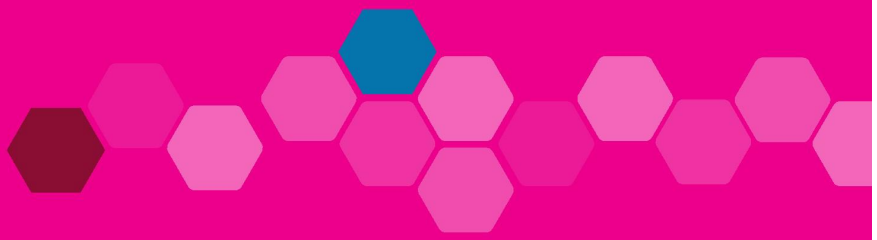
Scottish Government
Riaghaltas na h-Alba
gov.scot

Covid-19 Support Study: experiences of and compliance with self-isolation



HEALTH AND SOCIAL CARE

social research

Covid-19 Support Study: experiences of and compliance with self-isolation

August 2021

ScotCen
Social Research that works for society

Authors: Lisa Rutherford, Victoria Wilson, Stephen Hinchliffe, Hannah Biggs, Claire Elliott, Andy MacGregor

Contents

Executive Summary **1**

Introduction 1

Methods 1

Compliance with the requirement to self-isolate 1

Non-compliance 2

Knowledge of rules and guidance 2

Attitudes & experiences of self-isolation 3

Testing 3

Vaccination 4

Support during self-isolation 4

1. Introduction **6**

2. Methods **9**

2.1 Study design 9

2.2 Survey 9

2.2.1 Sample 9

2.2.2 Fieldwork 11

2.2.5 Sample profile (Index and Contact Cases) 14

2.2.6 Analysis 15

2.2.7 Data tables 16

2.3 Qualitative interviews 16

2.4 Changes in self-isolation guidance during the research 18

2.5 Ethics 19

2.6 Strengths and limitations of the study 19

3. Compliance with requirement to self-isolate **22**

3.1 Background 22

3.2 Compliance with self-isolation among Index and Contact Case participants 22

3.2.1 Perceived compliance with self-isolation 22

3.2.2 Behavioural compliance with self-isolation 24

3.2.3 Comparison of self-assessed compliance and behavioural compliance . 26

3.2.4 Compliance with specific aspects of self-isolation requirement 28

3.2.5 Understanding non-compliance with the requirement to self-isolate 30

3.3 International Traveller findings 32

3.3.1 Perceived compliance with self-isolation requirements 32

3.3.2 Behavioural compliance with self-isolation 33
3.3.3 Comparison of self-assessed compliance and observed compliance ... 34
3.3.4 Compliance with specific aspects of self-isolation requirements 35
3.3.5 Understanding non-compliance with self-isolation 36
4. Knowledge of rules and guidance 39
4.1 Background 39
4.2 Results 39
4.2.1 Knowledge around self-isolation among Index and Contact Cases and requirements around own self-isolation 39
4.2.3 Relationship between knowledge of self-isolation and self-isolation behaviour 42
4.3 Knowledge around self-isolation among International Travellers 45
4.3.1 Knowledge of the purpose and requirements around own self-isolation 45
4.3.2 Knowledge of self-isolation requirements more broadly 46
4.3.3 Relationship between knowledge of self-isolation and self-isolation behaviour 46
5. Attitudes & experiences of self-isolation 48
5.1 Background 48
5.2 Index and Contact Case participants' attitudes and experiences of self-isolation 48
5.2.1 Views on the effectiveness of the self-isolation strategy as a means of helping prevent the spread of COVID-19 48
5.2.2 Views on where decision-making around self-isolation should lie 49
5.2.3 Views on the impact of self-isolation on mental health 50
5.2.4 Perceived financial hardship during self-isolation 50
5.2.5 Impact of self-isolating on finances 51
5.3 International Traveller participants' attitudes and experiences of self-isolation 52
5.3.1 International Traveller views on the effectiveness of the self-isolation strategy as a means of helping prevent the spread of COVID-19 52
5.3.2 Views on where decision-making around self-isolation should lie 53
5.3.3 Belief that restrictions for international travel were effective in reducing the spread of COVID-19 and variants 54
5.3.4 What impact did self-isolation have on the mental health of International Travellers? 55
5.3.5 Perceived financial hardship during self-isolation 56
5.3.6 Impact of self-isolation on different aspects of finances 57

5.4 Positive and negative impacts of self-isolation (qualitative interviews with Index Cases, Contact Cases, and International Travellers) 58
5.4.1 Mixed and negative impacts of self-isolation 58
5.4.2 Impacts in the context of specific personal circumstances 59
5.4.3 Positive impacts or experiences of self-isolation 60
6. Testing 63
6.1 Background 63
6.2 Testing and Index and Contact Cases 63
6.2.1 How often are individuals being tested and does this differ between Index and Contact cases? 63
6.2.2 What was the reason for the most recent test undertaken by Index and Contact Case participants? 64
6.3.3 Where are tests taking place and has this changed over time for Index and Contact Case participants? 65
6.3.4 How long are Index and Contact Case participants waiting for their test results and has this differed by where it was undertaken and/or over time? ... 67
6.2.2 Result of last test and levels of compliance among Index and Contact Case participants 67
6.3 Testing and International Travellers 68
6.3.1 How often have International Travellers been tested? 68
6.3.2 How long are International Travellers waiting for their test results? 68
6.3.3 What have been the outcomes of the most recent test taken by those self-isolating as a result of international travel? 69
7. Vaccination 70
7.1 Background 70
7.2 Vaccination status among Index and Contact Cases 70
7.2.1 Vaccination levels among self-isolating Index and Contact Case participants 70
7.2.2 Vaccination status and overall compliance among Index and Contact Case participants 71
7.2.3 Vaccination status and likely future behaviour among Index and Contact Case participants 71
7.3 Vaccination status among International Travellers 72
7.3.1 Vaccination status of International Traveller participants 72
7.3.2 Vaccination status and overall compliance among International Travellers 73
7.3.3 Vaccination status and likely future behaviour among International Travellers 73
7.4 Opinions on vaccinations (qualitative interviewees) 74

8. Support during self-isolation 76
8.1 Background 76
8.2 Formal support 76
8.2.1 Formal support offered to Index and Contact Case participants 76
8.2.2 Formal support accessed by Index and Contact Case participants 79
8.2.3 Reasons Index and Contact Case participants accessed formal support 79
8.2.4 How well Index and Contact Case participants' support needs were met 80
8.2.5 Reasons Index and Contact Case participants did not accept formal support 83
8.2.6 Self-Isolation Support Grant (SISG) 84
8.3 Formal support for International Travellers 86
8.4 Informal support among Index and Contact Case participants 87
8.5 Informal support among International Travellers 90
8.6 Communication with Test and Protect: participant preferences 91
Conclusions 93
Compliance with the requirement to self-isolate 93
Knowledge and understanding of the self-isolation requirement 94
Attitudes and views of self-isolation 94
Testing 95
Vaccination 96
Support during self-isolation 96
Appendix A 98

Executive Summary

Introduction

During the COVID-19 pandemic, self-isolation has been established as a vital approach for interrupting the spread of the virus, reducing community transmission and saving lives. For this strategy to be effective, individuals must be willing to self-isolate, feel adequately supported to do so and understand the detail of what they have been asked to do.

ScotCen was commissioned by the Scottish Government to conduct research with the aim of measuring rates of compliance with the requirement to self-isolate among those in the Test and Protect system in Scotland. In addition the research aimed to evaluate how well those asked to isolate understood the self-isolation guidance, and explore individual experiences of isolation, including barriers and facilitators to successful compliance.

Methods

A mixed method approach, comprising a survey followed by in-depth interviews with a sample of survey participants, was undertaken. The survey collected data, primarily online, from three key groups in the Test and Protect system:

1. Index Cases: Those asked to self-isolate after testing positive for COVID-19
2. Contact Cases: Those identified as having been in close contact with someone who tested positive
3. International Travellers: Those arriving into Scotland from outside the UK

Survey invitations to those eligible to take part were issued directly from Test and Protect via either SMS or email. A total of 4325 Test and Protect cases took part in the survey (Wave 1= 917 (7%), Wave 2=1748 (8%), Wave 3=1660 (9%)). In-depth interviews were carried out with 30 survey participants who consented to being recontacted for a follow-up interview.

Compliance with the requirement to self-isolate

Overall, compliance with self-isolation was high among survey participants of all case types (Index Cases, Contact Cases, International Travellers). Qualitative findings indicated that people complied with self-isolation requirements in order to protect the wider population by reducing the transmission of COVID-19. However, there was variance evident between how compliant people *thought* they had been when compared with an objective measure of compliance[1]. This suggests that

[1] Referred to throughout the report as 'behavioural compliance' – see the 'Methods' chapter for more information

some participants may have lacked the knowledge, willingness and/or capability to self-isolate successfully.

Full compliance was higher amongst some participants than others:

Across **all case types**, compliance was higher among those who agreed that self-isolation is an effective strategy.

Among **Contact Case** participants, compliance was higher for those who lived with someone who tested positive than among those who had been in close contact with someone outside their household.

For **Index and Contact Cases**, compliance was higher for: women, those aged 65 and over, those who accepted the offer of Local Authority support and those aware that the isolation period should be 10 days.

Among **International Travellers**, compliance was higher for those in managed isolation[2] than for those isolating at home. International Traveller participants in the youngest age group (aged 16-24) were significantly less likely than other participants to have fully adhered to the self-isolation requirements.

Although there was high compliance with all elements of self-isolation requirements across case types, compliance with specific elements varied by case type. Among Index and Contact Case participants, compliance with the requirement to remain at home during self-isolation and the requirement to avoid close contact with people from outside the household declined across the fieldwork period (small but statistically significant variations) while the requirement to isolate for 10 days declined for all case types over this period.

Non-compliance

Instances of non-compliance with self-isolation requirements were low across all case types although this is likely, in part, due to the opt-in nature of the survey. Over half of Index and Contact Case participants did not do any of the non-compliant activities listed in the survey. However, there were instances of non-compliance with requirements either in the period between being advised to self-isolate and its commencement, or during the isolation period.

Non-compliant activities undertaken by participants before or during self-isolation included: visiting shops for groceries, toiletries or medicine; taking part in outdoor recreation or exercise; and attending work, school or university. Additional non-compliant activities mentioned by qualitative participants included: dog walking; driving members of their household to get a COVID-19 test or to go to work; and delivering groceries to a neighbour who was also self-isolating.

Knowledge of rules and guidance

Understanding of what was permitted during the self-isolation period was high among all case types though there was some ambiguity about whether leaving self-

[2] As part of a hotel quarantine package

isolation for a medical reason, to care for a vulnerable person, or get/send a COVID-19 test was allowed.

The majority of survey participants of all case types knew that a 10 day self-isolation period was required after an individual tested positive for COVID-19. However, the proportion was much lower for International Travellers: 37% of International Traveller participants though the period was longer (14 days).

High proportions of all case types knew that the requirement for those in contact with someone who tested positive was 10 days even after a negative test result for the Contact Case.

For several activities there was a clear association between knowledge of whether an activity was allowed or not and whether a person carried out the activity themselves. However, knowledge of self-isolation requirements did not guarantee compliance. A number of qualitative interviewees knowingly breached self-isolation requirements. Those who admitted to doing so said these were minor infractions and they tried to minimise risks to others.

Attitudes & experiences of self-isolation

Agreement that self-isolation is an effective strategy against the spread of COVID-19 was high among all case types, though lower among International Traveller participants than Index and Contact Case participants. Support for the strategy strengthened with increased age.

There was some evidence of a relationship between endorsement of the strategy and compliance with the requirement (for all case types), with those who were fully compliant more likely to strongly agree than those who were partially compliant.

One fifth of International Traveller participants (particularly those in managed isolation) did not agree that international travel restrictions will help reduce the spread of COVID-19 and new variants of it.

Half of survey participants expressed that the experience of self-isolation had impacted negatively upon their mental health, with younger people, those in managed isolation and those experiencing repeated self-isolation particularly affected.

Isolation also impacted on peoples finances. Younger people, those with a household income of <=£16,900, and those living in the two most deprived SIMD quintiles in Scotland were likely to cite self-isolation impacting negatively upon their employment and income in all case types.

Testing

Index and Contact Case participants who tested positive on their most recent test were more likely to comply fully with self-isolation than those who tested negative (80% and 75% respectively).

Qualitative interviewees who undertook testing at home commented that the instructions for testing were clear and easy to understand.

Vaccination

Half of the Index and Contact Case participants had received at least one dose of vaccine, with 15% having received both doses at the time of completing the survey. Among qualitative interviewees, motivating factors for accepting a vaccine were to protect themselves and others and believing that the vaccines were effective in reducing the risk of catching and transmitting COVID.

No significant association between compliance with the self-isolation regulations and vaccination status were observed for any case type. A high level of intended future compliance with self-isolation regulations (82%), even once vaccinations had been given, was reported amongst Index and Contact Cases. However, only 61% of International Travellers said they would self-isolate if asked to do so once fully vaccinated, while 19% indicated they would not.

Support during self-isolation

A fairly high level of awareness of formal support existed among **Index and Contact Case** participants.

Over half (56%) indicated that they were offered the option of their Local Authority contacting them. Smaller proportions recalled being offered online support, the National Assistance Helpline number and/or support when visiting a test centre. Yet 29% did not recall being offered any of these formal support options.

Participants aged 25-44 and 45-64 were more likely than the youngest and oldest age groups to mention having received an offer of Local Authority contact, as were those living with others (adults and/or children), and those managing comfortably on their income during self-isolation.

In the qualitative research, interviewees were not always able to say if offers of support around self-isolation came from Test and Protect, the Local Authority or the NHS. Furthermore, while most interviewees were aware that Local Authorities offered support, they did not always know what the support entailed.

Uptake of Local Authority support was relatively low among Index and Contact Case survey participants, with 14% of those offered the opportunity of contact from their Local Authority accepting the offer.

The vast majority of Index and Contact Case participants that were offered the option of contact from their Local Authority declined the offer, with most doing so because they did not need any additional support.

The majority of Index and Contact Case survey participants responded that they had support from friends, family or neighbours outside of their household if they needed it, a higher proportion than among International Travellers. Those who had less access to informal support were more likely to take-up the formal support offer.

Uptake of the Self-Isolation Support Grant (SISG) was low. Only 8% of Index and Contact Case participants indicated that they had applied for a SISG, with no variation by case type.

Around a fifth of all Index and Contact Case participants did not apply because they did not know about the grant. This was higher among those on lower incomes.

Most Index and Contact Case participants who had contact with their Local Authority, indicated that their support needs had been met (84%).

Only small proportions of **International Traveller** participants directly sought assistance from either their Local Authority and/or via the National Assistance Helpline, with no significant variations by whether they were on a managed isolation package or self-isolating and testing at home.

Most International Travellers who sought formal support either from their Local Authority directly and/or via the National Assistance Helpline agreed that their support needs were met (72%).

In the qualitative interviews, **all case types** said they would have benefited from more support in the form of clear and easy to find information on self-isolation requirements and support available to them during isolation. Suggestions included: providing everyone who is isolating with a written list of sources of support and relevant contact details (available in a range of formats); improving the accessibility and clarity of guidance available on the relevant government and NHS websites (including for International Travellers); and offering resources to help people look after themselves physically and mentally during isolation.

1. Introduction

Self-isolation is a well established approach in transmissable disease prevention. The primary reasons for asking individuals to self-isolate during the COVID-19 pandemic have been to interrupt the spread of the virus, reduce community transmission and save lives. Scotland's approach to self-isolation, laid out in the Test, Trace, Isolate, Support Strategy[3] and the Test and Protect Programme[4] is for those with, or potentially at risk of developing, COVID-19 to be identified and asked to self-isolate, while offering support for them to do so successfully.

> **Self-isolation** refers to the approach under the Test and Protect system whereby individuals are asked to remain at home or in managed isolation (see below) for a period of 10 days from: the onset of symptoms (or longer if the symptoms have not gone), contact from Test and Protect or return from international travel. Those asked to self-isolate should not leave their house/accommodation unless this is solely to get or return a COVID-19 test and should not receive visitors from outside their household. Where possible, those self-isolating should try to maintain physical distancing from others within their household who have not been advised to self-isolate.

In September 2020, SAGE identified an urgent need for better, and regular, data on adherence to self-isolation across the UK[5,6] to understand the challenges faced by those asked to undertake self isolation and enable opportunities to improve and develop support for those self-isolating in the future. This research is intended as a response to this, exploring the rate and extent of compliance, as well as exploring experiences of self-isolation.

A successful self-isolation strategy relies on a robust and responsive testing programme to correctly identify individuals who should isolate. Indeed, early and rapid testing is one of the six main tools in the Scottish Government's strategic approach[7] to the COVID-19 pandemic[8]. Testing allows for the identification of positive cases to ensure they get the correct care and to help interrupt further transmission. It also offers: protection for those at increased risk of contact, targeted community testing , and is a means of assessing the stress and resilience of essential services in the wider economy, as well as a means of monitoring cases at a population level. As with all aspects of the response to COVID-19, the testing

---

[3] See https://www.gov.scot/publications/coronavirus-covid-19-test-trace-isolate-support/
[4] See https://www.nhsinform.scot/campaigns/test-and-protect
[5] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925133/S0759_SPI-B__The_impact_of_financial_and_other_targeted_support_on_rates_of_self-isolation_or_quarantine_.pdf
[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931005/S0762_Fifty-seventh_SAGE_meeting_on_Covid-19.pdf
[7] Along with vaccinations, FACTS, border control measures, self-isolation and wider care and support
[8] See https://www.gov.scot/publications/scotlands-testing-strategy-update-march-2021/pages/1/

approach has been developed over time in response to changing circumstances, resources and scientific understanding, including expansion of testing centres and increased testing in the community via free at-home lateral flow tests (available from the end of April 2021).

A self-isolation strategy will only be effective if the public are aware of what is required of them during self-isolation. A person can be willing to self-isolate, and be provided with sufficient support to do so, but it is also vital that they understand the detail of what they are being asked to do. Previous studies have underlined the importance of clear guidance and knowledge in enabling individuals to adhere to self-isolation requirements, including an understanding of the rationale behind the approach and its effectiveness[9]. This research aimed to establish levels of knowledge and understanding of the self-isolation requirement among those asked, by the Test and Protect system, to do so themselves.

It is also important to understand attitudes and experiences of self-isolation, to understand where challenges to compliance based on support for the overall strategy, and/or individual circumstances, may exist. Willingness to adhere to the guidelines and a belief in the validity of the self-isolation approach have an important part to play in any self-isolation strategy. This research aimed to explore the isolation experience for individuals and the degree to which they believe in the strategy as a means of helping prevent the spread of the disease.

For the self-isolation approach to be successful, those asked to self-isolate need not only to be prepared to do so, but also able to within the context of their own personal circumstances. It is recognised that there are many factors and challenges that may make it difficult to adhere to self-isolation, no matter how much an individual intends to or indeed may believe that they are complying. Sufficient support and an awareness of, and access to, such support is an important criterion to helping prevent onward spread of the virus. This research aimed to identify and understand more about the support needs and challenges encountered by those asked to self-isolate. The evidence will inform policies and initiatives related to supporting self-isolation and identify ways in which the support offer could be adapted to help those self-isolating as much as possible in the ways that they as individuals require.

Additionally, it was important that this research explored the level of impact of self-isolation on the lives of those asked to self-isolate and others within their household, including which sub-groups are most likely to be adversely affected and where additional support may be needed.

The introduction of Scotland's mass vaccination programme, which began in December 2020, offers hope for the future and, alongside testing, self-isolation and

---

[9] Scientific Pandemic Influenza Group on Behaviours (SPI-B) (2020). *The impact of financial and other targeted support on rates of self-isolation or quarantine [SPI-B: 16 September 2020.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925133/S0759_SPI-

adherence to FACTS[10] guidelines, is a key pillar of the Scottish Government's strategy to reduce the transmission of COVID-19 and save lives. As with many aspects of the Scottish Government's reponse to the COVID-19 pandemic, the evidence related to vaccinations is developing over time, with more being learned about the effectiveness of the vaccination programme against COVID-19 and its transmission, the level and duration of immunity offered and recommendations for the deployment of individual vaccinations. As such, the Scottish Government guidance throughout, including in all three waves of the study, has been to continue to follow the self-isolation guidelines, FACTS and current COVID-19 restrictions irrespective of vaccination status. Therefore, understanding the experiences and attitudes of those asked to self-isolate remains vital in understanding how best to support such individuals in the future.

The specific aims of this research were to:

- Measure compliance rates for the survey sample over 3 monthly waves.
- Provide data on the extent of compliance (from full non-compliance to full compliance).
- Measure understanding of isolation guidance.
- Provide in-depth information on the experience of isolation.
- Provide in-depth information on barriers and support to comply.

The combined strength of a large survey of those asked to self-isolate along with in-depth qualitative exploration allows the Scottish Government and its partners to better understand common and distinct experiences, incentives and barriers to compliance, as well how support can be targeted in the best possible way for specific groups.

This knowledge will inform the policy and practices to improve the Test and Protect system and support high levels of compliance that will ultimately ensure that the population of Scotland can be protected. Interim reporting has been provided throughout fieldwork to feed into this policy area on an ongoing basis.[11]

This research is to be published at a point at which advice and rules around self-isolation are due to change. The findings here remain crucial to understanding the experience of self-isolation and supporting those asked to self-isolate as long as this remains a significant part of the response to the Covid-19 pandemic.

[10] At the time of publishing this report the communication message 'FACTS' was under review as part of the move to take Scotland beyond Level 0 to the next phase of pandemic handling.
[11] COVID-19 support study: experiences of and compliance with self-isolation - gov.scot (www.gov.scot)

2. Methods

2.1 Study design

In order to fully understand the knowledge, attitudes, experiences and support needs of those being asked to self-isolate, a mixed method design was required. A quantitative online survey (with the option of telephone completion instead) and qualitative telephone/video interviews were identified as the most appropriate and feasible means of meeting the study objectives and to generate a robust evidence base to inform policy.

Both the survey and qualitiative interviews involved collecting data from adults aged 16 and over from three key groups:

- Those asked to self-isolate after testing positive for COVID-19 (Index Case).
- Those who had been in close contact with someone who tested positive, either within their own household or from a separate household (Contact Cases).
- Those who had returned from international travel (International Travellers) (see below for details on changes to the self-isolation rules for this group during wave 3 of the survey).

