

Statistical bulletin

# Coronavirus and self-isolation after testing positive in England: 1 February to 13 February 2021

Behaviour of individuals required to self-isolate after testing positive for COVID-19, from the COVID Test and Trace Cases Insights Survey. Includes information on the impact of self-isolation on well-being and finances. Experimental Statistics.

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# 1 . Main points

- The data collected from 1 February to 13 February 2021 show that the majority (86%) of respondents reported fully adhering to the self-isolation requirements throughout their self-isolation period.
- Non-adherent behaviour was most likely to take place in the period between the onset of symptoms (prompting a test) and receiving a positive coronavirus (COVID-19) test result, with 86% of respondents who had symptoms reporting adherence during this period.
- In the 24 hours following a positive result, 98% of all respondents reported adhering to the requirements; in the period after the first 24 hours, until the end of self-isolation at day 10, 94% reported being adherent.
- Over a third (37%) of respondents reported that self-isolation had a negative effect on their well-being and mental health.
- Approximately a third (32%) of respondents reported having lost income because of self-isolation.
- The COVID Test and Trace Cases Insights Survey was compiled in response to policy questions on the level of adherence to the requirement to self-isolate among those who received a positive test result, and the impact this had on their well-being and work situation.

The statistics presented are experimental statistics, so care needs to be taken when interpreting them. While the sample was stratified to be regionally representative of the population being sampled, people who did not respond to the survey may have been less adherent than those who did, leading to bias in the results. This has an impact on the level of certainty of this research.

## Statistician's comment

"Although it's a legal duty, self-isolation does disrupt day-to-day life, and we can see that there are key side effects of self-isolation such as worsening mental health and loss of income. Despite this, our analysis shows that a majority of people report fully adhering to the rules throughout their self-isolation period. This behaviour is vital in preventing the spread of COVID-19 and keeping people safe."

Tim Gibbs, Public Services Analysis Team, Office for National Statistics

Follow the Public Services Analysis Team on Twitter: [@HughStick](https://twitter.com/HughStick)

# 2 . Adherence to self-isolation requirements

In September 2020, a new legal duty was introduced in England, requiring people to self-isolate for 10 days if they tested positive for the coronavirus (COVID-19). The self-isolation period begins from the day symptoms start or the day of the test if there are no symptoms. This legal duty was introduced to enforce previous guidance around self-isolation, in order to prevent the spread of the coronavirus.

Data on the self-isolation behaviours of individuals required to self-isolate after being in contact with a positive case of COVID-19 is available in [Coronavirus and self-isolation after being in contact with a positive case in England: 1 March to 6 March 2021](#).

The data presented in this bulletin were collected from individuals who had tested positive for COVID-19 and had recently reached the end of their self-isolation period. These data were collected from 1 to 13 February 2021, during a period of national lockdown, when the legal duty to self-isolate had been in place for more than four months. More information on identifying this group of people, self-isolation, and collecting the data can be found in the [Glossary](#) and [Measuring the data](#) sections.

The data collected from 1 to 13 February 2021 show that the majority (86%) of respondents to the survey reported fully adhering to self-isolation requirements throughout their self-isolation period. Approximately 3 in 20 people (14%) reported at least one activity during self-isolation that was not adherent to the requirements, such as leaving the home for a reason not permitted under legislation.

Non-adherence with self-isolation requirements is illegal unless there are exceptional circumstances such as emergency medical reasons. More information on adherence to self-isolation requirements can be found in [Measuring the data](#).

Table 1: Adherence to self-isolation requirements throughout the self-isolation period  
England, 1 February to 13 February 2021

	<b>Percentage</b>
<b>Reported full adherence</b>	86%
<b>Reported one or more non-adherent activity</b>	14%

Source: Office for National Statistics – COVID Test and Trace Cases Insights Survey

