection Survey, UK: 22 April 2022](#)

Thanks for reading - see you next month for our regular update on news and key findings - we will publish our next impact report at the end of July.

NCS are managed by:

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