More detail on each of the study strands can be found under the relevant headings below. A glossary of some of the key terms used throughout the report can be found in Appendix A.

2.2 Survey

2.2.1 Sample

The aim was to invite potential participants in each of the three case types (Index, Contacts and International Travellers) on or as close as possible to day eight of their self-isolation. This allowed more time for these individuals to have experienced self-isolation but was also intended to reduce the potential burden on those recovering from COVID-19 who may wish to respond to the survey.

Eligibility

Eligibility was established separately for Index and Contact Cases and International Travellers.

Index and Contact Cases' eligibility

The following outlines the sequence of steps taken to identify Index and Contact Cases in the Test and Protect system eligible to take part in the study. A case was eligible if:

1. They agreed, when asked by Test and Protect, to future contact about follow-up research[12]
2. They were aged 16 or over
3. They did not travel in the last 14 days[13]
4. The onset of their symptoms (or, for Contact Cases, the onset of symptoms for the person they were in close contact with) fell within the relevant fieldwork period
5. They were on/close to Day 8 of their official self-isolation period
6. Still met criteria outlined at steps 2 and 3 after steps 4-5 had been completed[14]

Cases that met these criteria were deemed suitable to receive a survey invitation.

International Travellers' eligibility

The following outlines the sequence of steps taken to identify International Travellers in the Test and Protect system eligible to take part in the study. A case was eligible if:[15]

1. They were identified as an International Traveller in the Test and Protect System
2. They agreed, when asked by Test and Protect, to future contact about follow-up research
3. They were aged 16 or over
4. They did not provide a Home Office email address[16]
5. They were on Day 8 of their official self-isolation period on the day invitations were issued

Cases that met these criteria were deemed suitable to receive a survey invitation.

Recruitment

In accordance with data protection regulations and consent given to uses of the personal data of those in the Test and Protect database, invitations to take part in the survey were issued by Public Health Scotland. Due to the way different case type information is held it was decided that all eligible Index and Contact Cases

[12] Public Health Scotland estimate that, when contacted by the Test and Protect system, around a third of Index Cases and a quarter of Contact Cases agreed to be contacted about follow-up research.
[13] This was used as a proxy for International Travellers in the Test and Protect system who were also an Index Case (due to testing positive). These people were removed from the eligible Index and Contact Case sample as they were invited to take part as International Travellers.
[14] It was possible for contact tracers to update a person's case record after having spoken to them.
[15] Every attempt was made to only include those isolating in Scotland, but it is possible that a small number isolated elsewhere.
[16] The sample excluded those who provided Test and Protect with a Home Office email address as these cases tended to be asylum seekers, seasonal workers etc who don't typically have their own email or phone number and consequently it would not be possible to pass invitations on to them.

would be invited to take part via an SMS invitation, while International Traveller Cases were sent an email invitation.

Survey invitations were designed in conjunction with and approved by the Scottish Government research team that included:

- A link to the online survey.
- A unique eight digit access code for every individual invited.
- The survey freephone number and option of undertaking a telephone interview.

ScotCen created the survey link and generated unique access codes for the survey. The survey link and access codes were provided to Public Health Scotland (PHS) who issued invitations daily by SMS or email to those individuals on the Test and Protect system who met the eligibility criteria on a given day.[17] No reminders were issued.

To maintain confidentiality and in accordance with the study privacy policy, anything that could link access codes to completed surveys were not provided by ScotCen to any external organisations including the Scottish Government, Public Health Scotland or any other third party.

In order to ensure that participants were fully informed and supported during the research process, a website containing further details on the study, the privacy notice and a list of relevant organisations that may be useful to potential participants were also made available, along with the ScotCen freephone number and email address for any queries or additional feedback. A Scottish Government email address was also provided. Links to these resources were included within the email invitations, however, due to character limitations for text messages and to avoid the participant burden of receiving too many messages, these details were also provided at the start of the online/telephone surveys and several of the useful organisations were also listed at the end of the survey (see questionnaire in Appendix B, available in the Supporting Files).

2.2.2 Fieldwork

Survey fieldwork took place over three distinct fieldwork periods:

Wave 1: 19th – 31st March 2021
Wave 2: 12th April – 5th May 2021
Wave 3: 10th May – 2nd June 2021

[17] The exact number of days SMS invitations were issued for varied across the three waves of survey fieldwork. For Index and Contact Cases the number of days invitations were issued for increased over the three waves to take account of the decline in positive cases. The opposite was the case with International Travellers with the number of days declining across the three waves of fieldwork.

As anticipated at the design stage, to ensure a sufficient sample size the fieldwork periods for waves two and three were extended from the original timings as the falling case numbers during those periods meant a reduction in the eligible population. An increase in the numbers eligible to take part, along with a higher than anticipated response among International Travellers during wave two, allowed the invitation window for this group to be reduced by one week in wave three.

2.2.3 Questionnaire

The questionnaire was designed to take an average of 15 minutes to complete online and covered several topics under three broad themes of interest:

Figure 2.1 Survey topics

Experiences	Support/guidance	Understanding and opinion
Current isolation status & reason for self-isolating	Contact & guidance offered	Understanding of self-isolation guidelines
Experiences of self-isolation	Whether applied for Self-isolation Support Grant	General opinions on self-isolation guidelines and behaviour
Experiences of being tested for COVID-19	Support offered/ accessed/ needed from Local Authorities	

Additional demographic details were also collected to aid analysis. A copy of the full questionnaire can be found in Appendix B in the Supporting Files for this report. The questionnaire was identical for those who opted to take part over the telephone.

The questions were converted into web and telephone survey programs with in-built routing and filtered question wording appropriate to the individual participant's circumstance (for example, whether an individual was still isolating or not). Participants were informed that they could skip any questions that they did not wish to answer.

The questions were identical across all the three waves with the exception of two new questions introduced in wave 2 and also included in wave 3: shielding status and indoor close contact with non-household members.

2.2.4 Survey response

The overall response rate for each of the survey waves ranged from 7% in wave 1 to 9% in wave 3. Reponse was highest among International Travellers (in the range 12%-14%) and Index Cases (11% in all waves) and lowest among Contact Cases (4%-5%). [Figure 2.2]

Figure 2.2 Survey response

Activities and Response	Total Wave 1	Index Cases Wave 1	Contact Cases Wave 1	International Travellers Wave 1	Total Wave 2	Index Cases Wave 2	Contact Cases Wave 2	International Travellers Wave 2	Total Wave 3	Index Cases Wave 3	Contact Cases Wave 3	International Travellers Wave 3
Invitations issued (n)	**14705**	3655	9135	1915	**23403**	2592	12458	8353	**21626**	2327	11382	7917
Failed delivery (n)	**1954**	140	1803	11	**2049**	136	1873	40	**2204**	108	2058	38
Invitations delivered (n)	**12751**	3515	7332	1904	**21354**	2456	10585	8313	**19422**	2219	9324	7879
Total completes (n)	**917**	385	267	265	**1748**	276	439	1033	**1,660**	254	455	951
Response rate* (%)	**7%**	11%	4%	14%	**8%**	11%	4%	12%	**9%**	11%	5%	12%

Survey questionnaires were classifed as 'completes' and included in analysis if the participant answered questions up to, and including, the reason for their self-isolation or beyond.

2.2.5 Sample profile (Index and Contact Cases)[18]

The sex, age and area deprivation profile of the survey sample was well-balanced and appeared to match the Test and Protect system profile, over the same period, reasonably well. This is encouraging given the opt-in nature of the survey recruitment. The proportions of 25-44 year olds in the survey sample were similar to those in the Test and Protect system over the same period. Similarly, the proportions of participants living in SIMD quintiles 2, 3 and 4 were similar to those observed in Test and Protect. Nevertheless, some groups were under-represented in the survey, notably: male Index and Contact cases, those aged 16-24 and those living in Scotland's most deprived SIMD quintile. It is not uncommon for these groups to be under-estimated in social surveys, even those drawn using random probability sampling. [Figure 2.3]

[18] Public Health Scotland did not have equivalent data for international travellers for comparison of the survey sample with the Test and Protect system at the time of report writing.

Figure 2.3 Sex, age and area deprivation profile of Index and Contact Cases in the survey sample and in the Test and Protect system during survey fieldwork

Demographics	Test & Protect system	Survey sample
Sex		
Female	53%	67%
Male	46%	32%
Age group		
16-24	25%	14%
25-34	21%	18%
35-44	21%	23%
45-54	16%	24%
55+	17%	21%
SIMD Quintile		
1 – Most deprived	26%	20%
2	22%	20%
3	17%	18%
4	18%	20%
5 – Least deprived	17%	22%

2.2.6 Analysis

Analysis of the survey data was undertaken in SPSS. The survey data has not been weighted as data on the key characteristics of the population from which the sample was from was not available at the time of analysis.

Frequencies and bivariate analysis have been used to describe the survey data and to identify associations between variables of interest. A wide range of independent variables were included across the bivariate analysis although the exact variables explored varied slightly depending on the dependent variable under investigation. Socio-demographic variables explored included: sex; age group; area deprivation (SIMD quintiles); household income; household composition; perceived financial hardship; ethnicity; carer status and long-standing illness. Some of the COVID-19 specific independent variables included in analysis were: case type; booking type (for International Travellers only); shielder status; vaccination status; offer of Local Authority support during self-isolation; acceptance of Local Authority support and isolation history. Variables on knowledge of, and attitudes towards, self-isolation were also included.

Throughout the report, the terms 'statistically significant' and 'significant' are used to imply significance at the 0.05% level.[19] It should not, however, be assumed that all observed differences in Excel tables are statistically significant.

[19] Significance testing determines the likelihood of a result being a result of chance or a genuine difference that is likely to be repeated if the data was collected again.

A limitation of bivariate analysis is that while it can identify the existence of an association between two variables, it cannot explain the direction of that relationship and nor does it mean that all within a particular sub-group (e.g. all aged 16-24) think or behave in the same way. Similarly while it gives an indication of potential association between two variables, it cannot account for the other associations at play.

When making inferences from the results it should be borne in mind that as the sample was opt-in, and not randomly drawn from the eligible population, the results describe the patterns and associations found among those who took part in the survey as opposed to all adults asked to self-isolate. It should also be borne in mind that some groups in particular appeared to be under-represented in the sample including: male Index and Contact Cases; Index Contact Cases aged 16-24 and Contact Cases from Scotland's two most deprived quintiles.

To ensure that the disproportionately large number of International Traveller participants' did not unduly bias overall totals presented, their data has been analysed and presented separately to Index and Contact Case data. In addition, differences in the self-isolation requirements for the International Traveller group warranted some separate questions and analysis for this case type. Where appropriate, findings for International Travellers have been compared with Index and Contact Case participants combined.

2.2.7 Data tables

The figures quoted in this report are drawn from data tables available as supplementary files to this report. Tables display frequencies for survey responses and derived variables (such as the behavioural measure of compliance). Data that is discussed in the main report will be referred to as, for example, Figure 1. Where data is only available in the supplementary files it will be referred to as, e.g.Table 1.

2.3 Qualitative interviews

Sample and recruitment

Survey participants were asked during the questionnaire if they were happy to consent to be approached to participate in an in-depth telephone/video interview, in which their experience of self-isolation would be explored in more detail. All of those who consented to be recontacted from wave one of the survey formed the sampling frame for the qualitative component.

Qualitative purposive sampling was conducted in order that survey participants were contacted to be interviewed based on the criteria outlined below. The main sampling criteria were: level of compliance with self-isolation requirements (self-reported and observed (see Chapter 3 for more on this)); case status; and receipt of local authority support. It was also important to include a range of participants across demographic variables such as age, sex, SIMD, ethnicity and employment status. Figures 2.4 – 2.6 demonstrate that the research team was successful in interviewing 30 participants across a range of purposive sampling requirements.

Figure 2.4: Rates of compliance of final qualitative sample (30 interviews)

Rate of compliance:	Fully Compliant	Mostly Compliant	Partially Compliant	Not Compliant
Number of interviewees:	5	4	19	2

Figure 2.5: Age range of final qualitative sample (30 interviews)

Age	16-24	25-34	35-44	45-54	55-64	65-74	75+
Number of interviewees:	2	7	5	6	4	5	1

Figure 2.6: Scottish Index of Multiple Deprivation (SIMD) quintiles of final qualitative sample (30 interviews)

SIMD	1 (most deprived)	2	3	4	5 (least deprived)	No data
Number of interviewees:	10	4	3	2	6	5

The range of other purposive sampling requirements were also met. Out of the thirty interviewees:

- 10 were index cases; 7 were household contact cases; 6 were non-household contact cases; and 7 were international travellers
- Fifteen were male and 15 were female
- Sixteen were working[20]; 3 were in education[21]; and 11 were neither working nor in education[22].
- Six had accepted Local Authority support to self-isolate; 15 had not accepted it; and 9 said they had not been offered it (including all the international travellers).

The interview sample was made up of a majority of White participants (n=25).

Those who consented to be recontacted were asked to provide an email adress and/or a contact phone number. In total, 67 individuals were approached by ScotCen in order to achieve the 30 interviews. All potential interviewees were provided with a study information sheet outlining the nature of the qualitative research, what participation would mean and contact information for members of the research team. The participants were then able to opt in to the qualitative research directly, or to contact the research team with any questions.

[20] Working for at least 10 hours per week / government training scheme

[21] In education (not work or government training scheme)

[22] Neither working (for at least 10 hours per week) nor in education

Qualitative fieldwork

The interviews took place between the 15th of April and the 14th of May 2021 and lasted, on average, 45 minutes. Verbal consent was sought at the start of the interview, and the participants were also asked for their agreement that the interviews would be digitally recorded and fully transcribed. Interviewees were given an incentive of a £30 gift card or online e-voucher on completion of an interview.

Qualitative topic guide

The interview topic guide was developed by the research team and agreed with the Scottish Government prior to fieldwork commencement. The interviews covered the following broad areas in detail:

- Covid-19 beliefs and other contextual factors
- Experiences of self-isolation
- Experiences and perceptions of support received
- Factors that helped and hindered self-isolation
- Future changes that would enable self-isolation to operate more smoothly.

The nature of qualitative interviewing meant that while the topics above were all covered, this mode offered flexibility in the order in which they could be addressed so that the conversation flowed naturally for each interview rather than following a set order. The full topic guide is outlined in Appendix C in the Supporting Files for this report.

Analysis

Completed transcripts were checked, edited and entered into qualitative analysis software NVivo 12 to aid the thematic analysis. A coding framework was developed and agreed by the research team. After coding was completed, a detailed analysis was undertaken in which the main emergent themes were identified, explored and developed. Comparison and cross-referencing within and between groups was also conducted, for example, by examining the responses of Contact and Index Cases. The main emergent themes were summarised, developed and written up, and are included in the main results section of the report, along with verbatim, anonymised quotations.

2.4 Changes in self-isolation guidance during the research

For Index and Contact Cases the requirements and guidance around self-isolation did not change during the life of the research project.

With regards international travel, in mid-May 2021, Scotland was aligned with the rest of the UK with the introduction of a traffic light system, designed to reflect the current situation in international countries with regards to the pandemic and transmission risk of COVID-19 and any variants. During the latter phase of wave 3

fieldwork this system, updated every three weeks, provided information on countries that should not be travelled to for holiday or leisure purposes and which require self-isolation in managed accommodation (red countries), those it was advised not to travel to and that require self-isolation at home upon returning (amber countries) and those it was possible to travel to without self-isolation but with the appropriate testing (green countries). Prior to the introduction of this system, all International Travellers returning to Scotland were required to enter managed isolation in a hotel, whereas those that arrived via another UK country, were required to self-isolate and test at home. Since fieldwork completed further changes have been made to the the traffic light system and whether people need to isolate once fully vaccinated when returning from an amber country, but the above were the regulations in place over the course of this reseach.

2.5 Ethics

Prior to commissioning, the study was subject to the Scottish Government's ethical review process. A steering group comprised of representatives from across the Scottish Government, Test and Protect, NHS Scotland and Public Health Scotland had oversight of the study, while the day-to-day management and oversight was undertaken by the Scottish Government Health and Social Care Analysis team. The study was also reviewed and approved by NatCen's Research Ethics Committee in February 2021.

2.6 Strengths and limitations of the study

Study Strengths

- The study included all case types in the Test and Protect system allowing comparisons across case types to be made.
- To measure actual behaviour and minimise recall bias, participants were invited to take part in the study during their official self-isolation period.[23]
- By asking questions regarding individual components of self-isolation compliance (e.g. how quickly someone started isolating, length of the isolation period etc.), as well as for the participants' own assessment of their level of self-isolation compliance, the survey was able to measure and report in more than one way, and at more than one point in time, in the self-isolation period.
- Survey fieldwork was carried out over more than one wave across a three month period. This meant that the data was able to capture the changing nature of self-isolation experiences and developments in the pandemic response, such as the widespread availability of free lateral flow tests and changes to the rules for international travel.
- Carrying out fieldwork over more than one wave also enabled for interim data to be delivered that allowed the survey findings to be reported and acted upon in real time before the final report was delivered.

[23] Survey participants were invited to take part at, or around, day 8 of their self-isolation but were not required to complete it straight away or before their official isolation period ended.

- The survey method was developed to be as inclusive as possible with the option of telephone surveying for anyone who was invited but was unable or unwilling to complete the survey online.
- The broad nature of the survey allowed data to be captured that enabled analysis based on a range of demographic, geographic, behavioural and attitudinal sub-groups. This not only allowed a picture of self-isolation compliance, attitudes and support needs to be built up by case type but also for different sub-groups to allow the nuances of experiences, attitudes and needs to be explored, to ultimately inform policy development and implementation.
- The survey allowed for a broad range of topics to be investigated across large numbers of participants, while the qualitative interviews provided a depth and additional understanding of personal experiences of self-isolation that added a greater richness to the survey data.
- Statistical testing was used to determine if observed differences across different groups of participants were statistically significant or not, adding weight to the survey findings reported and clarity regarding factors that are impacting on the self-isolation experiences of individuals.

Study Limitations

- The self-selecting nature of the sample was a limiting factor for the study. The opt-in approach required for this survey means that there was potentially higher representation among participants who were more likely to be compliant with the requirements to self-isolate, while those that did not take part in the survey were potentially less compliant with the requirement to self-isolate. While efforts to emphasise the value of the study and its non-judgemental and confidential nature were made, the nature of the recruitment process, particularly the use of a single SMS for Index and Contact Case invitations issued by Test and Protect, limited the opportunity for these assurances. It is important to note, that while qualitative sampling was undertaken to interview a range of case types, the sample of those available for this was also drawn from those who agreed to take part in a follow-up qualititative interview. It is therefore possible that those who did not consent to follow-up research were somehow different in terms of their compliance than those who did participate in qualitative interviews.
- The agreed recruitment process dictated that participants could only receive one piece of communication inviting them to take part. A reminder strategy may have yielded a higher response rate among groups typically harder to reach in surveys (e.g younger people, those in areas of greater deprivation) and which we know were under-represented in the survey sample.
- While invitations were issued during a case's self-isolation period, it is likely, particularly among those that chose to complete the survey after their self-isolation period had ended, that the accuracy with which some participants were able to recall past events and experiences was subject to a degree of recall bias.

- While every care was taken, at the design-stage, to ensure non-judgemental language was used across the survey and interviews, it is likely that the nature of the topic will have resulted in social-desirability bias. Given participants were explicitly asked about activites the Scottish Government has requested they do not do, it is likely that some participants did not accurately report carrying out such behaviour in case it was viewed unfavourably. The most likely impact on the data is that the figures in this report over-state compliance.

3. Compliance with requirement to self-isolate

3.1 Background

The important contibution of self-isolation[24] to the suppression and reduced transmission of the COVID-19 virus in Scotland necessitates an understanding of compliance. Within this is a recognition that for the self-isolation approach to be successful, those asked to self-isolate need not only to be willing to do so as advised but also able to do so within the context of their own personal circumstances. Willingness to adhere to the guidelines and a belief in the validity of the self-isolation approach have a part to play but it is recognised that there are other factors and challenges that may make it difficult to adhere to self-isolation, no matter how much an individual intends or indeed may believe that they are complying (see Chapters on knowledge and support for more on other factors that may relate to compliance with the requirement).

Throughout the fieldwork period, all those asked to self-isolate were asked to do so for 10 days, to avoid contact with others outside their household and to stay within their own home and garden (or hotel accommodation). The focus for the study with regards to compliance was to examine overall levels (both self-assessed and based on behaviours), how this may vary between case types and other demographic groups and to examine the individual components of compliance that may be proving harder for individuals to adhere to.

3.2 Compliance with self-isolation among Index and Contact Case participants[25]

3.2.1 Perceived compliance with self-isolation

When asked directly, in the survey, how well they thought they managed to comply with self-isolation, it is clear that the vast majority of Index and Contact Case participants assessed their ability to comply very positively. More than nine in ten (94%) reported that they managed to comply with self-isolation 'all of the time'. Five percent felt they complied 'some of the time' and no-one reported not managing to self-isolate at all. Index Cases were more likely than Contacts to report complying 'all of the time' (97% compared with 93%).