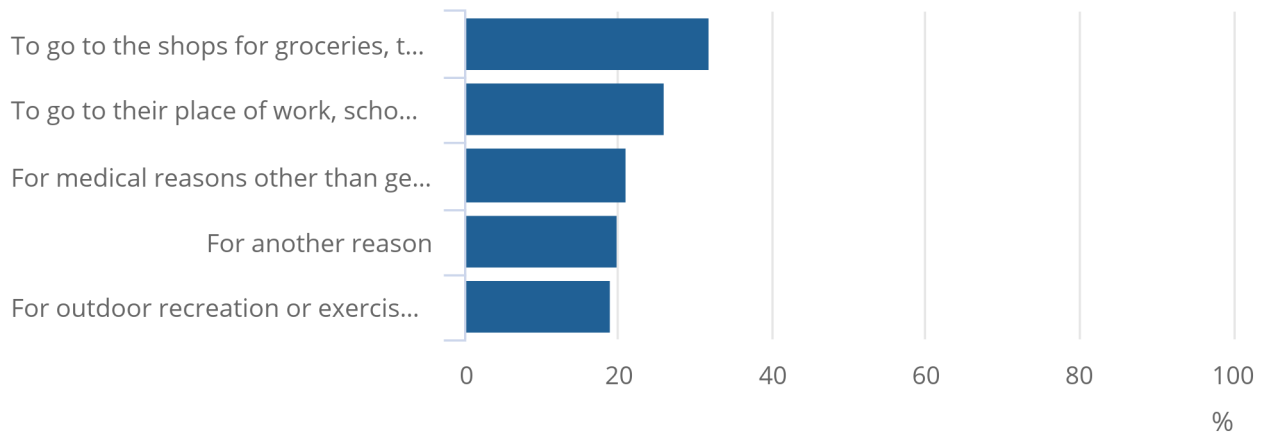
Approximately one in five (22%) of those who did not adhere to the requirements had one or more visitors to their home during the self-isolation period, whose visit was not to support their personal care. The main reason that people were found not to adhere to the requirements was leaving the home for a reason that is not permitted; 83% of those who did not adhere to the requirements left the home for a reason not permitted. Such reasons included going to the shops for groceries, toiletries, medicine or other items, and going to work, school or university (Figure 1).

**Figure 1: Reasons for leaving the home included going to the shops for groceries, toiletries, medicine or other items, and going to work, school or university**

Percentage of respondents who left the home, among respondents who left the home at least once for a reason not permitted during self-isolation, England, 1 February to 13 February 2021

Figure 1: Reasons for leaving the home included going to the shops for groceries, toiletries, medicine or other items, and going to work, school or university

Percentage of respondents who left the home, among respondents who left the home at least once for a reason not permitted during self-isolation, England, 1 February to 13 February 2021



Source: Office for National Statistics – COVID Test and Trace Cases Insights Survey

Notes:

1. Respondents were able to choose multiple options, so percentages will not sum to 100.
2. The percentage for those who left the house to help or provide care for a vulnerable person is not shown on this graph because the sample count is less than 30.

Non-adherent behaviour was most likely to take place in the period between the onset of symptoms requiring self-isolation and receiving a positive COVID-19 test result. See the [Glossary](#) for more information on symptoms.

Of those with symptoms prior to their test, the percentage who fully adhered to requirements between onset of symptoms and a positive test result was 86%. This compares with 98% of all respondents who adhered to the requirements in the 24 hours following a positive result and 94% in the period after the first 24 hours, until the end of self-isolation at day 10.

Of those with symptoms requiring self-isolation, half (50%) of respondents received their positive test result within 24 hours of first having symptoms. A minority (10%) received their test result more than 72 hours after their symptoms started.

## More about coronavirus

- Find the latest on [coronavirus \(COVID-19\) in the UK](#).
- [Explore the latest coronavirus data](#) from the ONS and other sources.
- All ONS analysis, summarised in our [coronavirus roundup](#).
- View [all coronavirus data](#).
- Find out how we are [working safely in our studies and surveys](#).

## 3 . Contact with others

To understand the risk of the coronavirus (COVID-19) spreading, respondents were asked whether they had contact with non-household members at any point when they felt ill or were self-isolating. When considering the risk of the coronavirus spreading, we consider those with any symptoms of illness before their test, for example, a sore throat. See the [Glossary](#) for more information on symptoms.

This differs from the population who were measured for adherence to self-isolation requirements in the time between onset of symptoms and receiving a positive test, which only includes those with a high temperature, a new continuous cough, or loss of sense of smell or taste (see the [Glossary](#)).

More information on defining contact with non-household members and adherence to requirements can be found in [Measuring the data](#).

The majority (83%) of respondents reported having no contact with non-household members while they had any symptoms of illness or during the self-isolation period. Contact was most likely to take place while out of the house; 84% of those who had contact with non-household members did so while out of the house. Of those who had contact with non-household members, approximately 1 in 5 (21%) had visitors to their home.