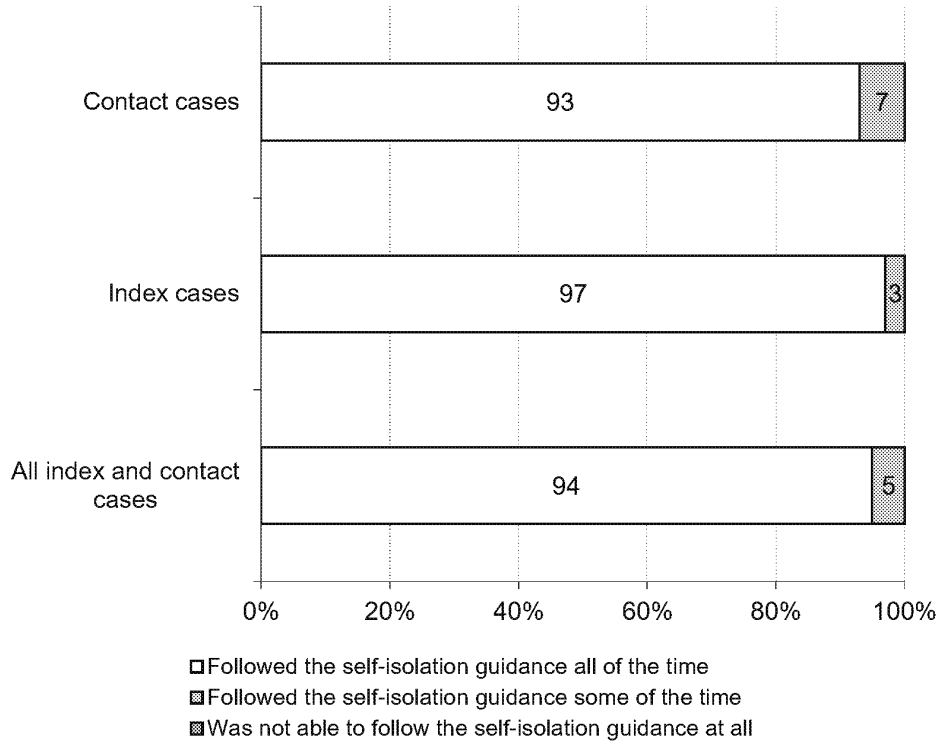
Here, the opt-in nature of the survey, in combination with a degree of social desirability among those that did take part, may help explain, in part, why self-

[24] See 'Methods' for more on what the term 'self-isolation' refers to in the context of the research and the COVID-19 pandemic response in Scotland

[25] Quantitative findings presented in this Chapter are based on bivariate analysis. See Chapter 2.2.6 for a discussion of the strengths and weakness of this type of analysis.

assessed non-compliance was so low among survey participants. [Figure 3.1, Table 3.1]

Figure 3.1 Self-assessed compliance with self-isolation by case type (%, All Index and Contact Case participants)



The qualitative research provided additional insights into how Index and Contact Cases viewed their own self-isolation and why self-assessed levels of non-compliance were so low. The consensus among interviewees was that the importance of the purpose of self-isolation, in protecting the wider population, meant that there was little or no temptation to flout the rules. The majority of interviewees were adamant that they had not even come close to breaching the self-isolation measures, and even those who said that they, on occasion wanted to leave the house, admitted that there was little hardship in having to isolate for such a comparatively short time period. The few exceptions to this are outlined later in this chapter. A few comments suggested that a minority were also concerned that they would be identified by others if they breached the regulations, though this did not seem to be a particularly prevalent concern.

> "I and my partner have been brought up to be law abiding, to do what's best for everyone else, not what's best for ourselves…and we've been brought up old school… we were brought up in a different timescale and a different mindset, so yes, we obey the rules." (International Traveller)

> "I would never forgive myself if I put somebody else in danger, so no. It was hard, but it was something you just have to do anyway…I

think it's more because the job I'm in, do you know what I mean? We care for elderly, and I think, that's my motivation is the fact that I know the job I'm in and I would be absolutely appalled if somebody had to go out." (Index Case)

3.2.2 Behavioural compliance with self-isolation

In addition to asking survey participants to directly assess how well they think they managed to self-isolate, the survey tried to capture a more objective measure of compliance by asking a series of detailed questions which would both measure adherence to specific aspects of the self-isolation requirement and provide a summary measure of compliance.[26] This summary measure is referred to as 'behavioural compliance' throughout this report.

On the behavioural measure, three-quarters (74%) of Index and Contact Case participants were classified as fully complying with self-isolation at the point of taking part in the survey.[27] A quarter (25%) partially adhered to the requirement but were not able to comply with it fully and just 1% were not compliant at all – that is they either did not try to self-isolate at all or tried, but did not manage to start immediately, stay at home/accommodation for the duration or isolate for the required period of time. [Table 3.2] High levels of compliance have also been observed elsewhere in the UK, with 79% of Index Case participants[28] and 87% of Contact Case participants[29] in Engand reporting that they were fully compliant.[30] And 78% of Contact Cases in Wales[31], reporting that they adhered to the requirement not to leave their house during self-isolation.[32]

Full compliance with the requirement to self-isolate significantly declined over the survey fieldwork period[33] dropping from 79% in wave 1 to 73% then 71% in waves 2 and 3 respectively. The decline in full compliance was observed among both

---

[26] See 'Behavioural Compliance' in Appendix A Glossary for a detailed description of how the measure of behavioural compliance was derived.

[27] It is possible that a participant classified as fully compliant at the point of taking part in the survey did not manage to remain fully compliant for the duration of their self-isolation period. There was no way of capturing this in the survey.

[28] See ONS 'Coronavirus and self-isolation after testing positive in England: 7 June to 12 June 2021' https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandselfisolationaftertestingpositiveinengland/7juneto12june2021

[29] See ONS 'Coronavirus and self-isolation after being in contact with a positive case in England: 1 to 5 June 2021' https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronavirusandselfisolationafterbeingincontactwithapositivecaseinengland/1to5june2021

[30] This represents significant decreases from the previous wave when compliance was 86% for Index Cases and 92% for Contact Cases.

[31] See https://phw.nhs.wales/publications/publications1/self-isolation-confidence-adherence-and-challenges-behavioural-insights-from-contacts-of-cases-of-covid-19-starting-and-completing-self-isolation-in-wales/

[32] Please note that compliance is not necessarily defined consistently across these surveys.

[33] Individual fieldwork periods: Wave 1: 19th – 31st March 2021; Wave 2: 12th April – 15th May 2021; Wave 3: 10th May – 2nd June 2021

Index and Contact Case participants and was matched with a significant increase in partial compliance over this same period. [Figure 3.2, Table 3.2]

Figure 3.2 Proportion of case types that were fully compliant by fieldwork wave (%)

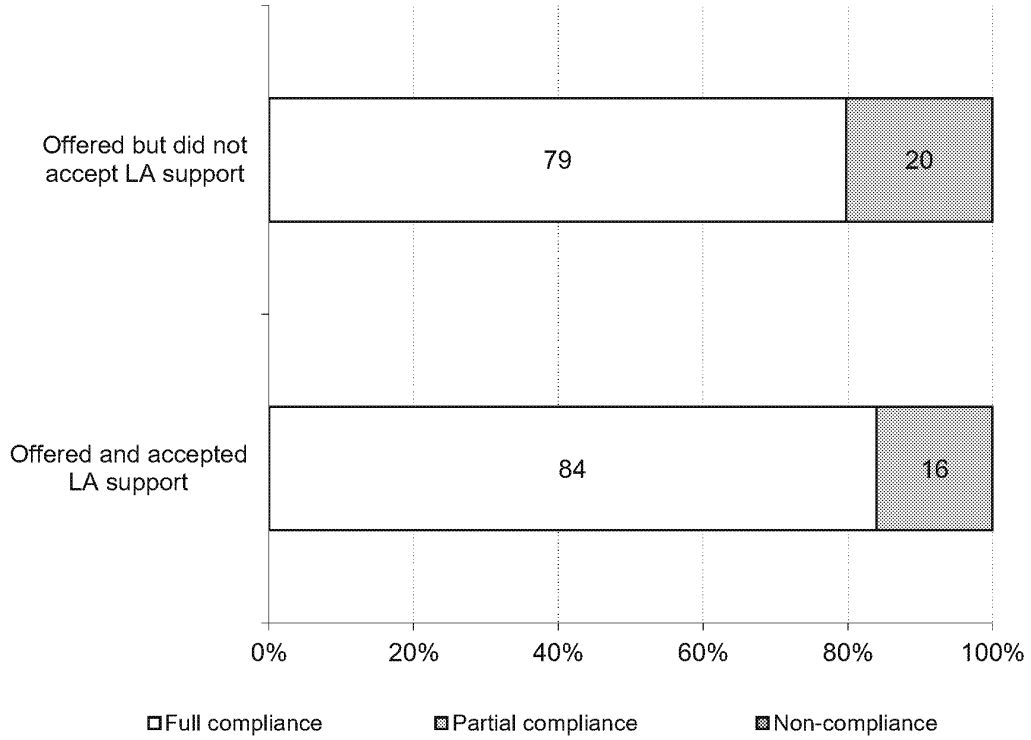
Case type	Wave 1	Wave 2	Wave 3
Index Case participants	80%	72%	74%
Contact Case participants	78%	74%	69%
All Index and Contact Case participants	79%	73%	71%

While Index Case participants were more likely than Contacts to self-assess their compliance positively, no such difference existed on behavioural compliance, with 76% of Index Case participants and 73% of Contacts assessed as fully compliant. Among Contact Case participants, those who lived with someone who tested positive were more likely than those in close contact with someone outside their household who tested postive, to fully comply with the aspects of self-isolation captured in the summary measure (78% and 70%, respectively). [Table 3.2]

Behavioural compliance was not uniform across different groups of participants. Woman (76%) were significantly more likely than men (71%) to fully comply with self-isolation. Similarly, full compliance was significantly higher among those aged 65 and over than among the youngest age group (80%, compared with 68% for those aged 16-24). [Table 3.2]

Interestingly, those that accepted the offer of Local Authority support during self-isolation were significantly more likely than those who were offered, but declined, the support to fully comply with the requirement to self-isolate (84%, compared with 79%). [Figure 3.3, Table 3.3]

Figure 3.3 Observed compliance with self-isolation by acceptance of Local Authority support offer (%, All Index & Contact Case participants)

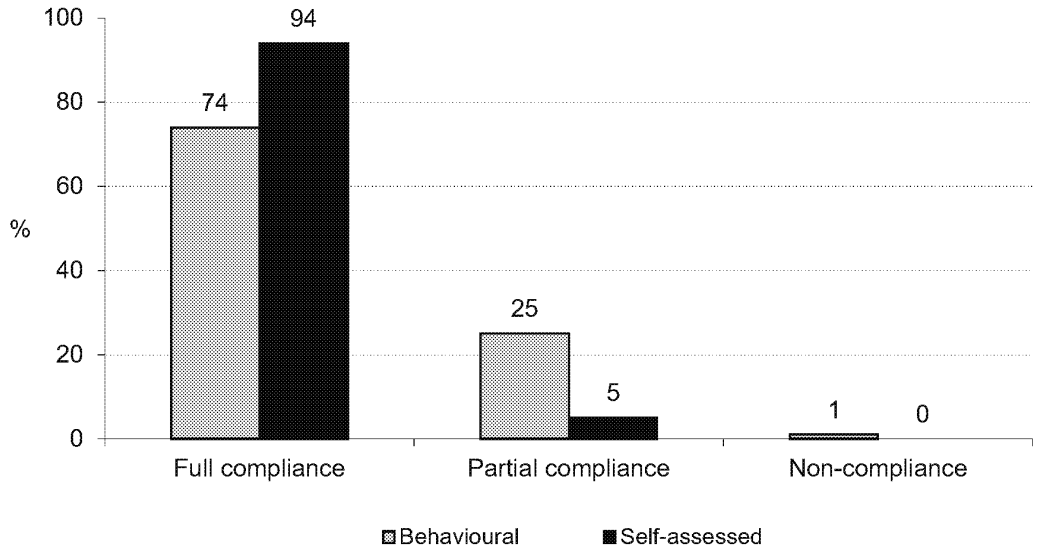


To assess knowledge of self-isolation requirements, survey participants were asked how many days a person who tested positive for COVID-19 was required to self-isolate for. Full compliance was higher among those aware of the 10 day isolation requirement than those who were not (79% compared with 62% of those underestimating the number of days and 70% of those overestimating). [Table 3.4] Views on the effectiveness of self-isolation as a strategy against the spread of COVID-19 was also associated with behavioural compliance. Those in agreement that it is an effective strategy were significantly more likely to fully comply with their own self-isolation (78% among those that agreed strongly/agreed, compared with 69% among those that neither agreed nor disagreed, disagreed strongly or disagreed). [Table 3.3]

3.2.3 Comparison of self-assessed compliance and behavioural compliance

The mis-match between participants' direct self-assessment of how well they managed to self-isolate and the survey's measure of behavioural compliance is highlighted in Figure 3.3. While the vast majority (94%) of the survey participants reported following self-isolation 'all of the time,' full-compliance stood twenty percentage points lower (74%) on the behavioural measure. Similarly, 5% felt that they adhered most of the time, partial compliance on the behavioural measure was 25%. [Figure 3.4, Tables 3.1 and 3.2]

Figure 3.4 Behavioural and self-assessed compliance with self-isolation (%, All Index and Contact Case participants)

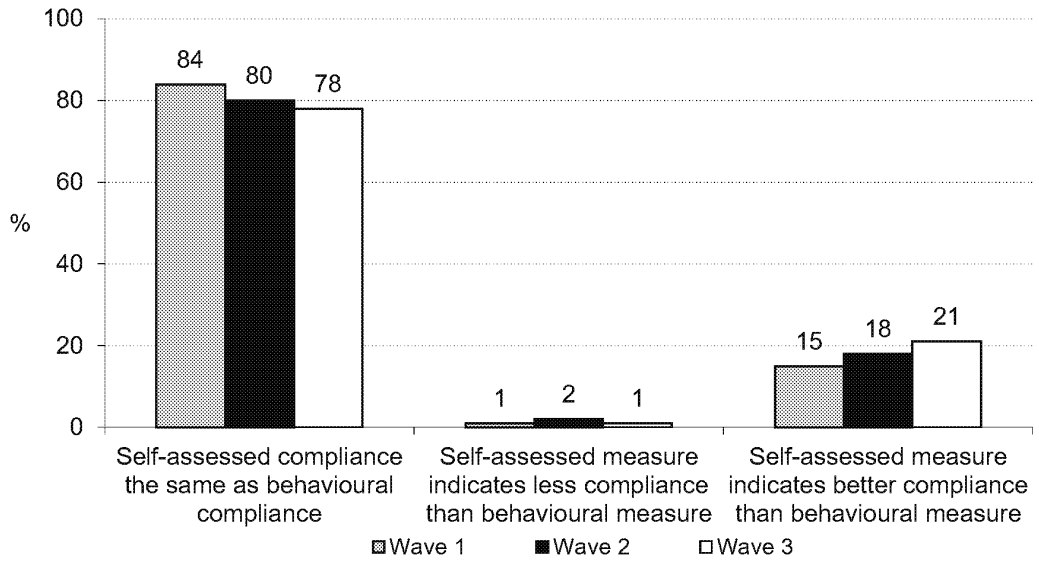


A mis-match between direct self-assessments and the behavioural measure of compliance occured when a participant was either: (i) more compliant on the behavioural measure than on their own direct self–assessment – i.e. they actually managed to comply better than they thought they did, or (ii) less compliant on the behavioural measure than their own more direct self-assessment – i.e. they complied less well than they thought they did. Table 3.4 shows that while the majority (81%) were able to make an accurate assessment of their own compliance, 18% were actually less compliant than they thought. Such assessments were similar among Index and Contact Cases.

The extent to which Index and Contact Cases were overly positive[34] about their compliance was higher at the end of the survey fieldwork period than the beginning. In wave 1, 15% of participants were classified as less compliant than their self-assessment. By wave 3, this had increased to 21%. [Figure 3.5, Table 3.4]

[34] That is, their own assessment of their compliance was more positive than their behavioural measure of compliance.

Figure 3.5 Accuracy of self-assessed compliance compared with observed behavioural compliance measure by fieldwork wave (%, All Index & Contact Case participants)



3.2.4 Compliance with specific aspects of self-isolation requirement

As outlined in the methods section (Chapter two), survey participants were asked detailed questions to measure compliance with each of the self-isolation requirements outlined below. Those in bold were used to derive the behavioural self-compliance measure discussed in this chapter:

- **Start self-isolating immediately**
- Avoid close contact with people from outside household/accommodation
- **Do not leave home/accommodation (unless COVID-19 test related reason)**
- Avoid letting non-household members into your home/accommodation[35]
- **Self-isolate for required number of days**

Were some self-isolation requirements easier to adhere to than others?

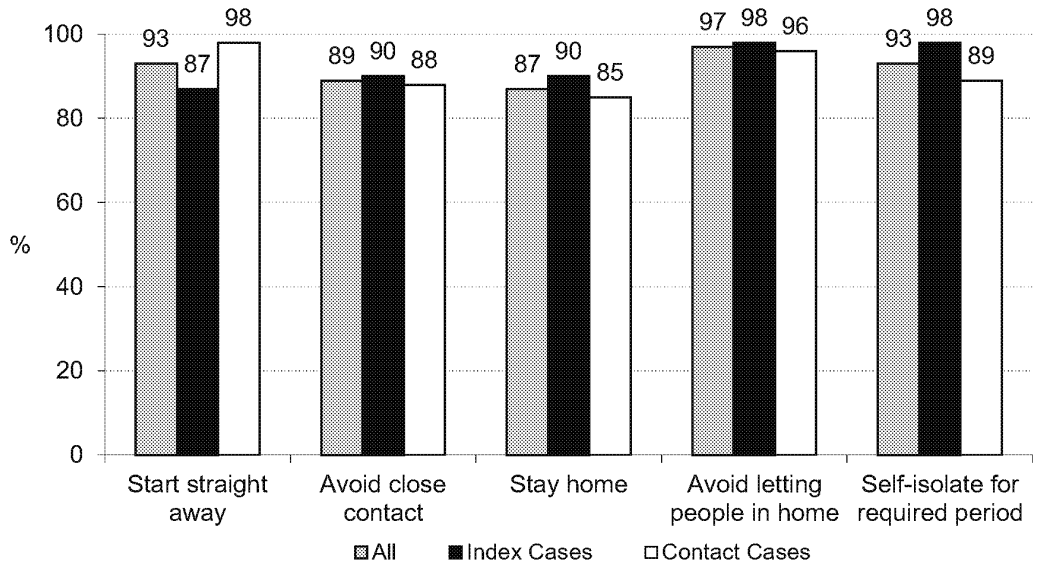
Compliance with each of these requirements listed above is shown in Figure 3.6 and [Tables 3.5-3.11].

In general, and in line with earlier findings, Index and Contact Cases' adherence to the specific self-isolation requirements asked about was high. Compliance was highest on the requirement to avoid letting people into your home/accommodation during self-isolation (97%). More than nine in ten (93%) of Index and Contact Case participants reported beginning isolation either immediately or before being advised

[35] This was introduced in Wave 2 of the survey fieldwork and was also included in Wave 3.

to do so. The same proportion (93%) either managed to isolate for the correct number of days or were still isolating at the time of taking part in the survey.[36]

Figure 3.6 Compliance with specific self-isolation requirements by case type (%)



How did compliance with specific self-isolation requirements vary by case type? [Tables 3.5-3.11]

Compliance varied by case type on some, but not all, of the self-isolation requirements asked about. Most notably, Contact Case participants were significantly more likely than Index Cases to begin isolating either immediately or in advance of being advised to do so (98% and 87% respectively). The opposite was observed for the requirement to isolate for 10 days, with Index Case participants significantly more likely to isolate for the correct number of days/still be in isolation at the time of taking part (98% and 89%, respectively). Index Cases were also more likely to stay at home (or only leave for COVID-19 test related reasons).

Did adherence to individual self-isolation requirements change over time? [Tables 3.5-3.11]

Compliance with the requirement to isolate for 10 days declined across the fieldwork period (96% fully complied in wave 1, 93% in wave 2 and 90% in wave 3). A smaller, but also significant, decline was also observed on compliance with the requirement to remain at home during self-isolation (90% in wave 1 and 86% in waves 2 and 3) and with the requirement to avoid close contact with people from outside the household (92% in wave 1 and 88% in waves 2 and 3).

[36] Since not everyone still self-isolating at the time of taking part in the survey will have managed to complete it successfully, it is likely that actual adherence to this requirement is lower than 93%.

3.2.5 Understanding non-compliance with the requirement to self-isolate

Survey participants who explicitly stated that they did not manage to self-isolate at all were presented with a list of possible reasons for not doing so and asked to indicate which, if any, applied to them. The majority of those that did not manage to self-isolate at all were Contact Cases. The main reasons given for not managing to isolate were: testing negative (55%); not developing any symptoms (43%); an 'other reason' (36%) and having been vaccinated (10%). [Table 3.12]

Activities carried out before beginning to self-isolate

All survey participants, including those who reported starting self-isolation immediately, were provided with a list of activities and asked to identify which, if any, they carried out before they began self-isolating. Most (58%) participants did not do any of the activities listed in the period between being advised to self-isolate and commencing their isolation. The most common activity mentioned was the permitted activity of getting or returning a COVID-19 test (27%). Other activities mentioned were: going to the shops for groceries, toiletries or medicine (7%); going for outdoor recreation or exercise (e.g. run, a walk, walk a dog, sit in the park) (6%) and going to work, school or university (6%). With the exception of outdoor recreation, for which no difference was observed, Index Case participants were more likely than Contacts to report carrying out these activities prior to starting their self-isolation. [Table 3.13]

Activities carried out during self-isolation

Survey participants reporting that they left their home/accommodation during self-isolation were presented with a list of activities and asked which, if any, they carried out when they left. The most common activity reported by participants was leaving home for the permitted reason of getting or returning a COVID-19 test (68%). Other commonly mentioned activities participants left self-isolation for were: outdoor recreation (20%); going to shops for groceries, toiletries or medicine (9%) or for a medical reason (e.g. a doctor/hospital/dental appointment) (7%).[37] Among those that reported leaving home/accommodation during self-isolation, Contact Case participants were more likely than Index Cases to cite leaving for a COVID-19 test related reason (71% versus 63%) and for outdoor recreation (22% and 17%), while the opposite was true for shopping for groceries, toiletries or medicine (14% verus 7%) and for leaving for a medical reason (14% versus 3%). [Table 3.14]

Very few direct examples of non-compliance with self-isolation measures were given by the qualitative participants. Of those who reported examples, they were not always clear themselves that they had actually breached the guidelines, and argued that, if they had, they were very minor infractions.

Where they had examples, they related to leaving home during self-isolation and/or coming into close contact with others. Interviewees did also question whether going

[37] There are some exceptional circumstances, such as medical emergencies, where leaving home during self-isolation is permitted. It is possible that some of those who cited leaving home for a medical reason did so because of such exceptional circumstances.

out to get a COVID-19 test or to post a COVID-19 test was allowed or not while self-isolating.

> "We're going to ask you to self-isolate but by the way you can go out and post these results. That to me doesn't seem like self-isolation but anyway that was the only issue we had with it I would have said looking at it, one contradicts the other." (International Traveller)

The main issue of contention related to dog walking. Although solutions could be found for this, for example, by asking family members, friends or official dog walkers to walk the pet, participants were not convinced this was any more safe given that the dog had to be handed over, along with the lead and other items, to the walker. As a result, there were participants who took the decision to continue walking their dogs, usually at times of the day when they thought the chances of having contact with anyone else were minimal. In one case, the interviewee alerted neighbours to the situation and warned them not to approach during walks, and also took other precautionary measures.

> "I did make a conscious decision that I would go out of the house every day because we've got a 10 year old Lab…I took the decision I would go out at 6 o'clock in the morning every day. Literally out the back of the house, we go up into the woods and I knew I wouldn't see another soul and so was confident that I wouldn't be in anyway spreading anything that we potentially had and so I went out every morning for about 20 minutes to take the dog out for a quick walk. Never met a soul the whole time." (Contact Case)

Two instances of driving others during the self-isolation period were also reported. In one case, the participant took a flatmate in the car for a COVID-19 test, and argued that there was no-one else who could have helped at this point. In the other case, the participant took her daughter to work on two occasions as her shift started very early in the morning, and she was concerned for her safety. It is also worth noting that an interviewee also said that he had gone outside of the house once to pick something up from the car that was parked directly outside, but did consider this to be a breach of the guidelines. Other examples of possible minor breaches raised were: an individual went outside to put the bin out; a smoker left the house briefly to smoke outside, though there was no contact with anyone else. Finally, there was an instance of a participant sharing a shopping delivery with a neighbour.

> "I can stand in my garden and speak with them, over the fence to people. I tell them to keep their distance and still speak to them, so I haven't been truly 100 per cent isolated that way…that's the one thing that I - where the rules have been slightly - had to be a bit flexible because I have a neighbour…and I get her messages delivered to me. Then I divide them up and give her them and she gives us the money, so we've had to do that, like, because she couldn't shop for herself…bending the rules a wee bit. She was self-isolating as well." (Index Case)

> "The only time I had to go out, it was just to go in the car and take my daughter to work and come back. That was it…That was just twice…No, she could have walked but I mean she starts at 7 in the morning so no...That was a necessity. I wouldn't let my daughter walk anywhere in (name of place) herself." (Contact Case)

When deciding to undertake non-compliant activities, qualitative participants are making decisions based on their assessment of risk and risk mitigation:

> "There is a big field, we don't see anybody, so it didn't really occur to us until the Test and Protect woman phoned and said, 'You cannot take the dog out,' and then we didn't." (Index Case)

Days participants left the home:

Survey participants that reported leaving home during self-isolation were asked on which days of self-isolation they left. Those who left home during self-isolation, were more likely to do so earlier in their self-isolation period than towards the end of it. A quarter (27%) of those that left home did so within 24 hours of starting self-isolation, 21% left on day seven and 14% left on day ten. [Table 3.9]

Close contact with others from outside household:

While 89% Index and Contact Case participants did not have any close contact with non-household members while self-isolating, 5% reported having close contact with one person from outside their household during this period, slightly smaller proportions came into close contact with two people (3%) or three or more people (3%). The proportion reporting contact with those outside the household was consistent across fieldwork waves. [Table 3.10]

Number of people let into house:

While one in ten Index and Contact Case participants reported having close contact with someone from outside their household during self-isolation, the proportion reporting that close contact with non-household members took place inside their own home during this period was smaller (3%). Two percent reported that a non-household member was inside their home once while self-isolating (3% for Contact Case participants and 1% for Index Cases. [Table 3.11]

3.3 International Traveller findings

3.3.1 Perceived compliance with self-isolation requirements

Self-assessed compliance with the requirement to self-isolate was high among International Traveller participants. Nine in ten (91%) were of the view that they managed to comply with self-isolation 'all of time,' just 9% felt they responded 'some of the time' and no-one described themselves as non-compliant. As discussed earlier, such positive assessments are likely, in part, explained by the opt-in nature of the sample and social desirability among those that did take part.

Those International Travellers in managed quarantine were significantly more likely than those self-isolating at home to positively assess their own compliance (96% reported managing to follow the guidance all of the time, compared with 90% of those isolating at home). [Table 3.15]

The International Travellers interviewed as part of the qualitative research isolated both at home and in hotels with all of them stating that they complied fully with the self-isolation guidelines, and no possible breaches were reported. However, the compliance behaviour measure indicated that some of these participants were partially compliant, not fully compliant.

3.3.2 Behavioural compliance with self-isolation

In addition to the above direct assessments of adherence, how well International Travellers complied with self-isolation was also captured via the survey's behavioural measure of compliance.[38]

Based on this summary measure of behavioural compliance, seven in ten (70%) International Traveller participants fully complied with self-isolation at the point of taking part in the survey. Three in ten (29%) adhered to the requirements partially and just 1% were not compliant at all. The apparent decline in full compliance among International Traveller participants over the fieldwork period was not statistically significant. [Table 3.16]

International Travellers in managed isolation were significantly more likely than those isolating at home to fully comply with self-isolation (79% compared with 72%) according to their responses to questions on: how soon they started isolating, days isolated for and whether they left accomodation during the isolation period. [Table 3.16]

Among International Travellers, behavioural full compliance did not vary by sex but did vary significantly by age, with the youngest age group significantly less likely than others to have fully adhered to the requirements asked about (64% of 16-24 year olds fully complied, compared with 71%-72% of those in other age groups). [Table 3.16]

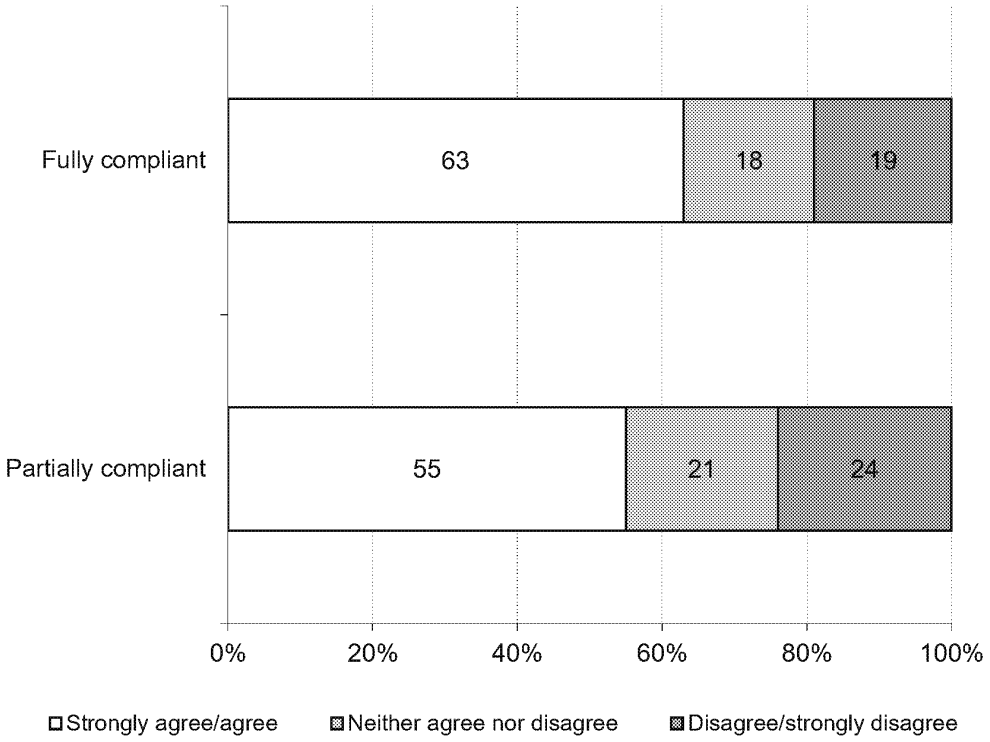
Those with no previous experience of self-isolating appeared slightly more likely than those that had isolated before to fully comply with self-isolation, however isolation history was also independently associated with type of isolation undergone - with those with no previous experience of self-isolating more likely than those with previous experience to be in managed quarantine - so the nature of the association is likely to be complex. [Table 3.17]

As observed for Index and Contact Cases, there was a significant association between behavioural compliance with self-isolation and views on the effectiveness of the strategy against the spread of COVID-19. International Travellers agreeing that self-isolation is effective were significantly more likely than those disagreeing to

[38] See 'Behavioural Compliance' in Appendix A Glossary for a detailed description of how the measure of behavioural compliance was derived.

fully comply with their own self-isolation (78% and 68%, respectively). Similarly, those that agreed with the statement 'international travel restrictions will help reduce the spread of COVID-19 and new variants of it' were significantly more likely than those that disagreed to fully adhere with their own self-isolation (76% compared with 69%). [Figure 3.7[39], Table 3.17]

Figure 3.7 Behavioural compliance by agreement or disagreement with 'International travel restrictions will help reduce the spread of COVID-19 and new variants of it' by observed compliance (%, All International Traveller participants)

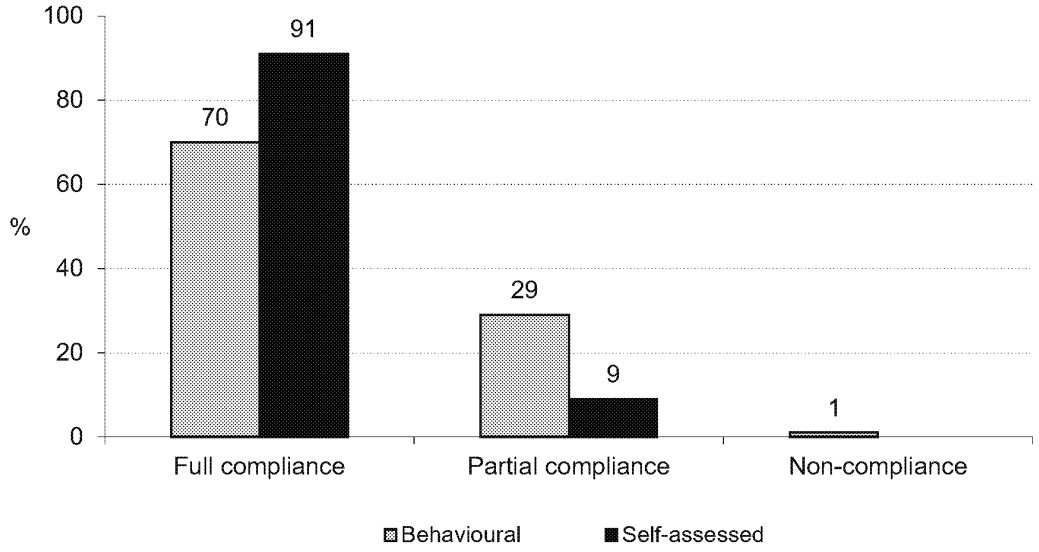


3.3.3 Comparison of self-assessed compliance and observed compliance

As was the case for Index and Contact Cases, there was a large mis-match between International Travellers' direct self-assessments of how well they managed to self-isolate and the survey's more indirect behavioural observation of how well they complied. [Figure 3.8] So while nine in ten (91%) felt they complied with self-isolation all of the time, seven in ten actually appeared to do so. [Tables 3.15 and 3.16]

[39] Breakdown for those who were not compliant is not shown because of the very small numbers in this category.

Figure 3.8 Behavioural and self-assessed compliance with self-isolation (%, All International Traveller participants)

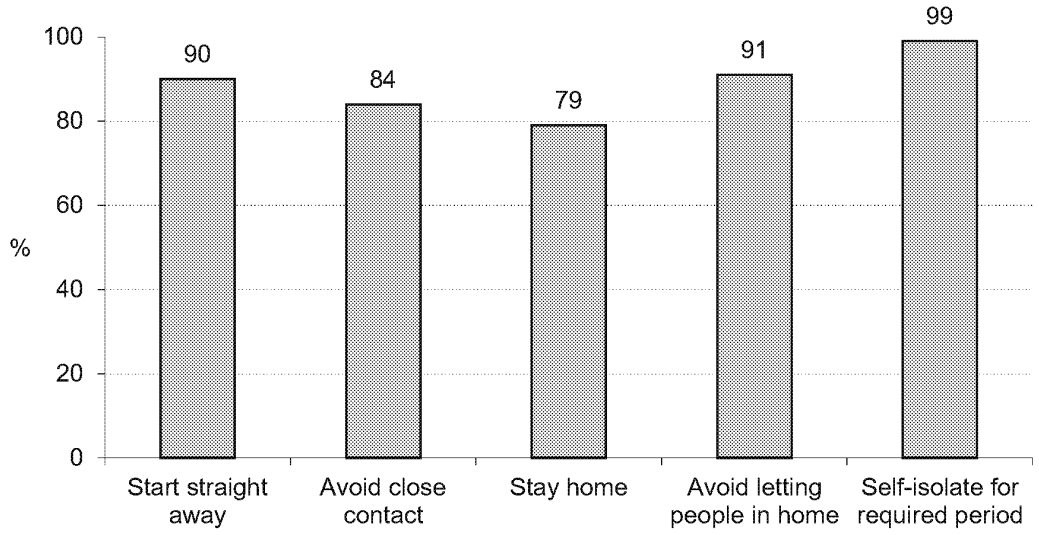


The scale and direction of mis-match between International Travellers' direct and behavioural measures of compliance were similar to that observed for Index and Contact Cases. While most clearly had a good grasp of how well they managed, according to the the behavioural measure, a sizeable proportion (19%) appear not to have complied as well as they thought they did (17% did not comply as well as they thought, while 2% were more compliant than they thought). Unlike Index and Contact Cases, there was no notable difference, over time, in the accuracy of International Traveller participants' assessment of how well they complied. [Table 3.18]

3.3.4 Compliance with specific aspects of self-isolation requirements

Like Index and Contact Cases, the specific requirements that International Traveller participants were most likely to comply with were the requirement to start isolating straight away (90% complied) and to isolate for the correct number of days (99% either isolated straight away or were still in isolation at the time of taking part). [Figure 3.9, Tables 3.19-3.25]

Figure 3.9 Compliance with specific self-isolation requirements (%, All International Traveller participants)



Over the survey fieldwork period there was, a small, but significant, decline in International Traveller compliance with the requirement to start isolating straight away (79% in wave 1 compared with 71% in wave 3) and the requirement to isolate for 10 days (in wave 1 96% either isolated straight away or were still isolating, the equivalent figure in wave 3 was 90%). [Tables 3.19-3.25]

The type of self-isolation undergone was significantly associated with two of the five self-isolation requirements asked about in the survey. Those in managed quarantine were significantly more likely than those isolating at home to comply with the requirement not to leave home/accommodation during isolation (87% compared with 77%) and the requirement to avoid close contact with people from outside your household (93% and 82%, respectively). [Tables 3.19-3.25]

3.3.5 Understanding non-compliance with self-isolation

In qualitative interviews several interviewees spoke about the challenges faced while complying with self-isolation. In one case, a participant contrasted a period of self-isolation abroad unfavourably with self-isolation at home in Scotland. International travellers, particularly those with experience of facing hotel quarantine within and outwith the UK, tended to have more negative views of self-isolation. They raised quite distinct issues in relation to barriers to self-isolation. Complaints were made that hotel windows did not open and air-conditioning did not allow air to circulate in the same way. Hotels were seen as being potentially more difficult places to self-isolate in as a result of smaller rooms, less personal control over the environment, including an ability to exercise, and difficulty of organising and carrying out PCR testing. There was a view that hotels were therefore more liable to create feelings of boredom among those self-isolating. One participant who came back into the UK via Heathrow stated that the information provided was of poor

quality on governmental websites, and it was far from clear where and how people should self-isolate if travelling on to Scotland.

Activities carried out before beginning self-isolation [Table 3.26]

The majority (78%) of International Travellers that completed the survey did not carry out any of the listed activites asked about before starting self-isolation. The most commonly cited activities were for the permitted reason of getting or returning a COVID-19 test (8%); for an 'Other' reason (7%) and going to the shops to get groceries, toiletries or medicine (8%). Those self-isolating at home were more likely than those in managed quarantine to cite carrying out these activities before starting their self-isolation.

Activities carried out during self-isolation [Table 3.27]

The activity most commonly cited by those that reported leaving their home/accommodation while self-isolating was the permitted reason of getting or returning a COVID-19 test (74%). As was the case among Index and Contact Case participants, other common activities carried out were: going to the shops for groceries, toiletries or medicine (23%); for outdoor recreation (17%) or for a medical reason (5%). Those in managed quarantine were more likely than those self-isolating at home to cite leaving home/accomodation during self-isolation for outdoor recreation (33% compared with 16%) or a medical reason (10% compared with 4%). The reverse was true for COVID-19 test related activity and going to the shops for groceries, toiletries or medicine.

The days during self-isolation on which participants left home/accommodation:

The most common day for those International Traveller participants reporting leaving home/accommodation during their self-isolation period to leave was on day 2 (46%). Three in ten (29%) reported leaving on day 5 and 5-6% left on days 9 or 10. It should be noted that the vast majority of International Traveller participants who indicated that they left at all during their self-isolation period were those who were self-isolating at home. [Table 3.22]

Close contact with others from outside household:

While 84% of International Traveller participants reported having no close contact with others from outside their household during their self-isolation period), 8% reported coming into close contact with one person, 4% came into contact with two people and a further 4% with three or more people.

The proportion of International Travellers in close contact with someone outside their home/accommodation was higher among those who were self-isolating at home (18%) than those in managed isolation (7%). [Table 3.23]

Number of people let into house/accommodation:

Around one in ten (9%) International Traveller participants reported having at least one person from outside their household in their home or accommodation during

self-isolation (9%). International Traveller participants self-isolating at home were more likely than those in managed isolation to report any visits from people outside their household during self-isolation (10% and 2% respectively). [Table 3.24]

4. Knowledge of rules and guidance

4.1 Background

The nature of the pandemic has required a responsive and evolving approach to interrupting the transmission of COVID-19 and saving lives. Guidelines, restrictions and approaches have changed over time to respond to a variety of factors such as changes in case levels (at a population and local level), the emergence of new variants, developments in scientific understanding and the rollout of Scotland's mass vaccination programme. While the Scottish Government aims to communicate any such changes as clearly as possible, there remains scope for such change to cause confusion around guidelines and requirements, particularly where nuanced differences are present within the approaches of the four nations of the UK.

Therefore, it was important that this study explored understanding of several key aspects of the self-isolation requirement such as how long to isolate for and the activities that are/are not advised during this period, as well as an evaluation of how well knowledge and compliance levels interact. This provides insight into where further clarity may be helpful to support those asked to self-isolate.

4.2 Results

4.2.1 Knowledge around self-isolation among Index and Contact Cases and requirements around own self-isolation

In the qualitative interviews, participants were asked about the main reason they had been advised to self-isolate. With a few exceptions, understanding of why individuals needed to self-isolate appeared to be good, and indeed many were already aware they would have to isolate in advance of being contacted by Test and Protect.

As expected, the majority of interviewees reported that they had isolated for 10 days in total. However, two participants stated they isolated for 12 days, for example, as a result of waiting for the results of the second COVID-19 test. Four interviewees also said they self-isolated for over 20 days, with the longest time period cited being 28 days. The reasons for this were that members of the household were contracting COVID-19 at different times during the self-isolation period, and one individual still tested positive after the first period of isolation ended and was asked to self-isolate again.

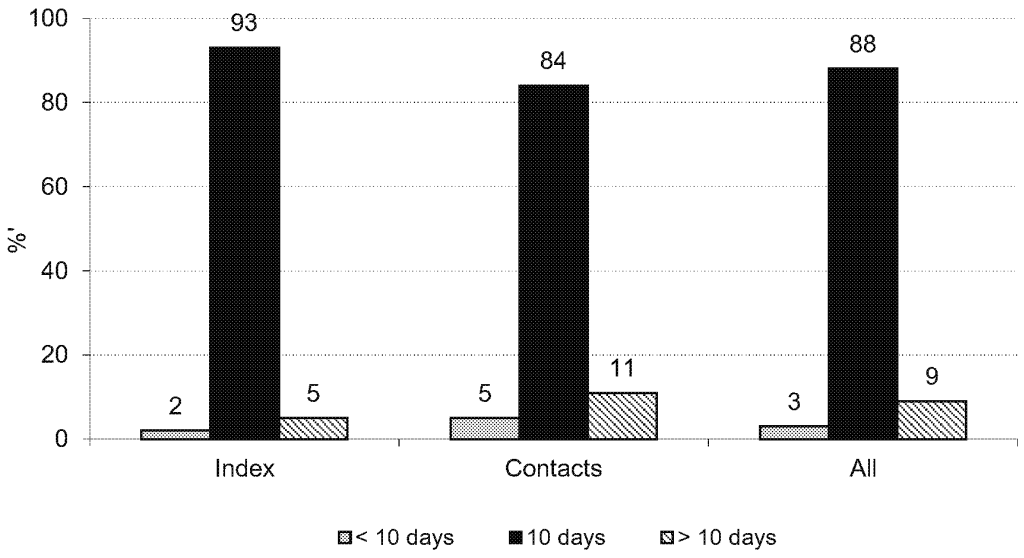
> "Yes, first of all, it was my grandson, he had it, so we all had to take a test and, obviously, self-isolate, which we done. Mine's come back negative. We all came back negative actually, and then we were told tae take another one, I think it was five days, six days later. We all took it, then my daughter, she ended up with it. So that put me back again because then I had to dae more self-isolating. Then my granddaughter took it. So, I was the longest to self-isolate out of the

whole house because they were saying because I hadn't taken it, I had to do it extra days. That was quite hard." (Index Case)

Survey participants were asked how long someone must self-isolate for after testing positive for COVID-19. At 88%, knowledge of the requirement to self-isolate for 10 days after a positive test was high. While 9% thought a person was required to isolate for more than 10 days in such circumstances (most in this group thought it was 14 days), 3% incorrectly thought the requirement was under 10 days. [Table 4.1] Knowledge of the requirement was higher among Index Cases (93% correct) than Contact Cases (84% correct). [Table 4.1]

Women were more likely than men to correctly state the 10 day self-isolation requirement for positive cases (90% and 85% respectively), as were those aged 45-64 (90%) compared with other age groups (79-80%). Variations were also evident by income (93% among those with a household income of £52,201 or more compared with 83% of those with an income of <=£16,900). Those whose last COVID-19 test was positive (93%) were more likely to correctly state the requirement here compared with those whose last test was negative (84%). [Figure 4.1, Table 4.1]

Figure 4.1 Knowledge of requirement for COVID-19 positive case to isolate for 10 days (%, All Index and Contact Case participants and by case type)



Knowledge of a close contact's requirement to self-isolate for 10 days, even if they later test negative themselves was also high among survey participants. Nine in ten (91%) were aware of the requirement, 5% thought 10 days was incorrect and 3% were not sure either way, with no significant variations by case type. Those with the highest reported household income were more likely than those on the lowest to be aware of the requirement (96% of those on £52,201 or more, compared with 92% with a household income of <=£16,900), as were those who agreed that self-

isolation was an effective strategy against the spread of COVID-19 (92%, compared with those who disagreed (79%). [Table 4.2]

While qualitative interviewees were relatively clear on the amount of time they needed to self-isolate for, there was some confusion among participants more generally about what the overall COVID-19 restrictions meant at different times.