Of those who lived with others, the majority (79%) reported being unable to keep themselves completely separate from other household members while self-isolating. Of respondents who lived with others:

- 36% said that they were not at all able to keep themselves separate from others in the home
- 19% said they were able to keep themselves separate some of the time
- 25% said they were able to keep themselves separate most of the time
- 21% said they were able to keep themselves completely separate

## 4 . Understanding of self-isolation requirements

Respondents were asked about their interpretation of the requirements for self-isolation, to determine how well they understood these requirements. The majority of respondents (68%) fully understood the requirements. The remaining 32% of respondents either misunderstood or were unsure of the requirements. These respondents provided either one or more incorrect interpretation, or one or more “don’t know” answer.

More information on understanding of self-isolation requirements can be found in [Measuring the data](#).

The activity that was most likely to be reported by respondents as allowed during self-isolation was going out for medical reasons other than getting or returning a COVID-19 test, for example, a doctor's appointment (Figure 2). Attending routine medical appointments, such as doctor's appointments, is not allowed during self-isolation but there are exceptions for medical emergencies. Those who reported that this activity was allowed may have been referring to this exception, so it is possible that understanding of guidance is higher than reported here.

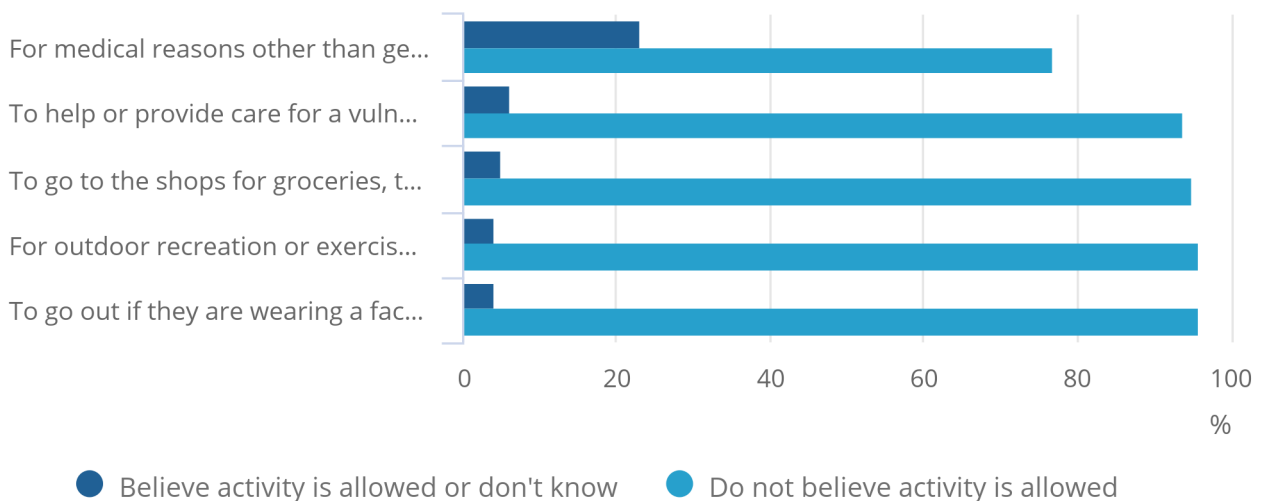
Adherence with self-isolation requirements was [statistically significantly](#) higher among those who fully understood the requirements (87%) compared with those who misunderstood or were unsure of the requirements (83%).

**Figure 2: The activity that was most likely to be reported by respondents as allowed during self-isolation was going out for medical reasons other than getting or returning a COVID-19 test**

Percentage of all respondents who believed that reasons for leaving the home were allowed during self-isolation by activity type, England, 1 February to 13 February 2021

Figure 2: The activity that was most likely to be reported by respondents as allowed during self-isolation was going out for medical reasons other than getting or returning a COVID-19 test

Percentage of all respondents who believed that reasons for leaving the home were allowed during self-isolation by activity type, England, 1 February to 13 February 2021



Source: Office for National Statistics – COVID Test and Trace Cases Insights Survey

Notes:

1. The category 'prefer not to say' is not included in this chart due to low sample counts, so percentages may not sum to 100.
2. The category 'To go to their place of work, school or university' is not shown in this graph due to a sample count of less than 30 in the response 'believe activity is allowed or don't know'.
3. The activities shown in this graph are not allowed during self-isolation, except for in exceptional circumstances, so respondents answering that activities are allowed or that they don't know have misunderstood or are unsure of the requirements.