> "We keep giving mixed messages. Even things like the hands, face, space and the FACTS, you're seeing both of these two things all over the place. You don't know – lots of people don't know what it is and it just seems we're getting very mixed messages all the time." (International Traveller)

> "I think over the summer it was a bit confusing because they seemed to change like every week. The tier system was like confusing, what was opening week by week and like comparing it to different areas. But the national approach, well I suppose lockdown is pretty simple, yeah I struggled in the summer to see what was allowed and what's not." (Index Case)

On the whole, participants recognised that the COVID-19 restrictions imposed by the UK Government were different than those imposed by the Scottish Government, with widespread consensus that the pace of relaxing restrictions has been slower in Scotland. There was, however, confusion among many qualitative participants about which rules applied where, especially since participants reported consuming media content from across the UK (see Chapter 5 'Attitudes' for more on thoughts related to the different approaches of the four nations within the UK).

> "They are quite similar in places, but they are also different in places. Sometimes the most confusing is this different timeline, so in England you've got different rules, sometimes it's just a week's difference, sometimes it's a bit longer. But for example, now you've got pubs open in England, or the restaurants, or the places outside open in England but they are still not open in Scotland. So sometimes when you listen or read the news and you don't catch carefully about Scotland or England that maybe confusing." (Household Contact Case)

While there were interview participants who thought the information provided by Test and Protect was clear and they knew what was expected of them, others felt that it was confusing or contradictory, and they were left uncertain of what activities were permitted during isolation. Some participants were also critical of the quality of advice they received, feeling that they were not given enough advice about how to self-isolate within households with other occupants who did not have to isolate or were not informed what advice was on offer. For example, participants reported feeling uncertain about:

- **Length of isolation:** and the circumstances that may lengthen / shorten self isolation (e.g. Whether they were required to self-isolate further if household members became infected during the isolation period)

- **Testing:** When and how often they should be tested for COVID-19
- **Testing:** Whether they were allowed to post their COVID-19 test during isolation (particularly if they had tested positive for COVID-19)
- **Process:** What to do if a child tests positive for COVID-19
- **Process:** When to contact the NHS regarding COVID-19 symptoms
- **Permitted tasks during isolation:** Whether support bubbles applied during isolation
- **Permitted tasks during isolation:** and whether this varies if you have a positive or negative COVID-19 test (e.g. whether they were able to drive household members somewhere whilst wearing a mask)
- **International travellers**: whether they can self-isolate at home or require hotel quarantine (and who to contact if they have questions).

Participants thought clear information and guidance addressing these issues should be developed and communicated to those asked to self-isolate. Participants stated that they would have found it helpful if, after the initial call, Test and Protect contacted them in writing to summarise the most salient points and provided details of who to contact if they had any questions.

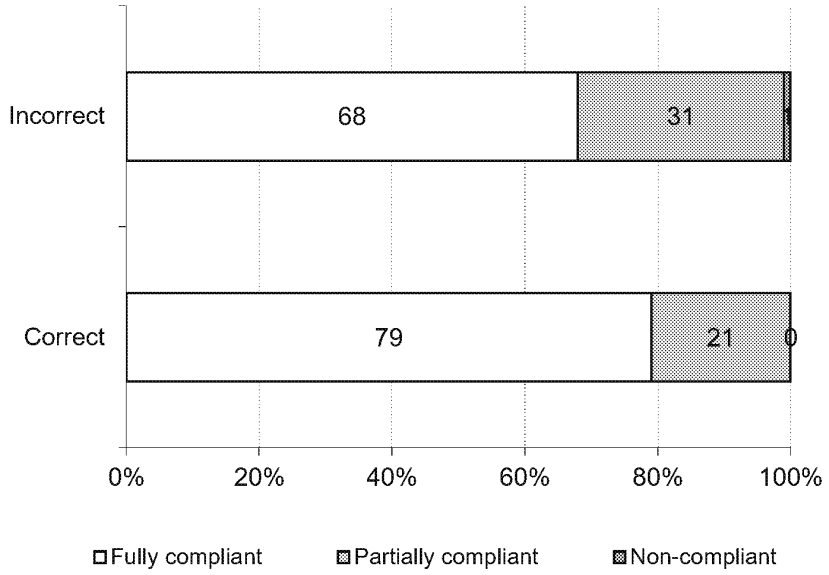
4.2.3 Relationship between knowledge of self-isolation and self-isolation behaviour

Three-quarters (74%) of Index and Contact Case participants who correctly identified that a positive case should self-isolate for 10 days were fully compliant[40] with their own requirement to self-isolate.[41] This was significantly higher than the proportion of those unaware of the requirement that managed to fully comply with their own self-isolation (68%). [Figure 4.2, Table 4.3]

[40] Please see Chapter two for details of how the summary measure of behavioural compliance was derived.

[41] This was the case for both Index Cases (76%) and Contact Cases (73%).

Figure 4.2 Behavioural compliance by knowledge of requirement for someone to self-isolate for 10 days if they test positive for Covid-19 (%, All Index & Contact Case participants)



Participants were presented with a series of activities and asked whether they believed each was allowed or not during self-isolation[42]. On the whole, understanding of what was and was not permitted during the self-isolation period was high among Index and Contact Case participants. The majority (80%) were aware that COVID-19 test related activities are allowed, while there was almost universal recognition that activities such as meeting people from outside your household or going to shops for any reason are not permitted. [Table 4.4]

There was some ambiguity about whether leaving self-isolation for a medical reason was allowed or not with 18% incorrectly concluding that it was permitted and a similar proportion (16%) reporting being uncertain.[43] One in ten participants were unsure whether it is ok to leave self-isolation to care for a vulnerable person (9%), similar to the proportion who were unsure whether leaving to get or send a COVID-19 test was allowed (9%). [Table 4.4]

Men were significantly more likely than woman to think that the following activities were permissable while self-isolating: attend a planned medical appointment (24% versus 16%) and helping a vulnerable person (6% versus 3%). Compared with older age groups, those aged 16-24 were more likely to think attending a planned medical appointment was allowed (27%, compared with 17% among those aged 25

[42] See Chapter 2.5 for definitions of compliance used and activities allowed.
[43] The question asked about, and gave examples of, planned medical appointments. It is possible that some of the ambiguity that exists around the permissibility of medical appointments is because there are exceptional circumstance (e.g. medical emergency) when leaving home during self-isolation is permitted).

and over) and that outdoor recreation was permissable (11% compared with 5%). [Table 4.5]

For several activities there was a clear significant association between knowledge of whether an activity was allowed or not and whether a person carried out the activity themselves or not.[44] For example, those incorrect or unsure about whether it was permissible to leave self-isolation for a medical reason were 4 times more likely to leave home for this reason than those who were aware that it was not allowed (12% compared with 3%). [Figure 4.3, Figure 4.4, Table 4.6]

Figure 4.3 Whether knew activity was allowed or not by whether individual activities were undertaken (%, All Index & Contact Case participants)

Activities	% who knew activity not allowed but undertook activity	% who thought activity was allowed/were not sure but undertook it
Outdoor recreation	13	49
Medical reason (e.g. doctor/hospital/dental appointment)	3	12
Take children to/from school	1	8
Provide help for vulnerable person	0	3

Figure 4.4 Whether knew if going to get or return a COVID-19 test during self-isolation was allowed or noy by whether undertaken (%, All Index & Contact Case participants)

Activities	% who knew activity was allowed and undertook it	% who thought activity was not allowed/were not sure but undertook it
Get/return COVID-19 test	34	73

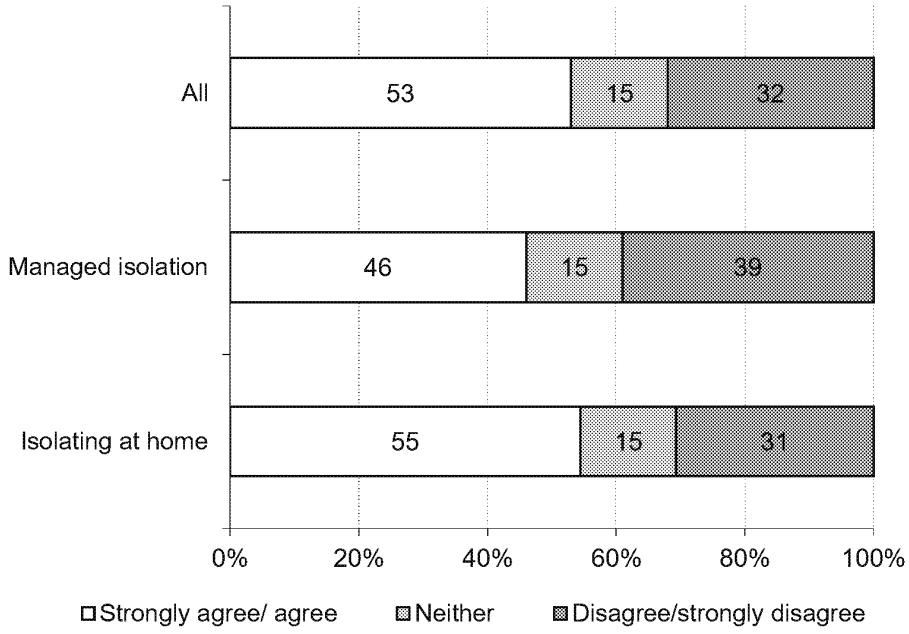
[44] Where sample size permitted (50+ participants), the association between knowledge of permitted activities and whether participants themselves reported carrying out the activity during self-isolation was explored.

4.3 Knowledge around self-isolation among International Travellers

4.3.1 Knowledge of the purpose and requirements around own self-isolation

International Traveller survey participants were asked the extent to which they agreed that it was easy to understand the Scottish Government information on international travel rules during the pandemic. While around half (53%) either agreed strongly or agreed that this it was easy to understand the information, 32% disagreed. Those self-isolating at home were more likely than those in managed isolation to agree that the information was easy to understand (55% and 46%, respectively). [Figure 4.5, Table 4.7]

Figure 4.5 Levels of agreement with statement 'it was easy to understand the Scottish Government information on international travel rules during the pandemic' by arrangement type (%, All International Traveller participants and by arrangement type)



The qualitative interviews also demonstrated that there was some confusion about the requirements of self-isolation among the International Traveller group. This mostly related to when and where self-isolation should take place if they first arrived back in the UK outside of Scotland.

> "Earlier this year we decided that we were going to come back [to Scotland] when we could, because there was no indication as to how the hell we were going to get back. And the big problem was that nobody could advise us. We were in [name of place], our British representative…our consul, was unable to give us any information. We were referred then, if you tried to phone through you then had an answerphone, 'Please refer to the website,' and the website of course was out of date. Then we came through to the Scottish Government and I'm still waiting on a reply from them…I didn't know

> when I got into Heathrow whether I was certainly going to be able to go through and ultimately into Scotland. I couldn't get an answer as to what the rules and regulations were because I was travelling into Scotland via England." (International Traveller)

4.3.2 Knowledge of self-isolation requirements more broadly

International Travellers' knowledge of the number of days a positive COVID-19 case needs to self-isolate for was broadly split between those who thought it was 10 days (55%) and those who thought it was 14 days (37%). [Table 4.8] Fourteen days was the previous isolation guidance, updated in December 2020 to 10 days.

While high (80%), knowledge of a close contact's requirement to self-isolate for 10 days, even if they later test negative themselves was lower among International Travellers than among Index and Contact Cases. Since International Travellers have to isolate by virtue of having travelled as opposed to any test result, it is perhaps not unexpected that knowledge of this requirement is lower. [Table 4.9]

4.3.3 Relationship between knowledge of self-isolation and self-isolation behaviour

While there was a clear association between knowledge of self-isolation requirements and self-isolation behaviour, in terms of overall compliance, for Index and Contact Cases, this was not the case for International Travellers. Irrespective of whether or not they knew the number of days a positive COVID-19 case should isolate for, around three-quarters fully complied, and a quarter partially complied with their own self-isolation. [Table 4.10]

International Travellers' knowledge of the permissability of particular activites during self-isolation followed a similar pattern to Index and Contact Cases and, on the whole, tended to be either similar or lower. Where ambiguity did exist, it tended to be more pronounced than observed among Index and Contact Cases. For example, close to two thirds (63%) of International Travellers were either incorrect or unsure about whether or not going out for a planned medical reason was ok[45]. Around three in ten didn't know whether leaving to provide help or care for a vulnerable person was allowed or not, similar to the proportion confused about whether going out to get groceries, toiletries or medicine (29%) or to get or send a COVID-19 test (27% incorrect or unsure) was permissable or not. [Figure 4.6, Figure 4.7, Table 4.11]

[45] The examples given in the question text were planned medical appointments - doctor/hospital/dental appointment

Figure 4.6 Knowledge of whether activities were allowed or not by whether specific activities undertaken during self-isolation (%, International Traveller participants)

Activities	% who knew activity not allowed but undertook activity	% who thought activity was allowed/were not sure but undertook it
Outdoor recreation	9	44
Medical reason (e.g. doctor/hospital/dental appointment)	2	6
Take children to/from school	1	7
Provide help for vulnerable person	1	4

Figure 4.7 Whether knew if going to get or return a COVID-19 test during self-isolation was allowed or not (%, International Traveller participants)

Activities	% who knew activity was allowed and undertook it	% who thought activity was not allowed/were not sure but undertook it
Get/return COVID-19 test	47	77

For International Travellers, the association between knowledge of permitted activities and whether a participant themselves reported carrying out the activity during self-isolation was similar to that observed for Index and Contact Cases. Those with a better awareness of the permissability of an activity during self-isolation were less likely than others to carry out disallowed activities during their own self-isolation. For example, 9% of those who knew outdoor recreation was not permitted reported leaving isolation themselves for this reason, whereas 44% of those incorrect or unsure about it left isolation for this reason. [Table 4.12]

5. Attitudes & experiences of self-isolation

5.1 Background

The Test and Protect Programme[46] supports Scotland's Test, Trace, Isolate, Support strategy through the identification of positive cases via testing, identifying and tracing close contacts and supporting those asked to self-isolate to do so, reducing the potential for transmission to others. Such an approach is a well-established response to the suppression of transmissible diseases, however, there is the potential for variation in levels of buy-in to this approach across the population, as as result of differing attitudes towards self-isolation but also in some cases, influenced by individual experiences.

This study aimed to understand more about attitudes towards the effectiveness of the self-isolation strategy, views on the role of individual agency in deciding whether to self-isolate or not, the impact of self-isolation on individuals and their families (particularly in regards to their mental health and finances), as well as how attitudes and experiences may vary by case type and other population sub-groups.

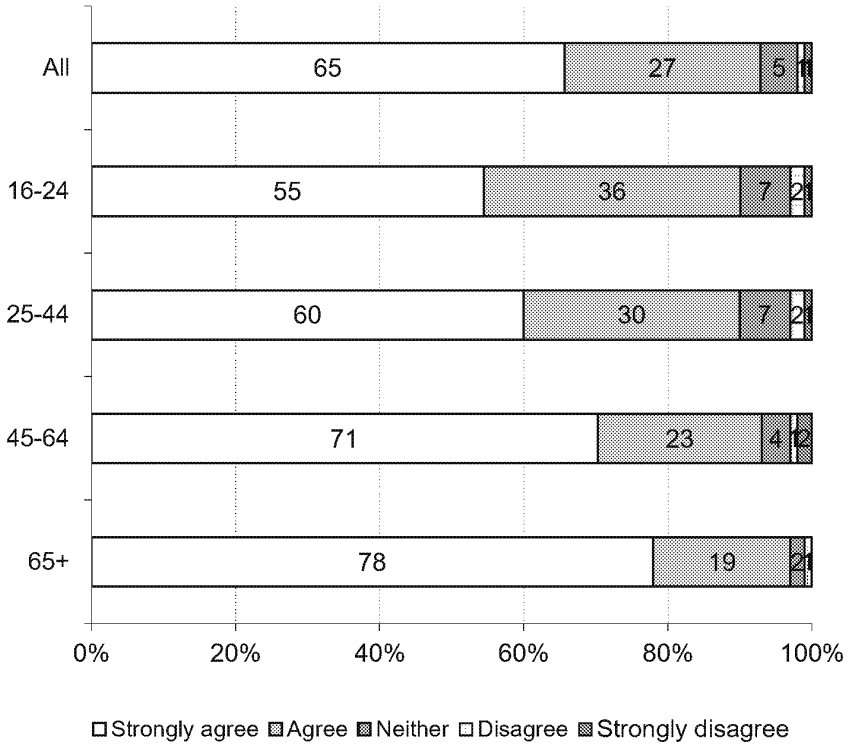
5.2 Index and Contact Case participants' attitudes and experiences of self-isolation

5.2.1 Views on the effectiveness of the self-isolation strategy as a means of helping prevent the spread of COVID-19[47]

Index and Contact Case survey particiants were asked about their attitudes towards the self-isolation strategy. When asked the extent to which they agreed that 'self-isolation is an effective way to help prevent the spread of COVID-19' agreement was high, with 92% of participants agreeing/strongly agreeing with the statement. Views on the effectiveness of the strategy did not vary significantly by case type. Those fully compliant with their own self-isolation were more likely than those partially complying to *strongly* agree with the statement (67% and 58%, respectively).[48] [Figure 5.1, Table 5.1] It should be borne in mind that those more supportive and convinced of the effectiveness of the strategy were more likely to opt in to the survey.

[46] See https://www.nhsinform.scot/campaigns/test-and-protect
[47] See Chapter 8 for findings on views and experience of formal support during self-isolation
[48] The sample size for non-compliance was too small to present.

Figure 5.1 Levels of agreement with statement 'self-isolation is an effective way to help prevent the spread of COVID-19' by age (%, All Index & Contact Case participants)



While agreement with the effectiveness of the strategy was high across all age groups (90-97%), younger people were less likely than others to agree that it would help prevent the spread of COVID-19. This difference was most pronounced with regards the proportion in each age group that 'strongly agreed' with the statement. [Table 5.1]

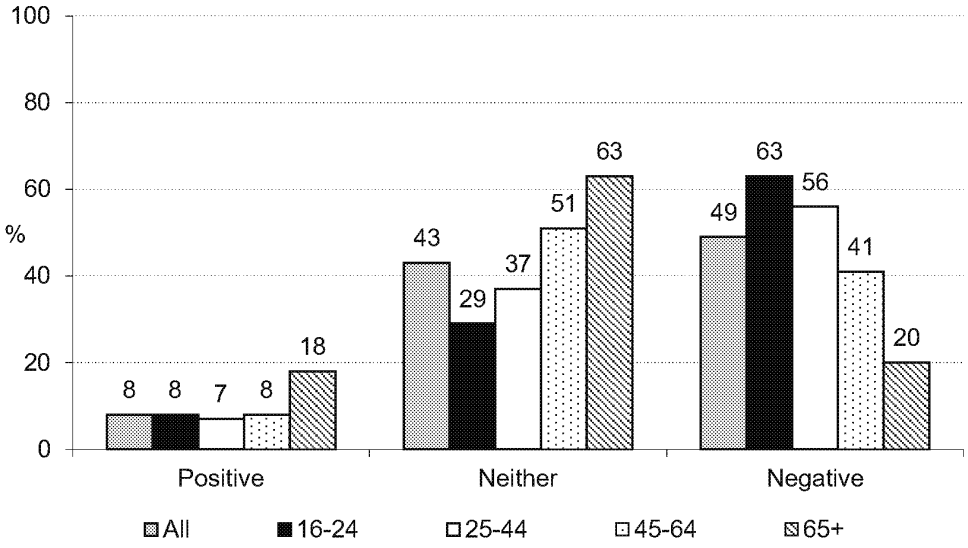
5.2.2 Views on where decision-making around self-isolation should lie

Survey participants were also asked the extent to which they agreed that 'it should be up to the individual, not the government, to decide whether they need to self-isolate or not'. Most (83%) did not agree that it should be up to the individual, while less than one in ten (8%) agreed that it should. Similar proportions of Index Case participants and Contact Cases disagreeed that the individual should be able to decide whether to self-isolate or not (85% compared with 81%). [Table 5.2]

5.2.3 Views on the impact of self-isolation on mental health

When asked about the impact self-isolating had on their own mental health, around half of all Index and Contact Case survey participants reported a negative impact (49%), 8% reported a positive impact and 43% neither a positive nor negative impact (43%). Perceptions did not vary significantly by case type. [Figure 5.2, Table 5.3]

Figure 5.2 Impact of self-isolation on own mental health by age (%, All Index & Contact Case participants)



Young people were more likely than others to report that self-isolation impacted on their mental health negatively (63% of those aged 16-24, compared with 56% of those aged 25-44, 41% of those aged 45-64 and 20% of those aged 65 and over. [Figure 5.2, Table 5.3]

Those with previous experience of self-isolation were more likely than those with no prior experience to report that the experience impacted negatively on their mental health (58% and 47%, respectively). [Table 5.3]

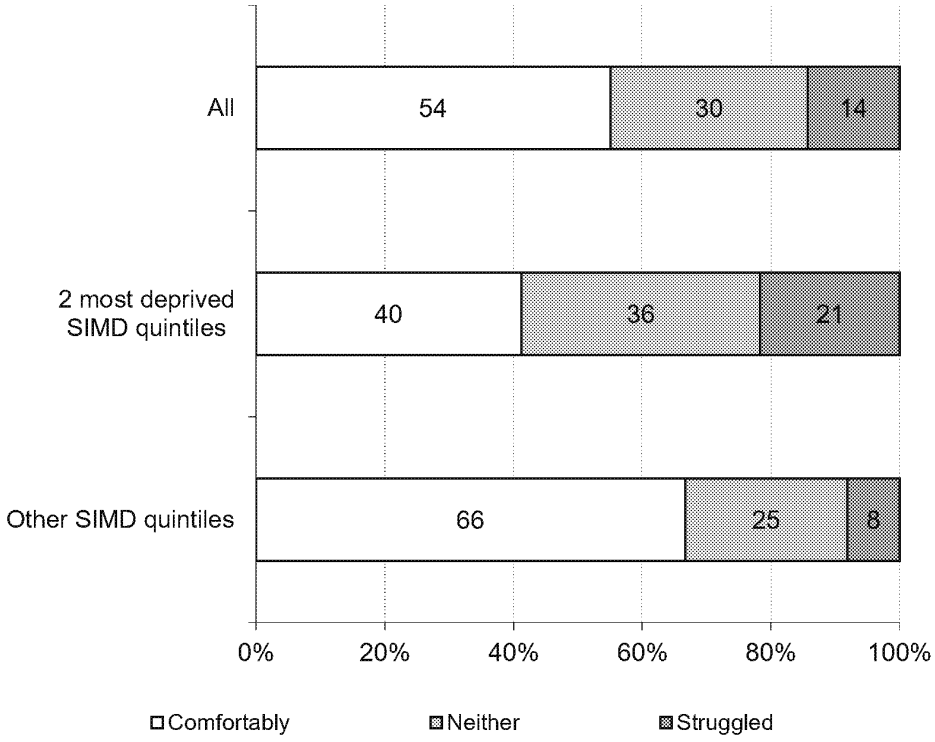
See Chapter 8 for findings on financial support needs, impact of self-isolation on the mental health of participants and access to informal support.

5.2.4 Perceived financial hardship during self-isolation

Just over half (54%) of participants reported managing 'comfortably' on their household's income during self-isolation with IndexCases more likely than Contact Case participants to do so. In line with survey evidence from general population

surveys[49,50,51], perceived financial hardship was higher among those on lower household incomes (32% among those with a household income of <=£16,900 compared with 10% of those on higher incomes) and those living in areas of greater deprivation (21% of those living in the two most deprived SIMD quintiles compared to 8% of those living elsewhere). [Figure 5.3, Table 5.4]

Figure 5.3 How managing/managed on household income during self-isolation by SIMD quintile (%, All Index & Contact Case Participants)



Young people were most likely to report struggling financially (17% among those aged 16-24 and 25-44, compared to 11% of those aged 45-64 and 1% of those aged 65 and over). [Table 5.4]

5.2.5 Impact of self-isolating on finances

Survey participants were presented with a list of possible ways that self-isolating could impact upon a person's finances and were asked to identify which, if any, applied to them. The most commonly mentioned impact was paying for online

[49] See https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandselfisolationaftertestingpositiveinengland/10mayto15may2021

[50] See https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronavirusandselfisolationafterbeingincontactwithapositivecaseinengland/1to5june2021

[51] See https://phw.nhs.wales/publications/publications1/self-isolation-confidence-adherence-and-challenges-behavioural-insights-from-contacts-of-cases-of-covid-19-starting-and-completing-self-isolation-in-wales/

deliveries they wouldn't normally have needed (54%) and 47% reported paying more for groceries than they normally would have needed. Financial implications linked to working and earning potential were also mentioned frequently with 25% reporting lost income and 18% indicating that they were likely to lose their job or miss out on work as a result of self-isolating. [Figure 5.4, Table 5.5]

Figure 5.4 Ways in which finances were impacted by self-isolation – all waves combined (%)

Finances impacted by self-isolation	All Index & Contact Case participants	Index Case participants	Contact Case participants
Likely to lose my job/miss out on work	18%	18%	17%
Paid for online deliveries wouldn't normally have needed	54%	61%	48%
Paid more for groceries than I would normally	47%	50%	45%
Lost income	25%	26%	24%
Paid for a dog walker	5%	4%	5%
Impact finances in another way	19%	19%	18%
Base	*1,950*	*851*	*1,099*

The only noticeable difference by case type was that Index Cases were more likely than Contact Cases to report paying for online deliveries that they would not normally be needed (61% and 48% respectively). [Table 5.5]

Index and Contact Case participants most likely to mention that self-isolation had impacted their employment, income and/or paying more for groceries included those aged 16-24[52], those with a household income of <£16,900 and those living in the two most deprived SIMD quintiles.

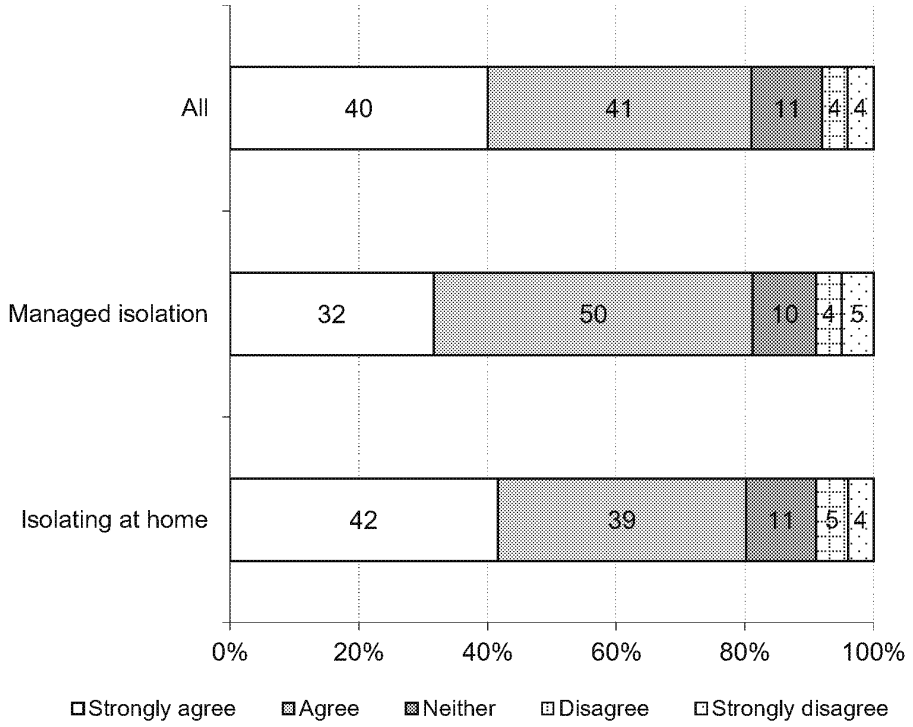
5.3 International Traveller participants' attitudes and experiences of self-isolation

5.3.1 International Traveller views on the effectiveness of the self-isolation strategy as a means of helping prevent the spread of COVID-19

While agreement that 'self-isolation is an effective way to help prevent the spread of COVID-19' was high among International Traveller participants (81%), it was lower than observed among Index and Contact Case participants (92%). Views on the effectiveness of the self-isolation strategy did not vary significantly by type of self-isolation undergone, with the exception that strong agreement with the statement was higher among those self-isolating at home (42%, compared with 32% in managed isolation). [Figure 5.5, Table 5.6]

[52] Difference is not significant for paying more for groceries by age

Figure 5.5 Levels of agreement with statement 'self-isolation is an effective way to help prevent the spread of COVID-19' by arrangement type (%, All International Traveller participants)



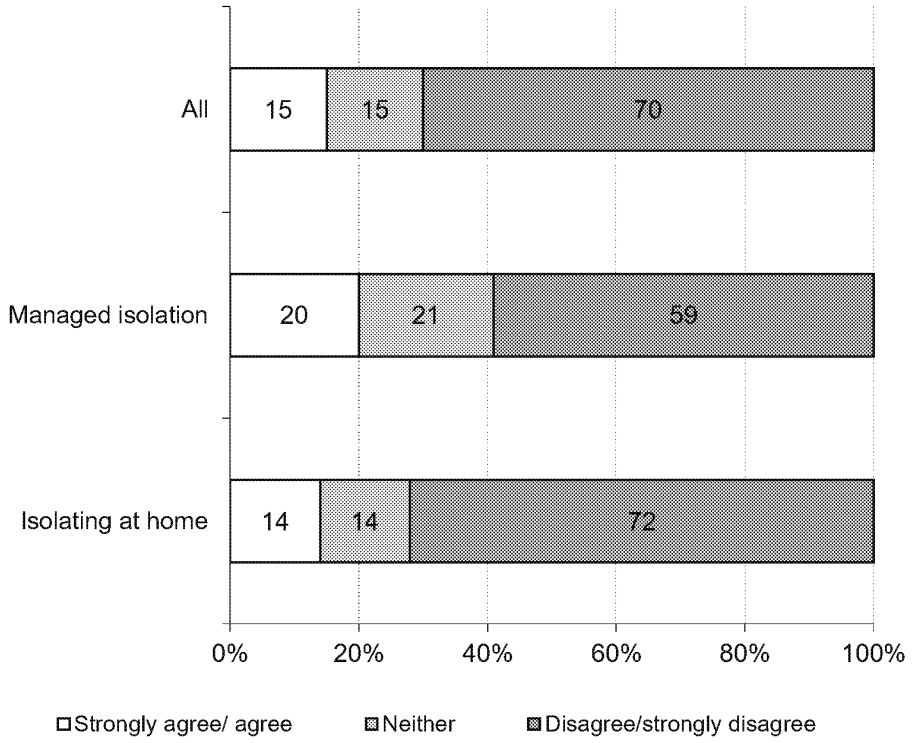
International Traveller participants fully compliant with their own isolation were more likely than those who partially complied to agree that the strategy is an effective way to prevent the spread of the disease (83%, compared with 76%)[53]. [Table 5.6]

5.3.2 Views on where decision-making around self-isolation should lie

The majority of International Traveller participants did not agree that 'it should be up to the individual, not the government, to decide whether they need to self-isolate or not' (70%), a lower proportion than among Index and Contact Cases combined (83%). One in six (15%) did agree that the decision should sit with the individual. [Figure 5.6, Table 5.7]

[53] Compliance here refers to the behavioural measure

Figure 5.6 Levels of agreement with statement 'it should be up to the individual, not the government, to decide whether they need to self-isolate or not' by arrangement type (%, All International Traveller participants)

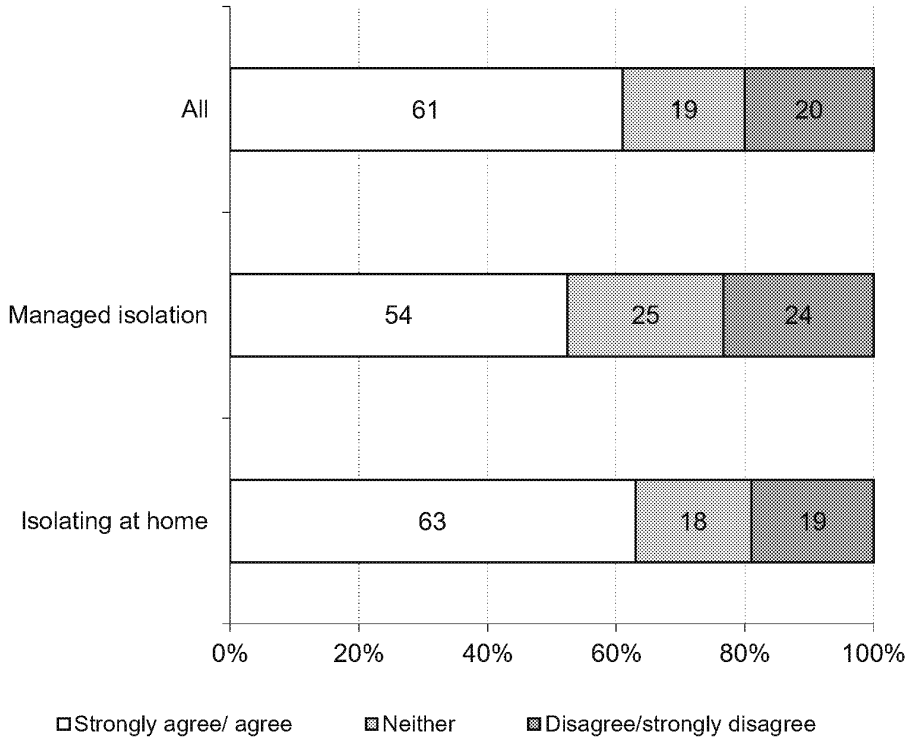


International Travellers self-isolating in managed isolation were more likely than those self-isolating at home to agree that individuals, not the government, should decide when to self-isolate (20% and 14% respectively). [Table 5.7]

5.3.3 Belief that restrictions for international travel were effective in reducing the spread of COVID-19 and variants

International Traveller survey participants were also asked the extent to which they agreed that 'international travel restrictions will help reduce the spread of COVID-19 and new variants of it'. Around six in ten (61%) agreed that the rules will help, while two in ten disagreed (20%) and a similar proportion (19%) neither agreed nor disagreed. Those in managed isolation were less likely than those self-isolating at home to agree that the international travel rules would help reduce the spread of the virus (51% and 63% respectively), as were those who were partially compliant (55%) compared with those who were fully compliant (63%). [Figure 5.7, Table 5.8]

Figure 5.7 Levels of agreement with statement 'international travel restrictions will help reduce the spread of COVID-19 and new variants of it' by arrangement type (%, All International Traveller participants and breakdown)



Agreement that international travel rules will help reduce the spread of COVID-19 was highest among the oldest International Travellers (74% among those aged 65 and over, compared with 60% among those aged 16-64). [Table 5.8]

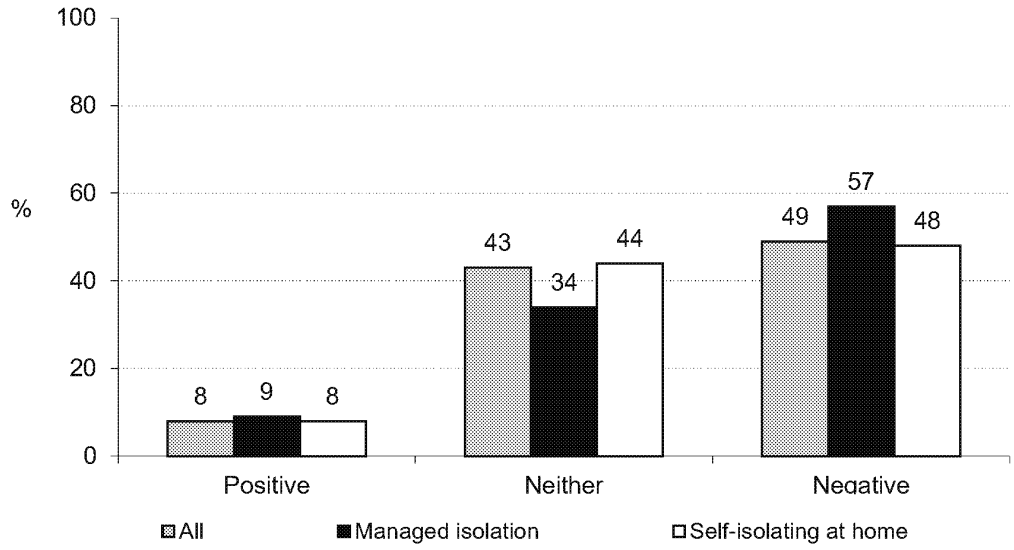
International Travellers with previous experience of self-isolating were also less likely than those with no prior experience to agree that the international travel restrictions were helpful (55% versus 64%). [Table 5.8]

Agreement that international travel restrictions are effective was significantly higher among those who agreed that self-isolation was effective in preventing the spread of COVID-19 (72%) than among those who disagreed that this was the case (9%). [Table 5.8]

5.3.4 What impact did self-isolation have on the mental health of International Travellers?

International Traveller participants' perceived impact of self-isolating on their mental health was similar to that observed for Index and Contact Case participants combined. Half (49%) reported a negative impact, 8% a positive one and for 43% the reported impact was neither positive or negative. Those International Traveller participants in managed accommodation were more likely than those isolating at home to report a negative impact on their mental health (57% and 48% respectively). [Figure 5.8, Table 5.9]

Figure 5.8 Impact of self-isolation on own mental health by arrangement type (%, All International Traveller participants)



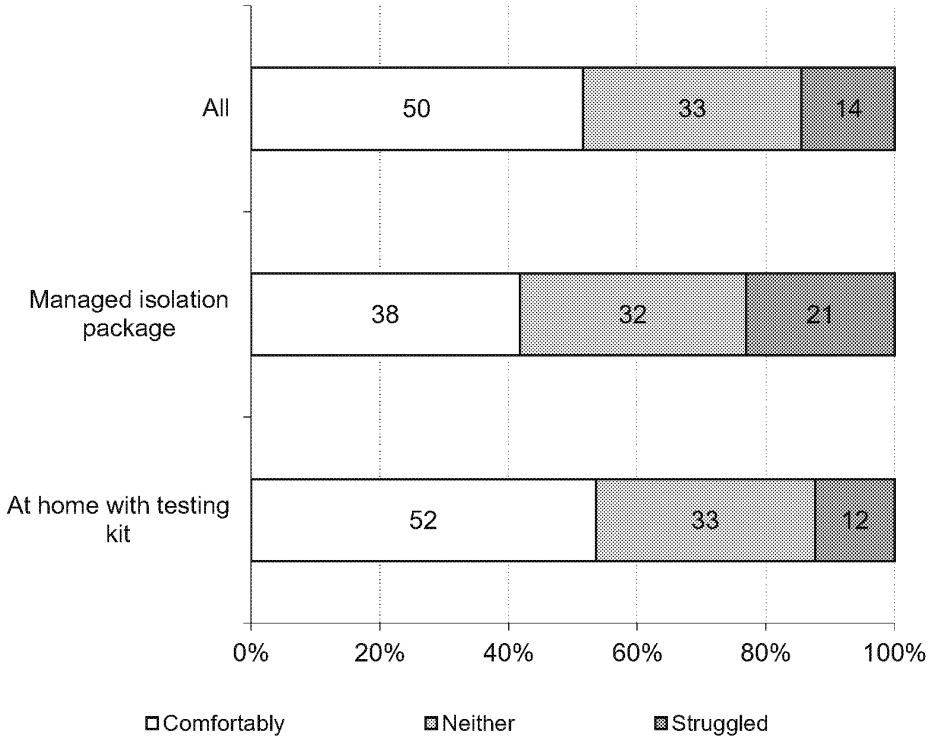
As was the case for Index and Contact Case participants, young International Travellers were more likely than others to cite that self-isolation had a negative impact on their mental health (63% of those aged 16-24, as did 56% of those aged 25-44, 43% of those aged 45-64 and 32% of those aged 65 and over). Those who had been asked to self-isolate previously were also more likely to report a negative impact (56% and 45% respectively), as were those who were partially compliant (57%) compared with those who fully complied with their own isolation (47%). [Table 5.9]

Chapter 8 includes findings on financial support needs, the impact of self-isolation on their mental health and access to informal support.

5.3.5 Perceived financial hardship during self-isolation

The level of perceived financial hardship among International Traveller participants was similar to that observed for Index and Contact Cases that took part. Half (50%) indicated that they managed comfortably on their household income while self-isolating, while 14% reported struggling. Those self-isolating at home were more likely than those in managed isolation to report being comfortable on their household income during self-isolation (52% and 38% respectively). [Figure 5.9, Table 5.10]

Figure 5.9 How managing/managed on household income during self-isolation by arrangement type (%, All International Traveller participants)



In line with Index and Contact Cases, perceived financial hardship varied according to household income and area deprivation for International Travellers. Younger International Travellers were more likely than older age categories to indicate struggling on their income during self-isolation (15% among those aged 16-24 and 19% aged 25-44 compared with 10% of those aged 45-64 and 5% of those aged 65 and over), as were those living in the two most deprived SIMD quintiles (21% comapred with 11% of those living in other areas). [Table 5.10]

5.3.6 Impact of self-isolation on different aspects of finances

Self-isolation impacted on the finances of International Travellers in a range of ways with 52% indicating that they had paid more for online deliveries than normal, 39% that they had spent more on groceries, 27% that they had lost income and 20% that they were likely to lose their job or miss out on work.

When analysed by self-isolation arrangement, those in managed isolation were more likely than those isolating at home to mention losing income (40% compared with 25% of those self-isolating at home) and losing their job/missing out on work (31% and 18% respectively). [Figure 5.10, Table 5.11]

Figure 5.10 Ways in which finances were impacted by self-isolation by arrangement type (%)

Finances impacted by self-isolation	All International Traveller participants	Managed isolation package	At home with test kit
Likely to lose my job/miss out on work	20%	31%	18%
Paid for online deliveries wouldn't normally have needed	52%	54%	52%
Paid more for groceries than I would normally	39%	38%	39%
Lost income	27%	40%	25%
Paid for a dog walker	4%	5%	4%
Impact finances in another way	36%	65%	30%

International Travellers more likely to mention financial impacts on their employment, income or paying more for groceries/ deliveries included those aged 16-44[54] and those with a household income of <=£16,900. When asked to describe the other ways in which self-isolation had impacted on finances responses included paying for tests and the cost of managed isolation packages. [Table 5.11]

5.4 Positive and negative impacts of self-isolation (qualitative interviews with Index Cases, Contact Cases, and International Travellers)

5.4.1 Mixed and negative impacts of self-isolation

On the whole, qualitative interview participants (of all case types) were more likely to report mixed or negative impacts of self-isolation. A number of interview participants spoke of the health impacts of self-isolation, which were predominantly related to mental health, with physical impacts appearing to be due to actual COVID-19 infection. Although the majority of interview participants appeared to be able to cope with self-isolation measures with relative ease, others stated that they found the experience very stressful and emotionally challenging. It was also said that stress levels rose within households, affecting others living there.

> "It was quite difficult. It was really tough. Really emotional, just because of the fact that you can't go out and you've got a disease that you don't know nothing about…I'd say staying in for ten days was really challenging and really emotional." (Index Case)

> "I must admit I actually felt like I was getting depressed I was sitting vegging, not getting dressed, just sitting in front of the telly because I was just like what's the point? There's nowhere to go, I've nothing to do. That was hard for me." (Contact Case)

The main factors cited were the inability to go outside, exercise and enjoy the fresh air; not being able to see partners, family or friends in person; not coping with family

[54] Difference not significant for employment

demands (especially not being able to entertain younger children); and as has been mentioned elsewhere the challenge of dealing with pets. However, there was a range of additional issues identified, though the participants noted that this was not always necessarily due to self-isolation as opposed to having COVID-19 and experiencing lockdown and other aspects of the pandemic itself.