## 5 . Ease and impact of self-isolation

Of respondents who adhered to self-isolation requirements, most (80%) agreed that “it was easy for me to self-isolate”. This compares with 76% of those who did not adhere to the requirements. This difference was [not statistically significant](#).

Over a third (37%) of all respondents reported that self-isolation had a negative effect on their well-being and mental health. But the average life satisfaction score for all respondents was 7.1 (out of 10), which is statistically significantly higher than the life satisfaction of the general adult population in England, at 6.4 ([Opinions and Lifestyle Survey \(COVID-19 module\), England, between 3 and 7 February 2021](#)).

The Opinions and Lifestyle Survey (COVID-19 module) uses a different data collection method to the COVID Test and Trace Cases Insights Survey, so these figures should be compared with caution.

Approximately a third (32%) of respondents reported a loss of income because of self-isolation. Of those who had been working prior to self-isolation (either in or outside the home), 59% reported either working as normal or receiving full sick pay, while 13% were not paid during the isolation period.

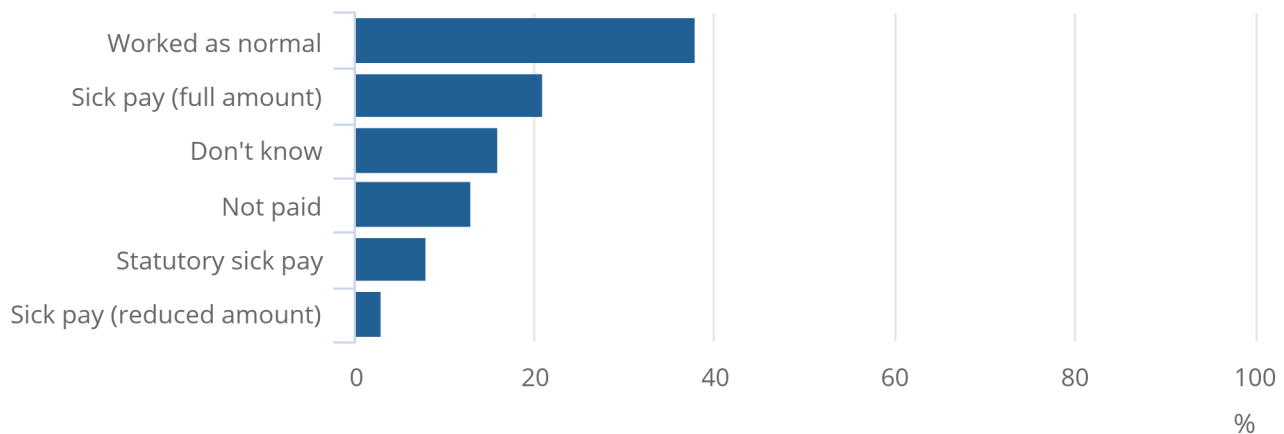
A further 8% received only statutory sick pay, 3% received reduced sick pay and 16% were not sure how they were paid (Figure 3). These figures relate to usual income and do not take account of other financial support during self-isolation, such as the [Test and Trace Support Payment Scheme](#).

### Figure 3: 13% of people working prior to self-isolation (either in or outside the home), were not paid during the self-isolation period

Percentage of respondents who were working prior to self-isolation, by how they were paid during self-isolation, England, 1 February to 13 February 2021

### Figure 3: 13% of people working prior to self-isolation (either in or outside the home), were not paid during the self-isolation period

Percentage of respondents who were working prior to self-isolation, by how they were paid during self-isolation, England, 1 February to 13 February 2021



Source: Office for National Statistics – COVID Test and Trace Cases Insights Survey

Notes:

1. The category 'prefer not to say' is not show in this graph due to a sample count of less than 30.

## 6 . Self-isolation after testing positive data

[Coronavirus and self-isolation after testing positive in England](#)

Dataset | Released 26 March 2021

Experimental statistics on individuals required to self-isolate after testing positive for the coronavirus (COVID-19), from the COVID Test and Trace Cases Insights Survey. Includes information on behaviour after testing positive for COVID-19 as well as the impact of self-isolation on well-being and finances.