> "I'm quite a gregarious person and I really like the company of other people, friends and family, and I miss that desperately, and my partner misses that desperately as well. We miss the contact, not being able to interact with other people, and that's awful…The negative impacts are that mentally it's been a real strain. The whole of this lockdown and restrictions and the rest of it is a very, very negative effect. There's nothing positive about it." (International Traveller)

> "You can see people on FaceTime or Teams or whatever it might be, but it's not quite the same as seeing someone in person. That was an odd sort of issue, mental health sort of issue, I guess…I think certainly that, and I think certainly just the lack of fresh air and the lack of sunlight, all that sort of thing. Can't quite get that from your home…I had to self-isolate, and I think in some sense I welcomed the break, welcomed a bit of time alone to recoup. Then there's also that lack of socialisation, the lack of contact with other people; lack of freedom, which is a very odd feeling to be told you can't leave your home. It's for the right reasons, but it's odd nonetheless. Very mixed, I would say." (Contact Case)

5.4.2 Impacts in the context of specific personal circumstances

Personal circumstances and contexts also impacted upon people's experience of self-isolation. For example, a few interview participants had experienced death of close family members (not COVID-related) prior to self-isolation, and then had to deal with the aftermath when they were unable to go out and meet with others. Also, participants were trying to cope with seriously ill members of the same household who had COVID-19, as well as continue with their own lives, as they still had to work or look after other household members.

> "We had to isolate twice because the whole family had COVID at that point, so our isolation wasn't the normal. We had to go on the longer, up to 28 days, because then the other family members started getting the COVID, so it took us time to actually go out of COVID and the normal isolation everybody would have done…I think it led to heightened emotions between the family because you are all isolating, in terms of who is going to cook and having food to eat and all that support. Even though I had some stuff delivered to me, you have to be cleaning the place and all that once you've used it. It led to some level of stress…I easily get stressed or easily get angry even though I don't have to, because you've just been at one place for a long period of time. I think that was the major thing I would say, because I was just getting upset quite easily for no

> reason, like certain things I'm not supposed to get annoyed at just became annoying because I was stressed. That would be the major thing I would say." (Household Contact Case)

A minority of participants said that they had financial concerns that appeared to get more pressing during self-isolation. This was due to either the participants or their partners not being able to work, falling into arrears with rent or as a result of unpaid bills.

International Travellers, particularly those with experience of facing hotel quarantine within and outwith the UK, tended to have more negative views of self-isolation. This seemed to be due to having less space and control over their own environment.

One participant argued that she thought there was a stigma associated with having a COVID-19 infection. Her view was that others assumed she and her family had behaved inappropriately, and were in some way to blame for their own infection. It should be noted that other participants did not appear to share this perception. The same participant was also very frustrated that she and her partner missed COVID vaccination appointments when isolating, and no rearranged appointments had been made at the time of interview.

> "I kind of think there's a bit of stigma around about it whereby people are kind of judging how do you manage to catch it? As if you've done something that you shouldn't have done. So I think that's affected me more than I thought it would because you know we haven't broken any rules, we hadn't done anything that we shouldn't have done...we were hoping to rearrange our vaccinations but they didn't give us alternative appointments, we couldn't get alternative appointments and they just said to us well you'll just go back on the allocations list and we'll write out to you whenever."
> (Index Case)

5.4.3 Positive impacts or experiences of self-isolation

A minority of participants were able to report positive elements of the self-isolation process. Of these, the main positive aspect reported was that those self-isolating were behaving properly or 'doing the right thing', they were acting in a manner which should have reduced the transmission of a potentially deadly virus and were contributing to society's fight against COVID-19. This did seem to be the main motivating factor which aided the adherence to self-isolation measures.

> "The positive impact for me is I'm playing my part. I'm doing what's expected of me. This is what I want to model for my children. Sometimes there are rules. I don't always like them, but this is the reason that we're being asked to do this."
> (Contact Case)

> "The positives are obviously that you're not spreading it to anybody and you're not a risk to anybody else. I wouldn't say there were any real negatives." (Index Case)

A few participants also stated that they benefited from the break, and it allowed them time to heal, recoup and improve their mental and physical well-being. Also, the fact that family members and close contacts who had experienced serious illness as a result of COVID infection were now recovering was viewed positively.

> "I think for me, because of what I've just been through and I've been through a lot of stress and a lot of panic attacks and things like that, my ten days at home actually helped my mental health because I didn't have to deal with the outside world, because me dealing with the outside world now is causing me panic and things like that. So, it was actually for me, ten days to lie in my bed, watch TV and just be. It probably helped a wee bit." (Index Case)

> "Well I didn't have much time off in the last year so ten days in the house it was'nae that bad." (Household Contact Case)

Other positive aspects that were reported included the support from family members and friends, even if they were not able to meet in person, and an improvement in household finances as there was no option to go out and spend money. It was also claimed that it made it easier to relate to the experiences of others who had been self-isolating.

Encouraging self-isolation

While adhering to isolation requirements wasn't easy for all participants, it was perceived that having a self-isolation period was important in terms of tackling COVID-19 and should continue to be supported by Test and Protect. Interviewees were asked if anything more could be done to make the isolation period easier and encourage people to adhere to all isolation requirements. As previously mentioned, improvements to communication and accessibility of information and support were noted. Reducing the isolation period and allowing outdoor exercise for those who test negative for COVID-19 were also suggested by interviewees. As the survey and qualitative interviews have illustrated, International Travellers found hotel quarantine both financially and emotional challenging. Therefore, allowing those International Travellers who live in Scotland to self-isolate at home rather than quarantine in a hotel was one way participants thought the requirement to self-isolate could be made easier as it would assist people both financially and emotionally.

> "To isolate I think is important; I don't think it's something you should get rid of; I think it's necessary…I'm enough of a realist to know that as long as we have high numbers of COVID, we need to isolate, or if you're coming from a country where there seems a higher rate, isolating….It's just one of the things that you'd have to do." (International Traveller)

> "Only use it as a last resort, self-isolation as a very last resort, not as the norm, as it is at the moment…if I had been trusted to come into Scotland, to land in Scotland, go straight on to my home destination and come to my house, then that would have been fine. Had I arrived in Scotland and been put straight into a hotel, that's wrong. That cannot be allowed, because you have hotels that are full of people that are self-isolating, so if any one of them has got it everyone will get it, because you have an air conditioning system that recycles air. I bet the filters on it are nowhere near as good as the airline filters." (International Traveller)

It was stressed by participants that they adhered to isolation requirements to protect others and to help in the effort to tackle COVID-19. However, it was felt that some may only adhere to self-isolation guidelines if they are either incentivised or deterred (e.g. isolation monitored, or issued a penalty for breaking self-isolation rules) but implementation of either approach was deemed problematic. Incentives or monitoring people's movements would be ethically questionable, expensive and may not be effective.

> "My son lives in the [name of country], but he travelled home and then he had to have a period of self-isolation…he had at least four phone calls checking that they were where they said they were. I quite liked that because I felt that they were following up on what they were meant to be doing. I don't know, maybe consequences for people that were not self-isolating, but to be honest, even as I'm saying that I don't know how that would be policed. I think maybe making it clear that people have a responsibility. They've got to play their part and we're all in this together kind of thing. I quite liked the fact that they did get in touch with my son on numerous occasions to check that he was still at this address and he was doing what he was meant to be doing and that he knew the dates that his self-isolation period ended." (Contact Case)

6. Testing

6.1 Background

While developments such as the mass vaccination programme have been introduced and offer hope for the future, testing remains crucial as Scotland continues to navigate the COVID-19 pandemic. It has been estimated that around one in three people with COVID-19 are asymptomatic, meaning that they have the potential to pass the virus on to others but may not experience symptoms themselves[55]. From the 26th April 2021, lateral flow tests have been available free of charge for use at home by anyone, irrespective of whether they have symptoms or not. As well as the identification of potentially asymptomatic cases (a positive result is confirmed by a subsequent PCR test), reduced transmission of the virus and the prevention of localised outbreaks as a result of self-isolation[56] such tests have been used prior to travel to Scotland's islands, reducing the potential for case levels to be impacted by those travelling from areas with higher case numbers[57].

The purpose of including information on testing within this study was not only to understand the reasons that motivated participants' most recent tests and their results[58] but also whether test results while in self-isolation had an influence on levels of self-isolation compliance, experiences of testing and what impact changes introduced over the fieldwork period, such as the introduction of lateral flow tests, may have had on testing locations and/or waiting times for test results.

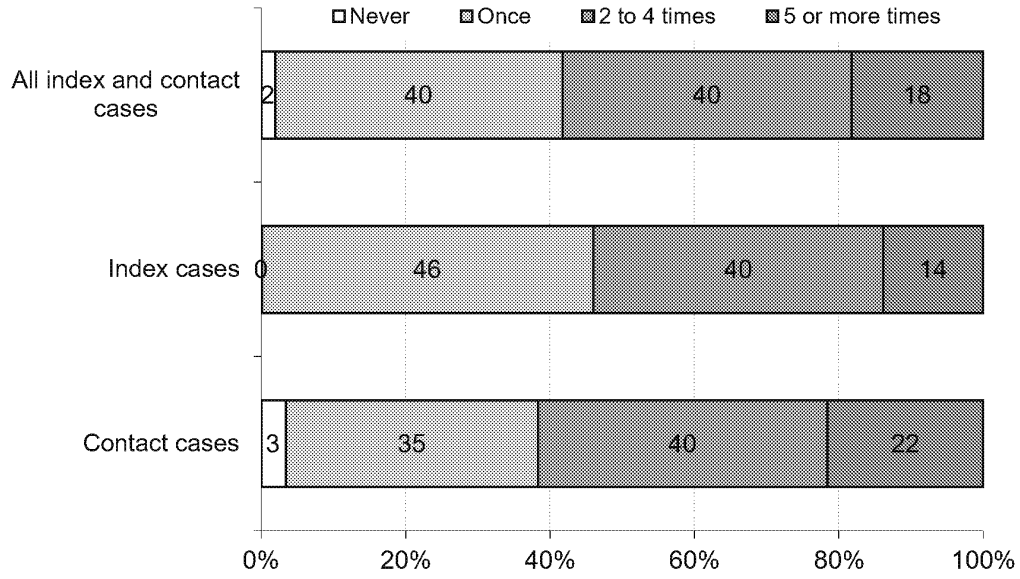
6.2 Testing and Index and Contact Cases

6.2.1 How often are individuals being tested and does this differ between Index and Contact cases?

Survey participants were asked how many times, to-date, they had been tested for COVID-19. Nearly all (98%) Index and Contact Case participants had been tested at least once. Contact Case particpants were more likely than Index Cases to have been tested multiple times: 62% of Contact Case participants had been tested at least twice, compared with 54% of Index Case participants. [Figure 6.1, Table 6.1]

[55] See https://www.nhs.uk/conditions/coronavirus-covid-19/testing/regular-rapid-coronavirus-tests-if-you-do-not-have-symptoms/
[56] Following positive lateral flow and PCR test results
[57] https://www.gov.scot/news/regular-rapid-testing-for-everyone/
[58] Bearing in mind that the research was timed to take place towards or as close to the end of the self-isolation period as possible (see 'Methods')

Figure 6.1 Number of times ever been tested for COVID-19 by case type (%)



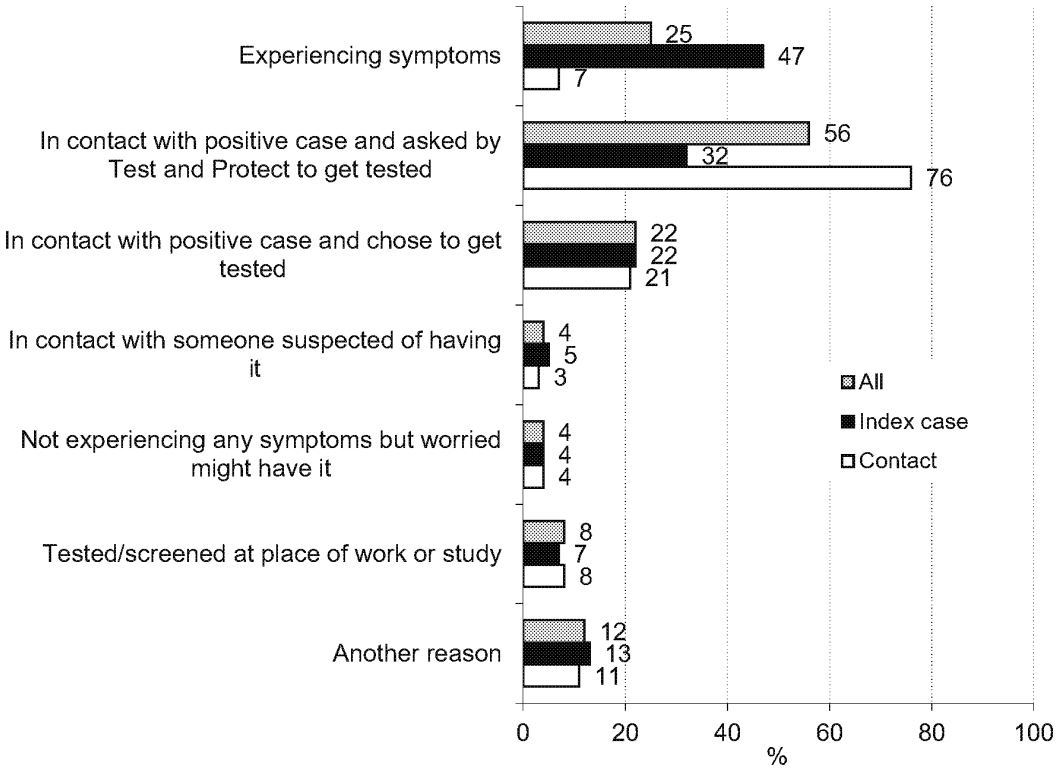
6.2.2 What was the reason for the most recent test undertaken by Index and Contact Case participants?

As Figure 6.2 shows a quarter (25%) of Index and Contact Case participants said they were experiencing symptoms when they got their most recent test with nearly half (47%) of Index Cases responding that this was the case (and 7% of Contact Cases). Two-thirds (69%) of Index and Contact Case participants said they got tested because they had come into contact with someone who tested positive: 56% said they had come into contact and were asked to get tested by Test and Protect, and 22% said they had come into contact with a positive case and chose to get tested.[59] [Figure 6.2]

Between waves, the proportion of all Index and Contact Case participants that had been tested as a result of experiencing symptoms decreased from 31% in wave one to 20% in wave three, while the proportion tested as a close contact after contact from Test and Protect rose over the same period from 49% to 61%. [Table 6.2]

[59] Multiple responses were allowed, hence the total for all who got tested because they had come into contact with someone who tested positive is less than the sum of the two separate categories

Figure 6.2 Reason for most recent test by case type (%, All Index & Contact Case participants)

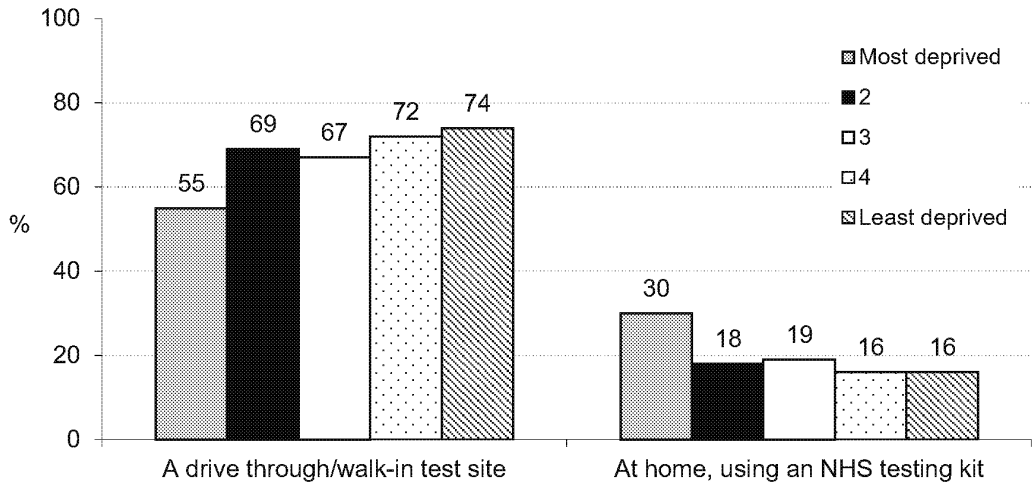


6.3.3 Where are tests taking place and has this changed over time for Index and Contact Case participants?

Index and Contact Case participants were asked to select, from a list, where their most recent test took place. A local drive-through or walk-in testing site was the most common location for obtaining a test, used by 67% of all Index and Contact Cases. A further 19% took their test at home, using an NHS home testing kit. Smaller numbers used a mobile testing unit (5%), a rapid testing site (2%), NHS premises (2%), a care home or social care setting (1%), their workplace (1%) or somewhere else (2%). Home testing kits were most commonly used by those living in the Scotland's more deprived areas. [Figure 6.3, Table 6.3]

Changes in the location of participants' most recent tests were recorded across the waves with a decrease in the proportion that took place at a local walk in/drive through testing site (73% in wave 1 to 64% in wave three) and an increase in testing at home (from 15% to 23% over the same period). [Table 6.3]

Figure 6.3 Location of most recent test by SIMD quintile (%, All Index & Contact Case participants)



Qualitative interview participants had taken COVID-19 tests at a range of locations including: going to drive-in test centres, walk-in centres and having the test posted to their homes. Participants had mainly positive experiences of COVID-19 testing and testing centres; they found the testing process, regardless of the format, easy, straightforward and efficient on the whole. In situations where the test was posted to people's homes, it was commented that the instructions were clear and easy to understand. That said, there were interview participants who commented that they knew of close family members who had been too unwell to access COVID-19 test centres, though when finally tested it confirmed that they had an active COVID infection.

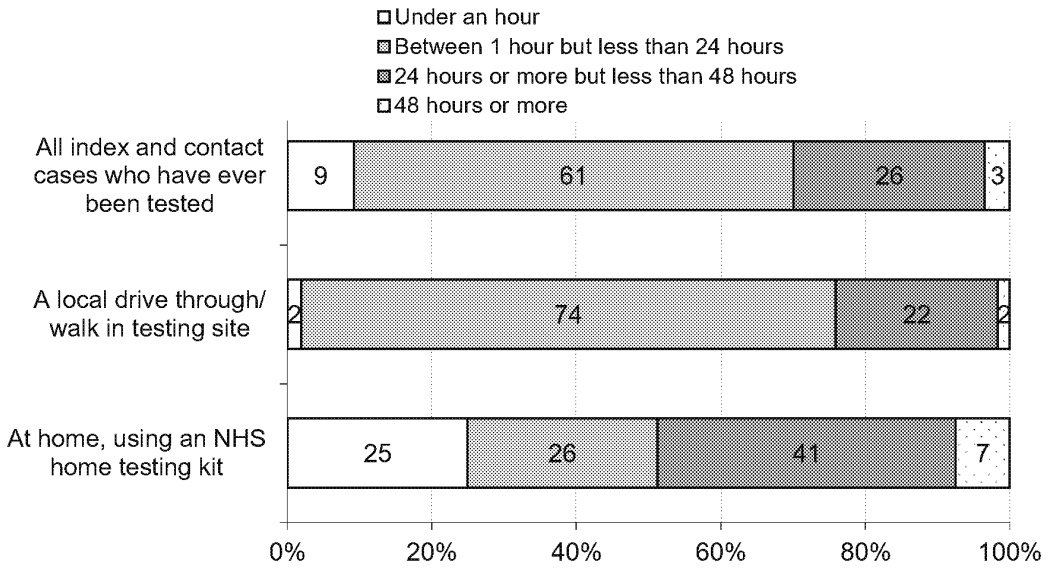
> "I thought it [home testing] was okay, yes. It's a little bit uncomfortable for anyone who's done it really, but I thought the instructions were quite clear. I can remember there being a video as well. It might have been a third-party video, but there was a video I found online that talks you through it step-by-step. That certainly helped. Especially I think sometimes you can look at a booklet and think one of two things, but with a video or some sort of content to follow, it made it a little bit easier." (Contact Case)

> "It [drive-in test centre] was really straightforward. They have people at every point that you stop at in the test centre, drive through bit, to guide you. I wasn't keen on doing this, I just hate stuff like that, if that makes sense - but you do it yourself where we are, so they just give you the kit. I know in some places they do it for you but you just do it yourself, but there was somebody next to the car the whole time if I needed them. It was pretty straightforward." (Household Contact Case)

6.3.4 How long are Index and Contact Case participants waiting for their test results and has this differed by where it was undertaken and/or over time?

Index and Contact Case participants that had been tested for COVID-19 were asked how long they waited for their most recent test result. Two-thirds (70%) of Index and Contact Cases received their most recent test results within a day, including 9% within an hour. Of those using a local drive-through or walk-in testing site, three-quarters (76%) received their results within a day. For those using a home-testing kit, half (51%) received their results that quickly. The proportion of all Index and Contact Case participants who received their most recent result within an hour rose from 5% in wave one to 12% in wave 3, potentially reflecting the increased availability of in-home lateral flow tests. [Figure 6.4, Table 6.4]

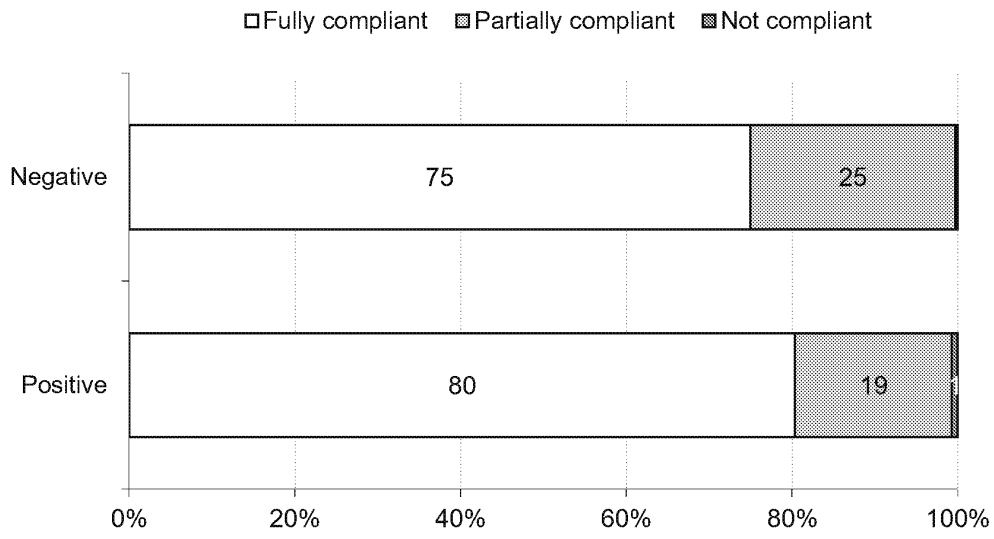
Figure 6.4 Time taken to receive result of most recent test by location of test (%, All Index and Contact Case participants)



6.2.2 Result of last test and levels of compliance among Index and Contact Case participants

Of Index Cases, 95% reported a positive result, while only 4% of Contact Cases reported this. [Table 6.5] Index and Contact Case participants who tested positive on their most recent test were more likely to comply fully with self-isolation than those who tested negative (80% of those who tested positive complied fully, compared with 75% of those who tested negative). In both groups, nearly all of those who did not comply fully showed at least partial compliance with the rules. [Figure 6.5, Table 6.6]

Figure 6.5 Compliance with self-isolation regulations by most recent test (%, All Index and Contact Case participants)



6.3 Testing and International Travellers

As testing was a requirement of international travel and response on location of testing varied accordingly, the findings for reason and location of last test are not explored here. Only a small number of International Traveller participants had tested positive on their most recent test, therefore, findings by test result are not presented for these participants.