## 7 . Glossary



## Self-isolation

Self-isolation refers to not leaving your home because you have or might have the coronavirus (COVID-19). It is a legal requirement to self-isolate if you test positive for COVID-19. In addition to staying at home, if you are self-isolating you should not receive visitors unless the purpose of the visit is to provide essential care. Your self-isolation period includes the day your symptoms started (or the day you had the positive test result, if you do not have symptoms) and the next 10 full days. If you still have symptoms after 10 days, you must continue self-isolating until they are gone.

For further information please see NHS guidance [When to self-isolate and what to do](#).

## Symptoms

Symptoms reported by respondents that do not require self-isolation prior to a positive test, if not experienced alongside a high temperature, a new continuous cough, or loss of sense of smell or taste are: shortness of breath or trouble breathing; runny or stuffy nose; muscle or body aches; headaches; sore throat; fatigue; vomiting, diarrhoea or severe stomach pain.

Symptoms requiring self-isolation prior to a positive test result are a high temperature, a new continuous cough, or loss of sense of smell or taste (see NHS guidance [When to self-isolate and what to do](#)).

## Lockdown

On 5 January 2021, the UK government announced a further national lockdown for [England](#). Similar rules applied for [Scotland](#) and [Wales](#), particularly the message to “stay at home” meaning that adults in Great Britain were under a national lockdown at the start of the year in 2021.

On 22 February 2021, the UK government published a four-step [roadmap](#) to ease lockdown restrictions in England. On 23 February, the Scottish government published an update to the [strategic framework](#) for easing lockdown restrictions in Scotland. In Wales, from 13 March, stay at home restrictions were replaced with [stay local restrictions](#).

# 8 . Measuring the data

## Survey information

The COVID Test and Trace Cases Insights Survey was compiled in response to policy questions on the level of adherence with self-isolation requirements, the prevalence of behaviour that poses a risk of transmitting the coronavirus (COVID-19), and the impact of self-isolation on well-being and finances. It was produced, run and analysed in a collaboration between the Department for Health and Social Care (DHSC), Public Health England (PHE) and the Office for National Statistics (ONS).

This survey was specifically designed to obtain information on people who have tested positive for COVID-19 and who are at the end of their 10-day self-isolation period. ONS experts were consulted on questionnaire design. The survey respondents were randomly selected from a list of adults (aged 18 years or over) who had tested positive for COVID-19 and who reached day 10 of their self-isolation period on one of the following dates: 31 January 2021, 2 February 2021, 7 February 2021 or 9 February 2021. Respondents were contacted by telephone and all answers are self-reported.

This is the first bulletin in this series. This wave of the survey is a pilot, which will be used to improve the quality of information in future waves. The statistics contained in this bulletin are [Experimental Statistics](#).

## Understanding self-isolation requirements

Respondents to the survey were asked what activities they believed were allowed during self-isolation (from a list of reasons for leaving the home) and how long they believed someone must self-isolate after testing positive. For the purpose of this analysis, respondents were categorised as having fully understood self-isolation requirements if they:

- did not select any reason for leaving the home which is not permitted during self-isolation (such as going to work or to the shops)
- reported a number between 10 and 14 days for the required number of days that someone must self-isolate after testing positive

The range above 10 days for the length of self-isolation was included in order not to discount those who believed it necessary to self-isolate slightly longer than stated in current requirements. Those who reported a number above 14 were counted as having misunderstood the requirements.

Some reasons for leaving the home are permitted in exceptional circumstances (such as medical emergencies). Those who reported that certain activities were allowed may have been referring to these exceptions, so it's possible that understanding of guidance is higher than reported here.

## Adherence with self-isolation requirements

Respondents were categorised as having adhered to the requirements of self-isolation legislation if they:

- did not leave their home during self-isolation, except to get or return a test for coronavirus (COVID-19)
- did not receive any visitors during self-isolation, except for visitors supporting their personal care

Individuals who left their home or had visitors for other reasons may have adhered to the requirements if they did so due to exceptional circumstances. This means a small number of individuals may be mis-categorised as non-adherent.

For those who reported having a high temperature, a new continuous cough or loss of sense of taste or smell prior to their test, adherence is measured from the onset of symptoms; otherwise it is measured from the date of a positive test result.

Adherence is measured until the end of self-isolation, or until the point of the survey if isolation has lasted beyond 10 days because of continued symptoms.

For further information please see [The Health Protection \(Coronavirus, Restrictions\) \(England\) Regulations 2020](#).

## Contact with non-household members

For the purpose of this analysis, contact with non-household members was defined as either physical contact for any length of time or being within two metres (six feet) of someone for at least a few minutes during a trip out of the house. Having visitors to the home was also counted as contact with non-household members if these visitors were not providing personal care.

This definition differs slightly from the definition of a contact for the purpose of NHS Test and Trace. For more information see [guidance for contacts of people with confirmed coronavirus \(COVID-19\) infection who do not live with the person](#).

## Estimates for Wave 1

The first wave of data was collected between 1 and 13 February 2021. The sample size was 2,552. While the sample was stratified to be regionally representative of the population being sampled, percentages in this bulletin are not weighted as complete population data was not available to do so.

Estimates presented are based on the 2,552 responses received and are not representative of the population testing positive for COVID-19 on the day of being sampled. Of those potential respondents who were successfully contacted by an interviewer, the response rate was 63%. When including cases where contact was attempted but not made, the response rate was 19%.

A low response rate can be expected as the target population was likely unwell with COVID-19 and so less likely to participate. As with all surveys, these estimates have an associated margin of error.

Future waves of the survey will provide statistics that are weighted to be representative of the population testing positive in the month prior to the survey.

## Identifying individuals at the end of their self-isolation period

Respondents were randomly sampled through the Contact Tracing and Advice Service (CTAS) database, held by NHS Test and Trace. This list was created by NHS Test and Trace to record information about people who have tested positive for COVID-19 and their contacts. The sample was limited to those who had provided a valid phone number and who had been entered onto the CTAS database at the point of sampling.

The majority (84%) of respondents were interviewed within four days of the end of their self-isolation period, in order to minimise recall bias. The longest time between the end of self-isolation and interview was 12 days.

## 9 . Strengths and limitations

The main strengths of the COVID Test and Trace Cases Insights Survey include:

- timely production of data and statistics that can respond quickly to changing needs, as the questions included are reviewed for each wave
- assessment of behaviour at three stages of the self-isolation period
- the sample was stratified to be regionally representative of the population being sampled
- quality assurance procedures are undertaken throughout the analysis stages to minimise the risk of error
- confidence intervals have been used to determine whether differences across time periods and groups are statistically significant

The main limitations of the COVID Test and Trace Cases Insights Survey include:

- people who did not respond to the survey may have been less adherent than those who did, leading to bias in the results
- the behaviour of respondents during self-isolation is self-reported and may be subject to recall-bias, which influences how accurately respondents are able to recall past events and experiences; most interviews took place within four days of the end of self-isolation to reduce this bias
- only participants who appear in NHS Test and Trace's database were invited to take part, which will exclude people who have the coronavirus (COVID-19) but who do not request a test
- respondents may be unwilling to report illegal behaviour, for example, leaving the house during a self-isolation period; this is also known as social-desirability bias
- the [Experimental Statistics](#) presented in this bulletin contain [uncertainty](#); as with all survey data based on a sample, there is an element of uncertainty as they are susceptible to respondent error and bias

## 10 . Related links

### [Coronavirus \(COVID-19\) latest data and analysis](#)

Webpage | Updated as and when data become available

Latest data and analysis on the coronavirus (COVID-19) in the UK and its effect on the economy and society.

### [Coronavirus \(COVID-19\) roundup](#)

Blog | Updated as and when data become available

Catch up on the latest data and analysis related to the coronavirus pandemic and its impact on our economy and society.

### [Coronavirus and the social impacts on Great Britain](#)

Bulletin | Weekly

Indicators from the Opinions and Lifestyle Survey (OPN) to understand the impact of the coronavirus pandemic on people, households and communities in Great Britain.

### [Coronavirus and self-isolation after being in contact with a positive case in England: 1 March to 6 March 2021](#)

Bulletin | Released 26 March 2021

Behaviour of individuals required to self-isolate after being in contact with a positive case of COVID-19, from the COVID Test and Trace Contacts Insights Survey. Includes information on the impact of self-isolation on well-being and finances. Experimental Statistics.