6.3.1 How often have International Travellers been tested?

International Travellers were more likely to have been tested multiple times (including potentially for other reasons prior to their international travel) than Index and Contact Case participants. The vast majority of International Traveller participants (95%) had been tested more than once, which is not surprising given that testing was a requirement for all International Travellers. More than half (54%) had been tested five times or more. This number of tests was more common among those who booked managed isolation (quarantine) packages (60%) than those who booked test kits for self-isolation (52%). [Table 6.8]

6.3.2 How long are International Travellers waiting for their test results?

A quarter of International Travellers (23%) received their results within a day of the test. Those who were self-isolating at home were more likely to wait longer: 83% waited more than 24 hours, compared with 49% of those who booked a managed isolation (quarantine) package. The results for International Traveller participants isolating at home tended to take longer than tests undertaken at home by Index and Contact Cases. [Table 6.9]

6.3.3 What have been the outcomes of the most recent test taken by those self-isolating as a result of international travel?

The vast majority of International Travellers received negative results from their most recent tests: 95% reported a negative test result, with 5% still awaiting a result. Less than 0.5% received a positive result. Those who booked managed isolation (quarantine) packages were more likely to test positive (2%) than those self-isolating at home (less than 0.5%). [Table 6.10]

7. Vaccination

7.1 Background[60]

Mass vaccinations began in Scotland in December 2020. Invitations were first issued to those within the groups identified and in the order recommended by the Joint Committee on Vaccination and Immunisation (JCVI). These determined the groups that were most vulnerable and priorities for vaccination including older age groups, the clinically extremely vulnerable, care home residents and carers, those aged 16-64 with underlying health conditions that put them at serious risk and/or who were unpaid carers. It was estimated (in March 2021), that doing so would target the vast majority (approximately 99%) of preventable mortality from COVID-19. By the end of the first wave of this study, 56% of those aged 18 and over in Scotland had received their first vaccination, while 9% had received both doses. These figures had risen to 64% and 32% respectively by the end of wave two and to 74% and 48% respectively by the end of wave 3[61].

This study aimed to learn more about the vaccination status of those asked to self-isolate, as well as the impact this may or may not have on planned future behaviour among those who had received both, one or no doses at the time of fieldwork, including whether this may differ by the reason for their self-isolation.

7.2 Vaccination status among Index and Contact Cases

7.2.1 Vaccination levels among self-isolating Index and Contact Case participants

Across the three waves of the study, half of the Index and Contact Case participants (51%) had received at least one dose of vaccine, with 15% having received both doses at the time of completing the survey. Contact Case participants were more likely than Index Cases to have been vaccinated, with three-in-five (60%) having received at least one dose and 21% having received both. Two-in-five (39%) Index Cases had also received at least one dose, with 8% having received both. [Table 7.1]

As may be expected, variations in vaccination status among Index and Contact Case participants were recorded by age. At the time of interview, eight in ten 16-24 year olds reported not having been vaccinated at all, a proportion that decreased with age to 1% among those aged 65 and over. The proportion receiving both doses, rose from 16% of 16-24 year olds to 62% of those aged 65 and over. [Table 7.1]

[60] See Vaccine deployment plan update at https://www.gov.scot/publications/coronavirus-covid-19-vaccine-deployment-plan-update-march-2021/
[61] See https://public.tableau.com/app/profile/phs.covid.19/viz/COVID-19DailyDashboard_15960160643010/Overview

7.2.2 Vaccination status and overall compliance among Index and Contact Case participants

No significant association between compliance with the self-isolation regulations and vaccination status were observed. Three-quarters of all Index and Contact Case participants were fully compliant with the regulations: 76% of those who had not been vaccinated, 75% of those who had received one dose, and 73% of those who had received both doses. [Figure 7.1, Table 7.2]

Figure 7.1 Observed (behavioural) compliance by vaccination status (%, All Index and Contact Case participants)

Compliance	Received both doses	Received one dose	Not vaccinated
Fully compliant	73%	75%	76%
Partially complaint	27%	25%	23%
Not compliant	<0.5%	1%	1%
Base	*304*	*741*	*1,007*

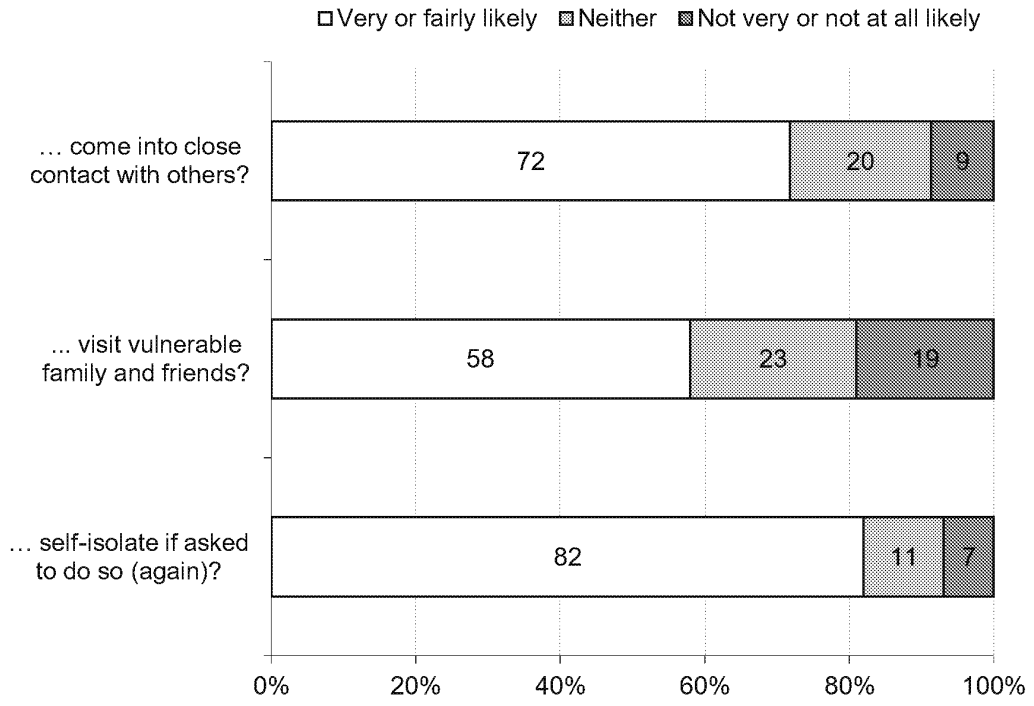
7.2.3 Vaccination status and likely future behaviour among Index and Contact Case participants

The majority of Index and Contact Case participants (72%) responded that they were likely (very likely and fairly combined) to come into close contact with others once they were fully vaccinated against COVID-19. Only 9% said this was not likely. [Table 7.3]

The majority, albeit a smaller one (58%) reported they were likely to visit vulnerable family and friends once they were fully vaccinated, with one-in-five (19%) saying this was not likely. [Table 7.4]

A high level of intended future compliance with self-isolation regulations, even once vaccinations had been given, was reported. Four-in-five Index and Contact Case participants (82%) reported that they would be likely to self-isolate again if they were asked to do so once they were fully vaccinated, while only 7% said they would not. [Figure 7.2, Table 7.5]

Figure 7.2 Likelihood of behaviour being undertaken now/once participants are fully vaccinated against COVID-19 (%, All Index and Contact Cases)



Likely future behaviour varied by age with those under 65 more likely than those aged 65 and over to report being likely to come into close contact with others once vaccinated (72-73% compared with 62% of those aged 65 and over). Younger participants were also more likely to respond that they would visit vulnerable family once fully vaccinated (62% among 16-44 year olds and 56% among 45-64 year olds compared with 41% of those aged 65 and over). [Tables 7.3-7.5]

However, there was less of a willingness expressed by younger Index and Contact Case participants with regards to self-isolating again if asked once fully vaccinated (77% among those aged 16-24, 88% among those aged 45-64 and 93% of those aged 65 and over). [Tables 7.3-7.5]

7.3 Vaccination status among International Travellers

7.3.1 Vaccination status of International Traveller participants

International Travellers were less likely than Index and Contact Case participants to have received their first dose of vaccine. Just over a third of International Travellers (36%) had received at least one dose, with 19% having received both. [Table 7.6]

7.3.2 Vaccination status and overall compliance among International Travellers

As was recorded for Index and Contact Case participants, behavioural compliance did not differ significantly according to vaccination status among International Travellers: 72% of those who had received both doses of vaccine, 68% of those who had received one and 73% of those who were not vaccinated at all complied fully with the self-isolation regulations, with very few in any of the groups not complying at all. [Figure 7.3, Table 7.7]

Figure 7.3 Behavioural compliance by vaccination status (%, All International Traveller participants)

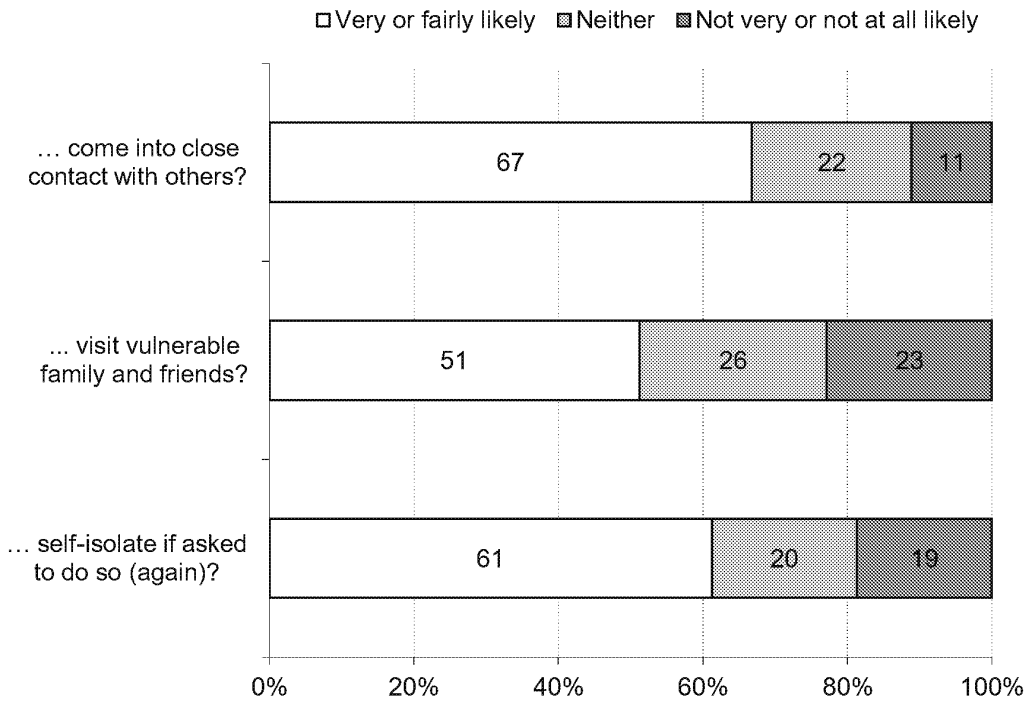
Compliance	Received both doses	Received one dose	Not vaccinated
Fully compliant	72%	68%	73%
Partially complaint	28%	31%	26%
Not compliant	<0.5%	<0.5%	<0.5%
Base	*374*	*410*	*1,399*

7.3.3 Vaccination status and likely future behaviour among International Travellers

While the majority of International Travellers reported they would be likely to meet people once they were fully vaccinated, the proportions were smaller than for Index and Contact Cases. Two-thirds (67%) of International Travellers said they would be likely to come into contact with others (compared with 72% of Index and Contact Case participants), while 11% said this was not likely. [Table 7.8] Half of International Travellers (51%) said they would be likely to visit vulnerable friends and family, with 23% saying this was unlikely. [Table 7.9]

Three-in-five (61%) International Travellers reported that they would be likely to self-isolate again if asked to do so once they were fully vaccinated. This is significantly lower than the 82% of Index and Contact Case participants reported above. One-in-five (19%) reported it was unlikely they would do this once fully vaccinated. [Figure 7.4, Table 7.10]

Figure 7.4 Likelihood of behaviour being undertaken now/once International Travellers are fully vaccinated against COVID-19 (%)



Variations in likely behaviours were evident by age with International Traveller participants in the 16-24 age group more likely to come into close contact with others (70%) and/or visit vulnerable family (53%) once fully vaccinated compared with those aged 65 and over (60% and 37% respectively). However, there was less of a willingness expressed by younger International Travellers (aged 16-24) with regards to self-isolating again if asked once fully vaccinated (57% compared with 66% of those aged 45 and over). [Tables 7.8-7.10]

7.4 Opinions on vaccinations (qualitative interviewees)

Due to age profile, over half of qualitative interview participants, of all case types, had been offered the vaccine at the time of interview, most of whom had received at least one dose of the vaccine. There were participants who were waiting for new vaccine appointments after having to postpone because they were self-isolating. The remaining interview participants had not received their vaccination invitation yet but almost all intended to accept the vaccine when offered. One participant was still uncertain whether they would accept the vaccine because they were concerned about the safety of the vaccines available.

There were a number of reasons interview participants had accepted or intended to accept a COVID-19 vaccine. A motivating factor for accepting a vaccine was to protect themselves and others, believing that the vaccines were effective in reducing the risk of catching and transmitting COVID. Getting vaccinated was also

perceived to be the best way to control COVID-19, get through the pandemic and ease COVID restrictions. Participants also said getting vaccinated was a way to ease pressure on the NHS. There were participants who had some concerns about getting the vaccine (a fear of needles, concerns about side effects) but on balance felt it was better to be vaccinated.

> "Yes, I'll be taking the vaccine, absolutely...I just feel like it's better to protect myself and better to protect people around me I suppose. Vaccines have helped in the past with pandemics and stuff and I don't see this one being any different if I'm honest." (Index Case)

> "I just feel it's the way forward. It's the only way we're ever going to get out of – not completely - but back to any kind of form of normality." (Household Contact Case)

Overall, interview participants intended to get the second dose of the vaccine when offered because it would give greater protection against COVID-19. Only one interview participant was unsure whether they would accept the second dose of the vaccine because they had an adverse reaction to the first dose.

> "I think it gives an extra protection and peace of mind. Even though I had COVID, it's an extra protection." (Index Case)

> "What I want to do is to make sure that I have a full, or as best a level of immunity as I can and it would only be by taking the second dose of the vaccine that that would provide me with that." (Household Contact Case)

When asked about their behaviour or intended behaviour after being vaccinated participants still perceived that it was important to follow the guidelines.

> "Yes, it's hard. My heart is hurting, but if this is all we're being asked to do then I'm sorry I don't think it's been that big a hardship if it means we can get out of this lockdown and get back to some kind of normality and allow the science to play its part and for the vaccines to roll on and get everybody vaccinated. I don't see any issue with it. I'm fine with following the restrictions." (Contact Case)

8. Support during self-isolation

8.1 Background

It is recognised that there are a range of challenges and support needs as a result of being asked to self-isolate and that these can vary both for individuals and as the self-isolation period progresses. Key elements of the support offer at the time of undertaking the research included:

- **Local Authority support:** All Index and Contact Cases should be offered the option of their Local Authority contacting them solely for the purpose of identifying and providing support during self-isolation. All those who accept should then be offered an initial call to identify their support needs, appropriate support and the offer of up to two follow-up calls to check on them and their support needs. Local Authorities must provide the same basic offering around food, pharmacy, and financial support, however, there is scope for them to adapt their wider offer so this may not be consistent across Local Authorities.
- **The National Assistance Helpline**: Available to all, including those asked to self-isolate, this helpline links callers to mental health and wellbeing support as well as to their Local Authority where there is the potential to access a range of support, including with food, pharmacy deliveries, befriending and with their finances as above.
- **Self-Isolation Support Grant**: Recognising the potential financial impact of self-isolation, a Self-Isolation Support Grant of £500 was launched for those on low incomes, which can be applied for via an individual's Local Authority.

In addition, a scheme was launched whereby a letter is provided for employers to help with expectations around work that cannot be undertaken from home when an individual is asked to self-isolate.

One of the key areas of focus for the research was to understand more about the support needs of those asked to self-isolate, as well as knowledge and take up of the support on offer.

8.2 Formal support

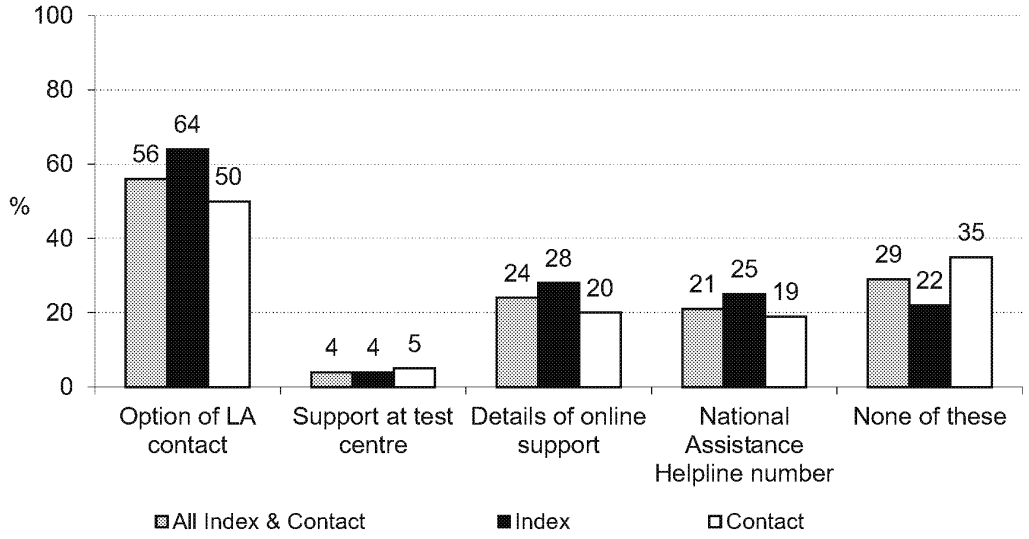
8.2.1 Formal support offered to Index and Contact Case participants

Over half (56%) of Index and Contact Case participants indicated that, when asked to self-isolate, they were offered the option of their Local Authority contacting them. Smaller proportions recalled being offered online support (24%), the National Assistance Helpline number (21%) and/or support when visiting a test centre (4%). Yet three in ten (29%) Index and Contact Case participants did not recall being offered any of these formal support options when asked to self-isolate.

Index Case participants were more likely than Contact Cases to report having been offered the following formal support: the opportunity for their Local Authority to

contact them (64% and 50% respectively); online support (28% compared with 20%) and/or being offered the National Assistance Helpline number (25% compared with 19%). [Figure 8.1, Table 8.1]

Figure 8.1 Types of support offered by case type (%)



Participants aged 25-44 and 45-64 (58% and 59% respectively) were more likely than the youngest age group (45%) to mention having received the offer of LA contact. The proportion of those aged 65 or over who mentioned receiving the offer of Local Authority contact was not significantly different from that observed for other age groups. Other groups more likely to report being offered the opportunity for their Local Authority to contact them than others included: those living with others, including children, (54%-59%, compared with 47% of those living alone); those managing comfortably on their income during self-isolation (58%, compared with 51% who reported struggling on their income) and those who gave their ethnic origin as White (57%, compared with 49% who gave this as Non-White). [Table 8.1]

In the qualitative research, awareness of the support available during isolation varied from feeling fully informed of the support on offer, to not being aware that any support was available. Interviewees were not always able to say if the information or offers of support they received around self-isolation came from Test and Protect, the Local Authority or the NHS. However, a majority of the participants said that they were aware support was on offer from Local Authorities. This appeared to be due to being contacted and made aware of the Local Authority support by Test and Protect in the main, although others stated that they knew of this service via family members who worked at the Local Authority, as well as through schools. Other sources of information on the availability of Local Authority support included the Scottish Governmental daily briefings and through the media.

Those interviewees who reported an awareness of formal support said that either Test and Protect or a representative from the local council phoned to say help was available for shopping, medical prescriptions, dog walking and to offer support for

mental health issues. This offer of support appeared to be appreciated, though the consensus was that assistance already on offer from family, friends and workplaces meant that no additional help was required (see Chapter 8.2.5 below).

It is important to note, that while most interviewees may have been aware that local authorities offered support, they did not always know what the support entailed. For some, this was because they didn't feel that they needed support so they didn't enquire further. For others, they confessed they may have been told but had not taken it in. It was argued that those being asked to self-isolate could benefit from more detailed information about what the local authority could offer in the way of assistance. There were interviewees who said it was an automatic response to say that they didn't need support but knowing more about what support was available may have made self-isolating easier. In particular, awareness of the eligibilty criteria of the Self-Isolation Support Grant appeared to be low amongst interviewees, with participants stating that they thought it was only for those on benefits or they had received mixed messages regarding who would qualify for the grant.

> "The food shopping and medication, that's the only support I was offered, and obviously, to take the dog out…A lassie told me on the phone." (Index Case)

> "Not from Test and Protect. (Name of) Council called me asking did I need any support with food shopping and things like that, but I just said no because I had family that were helping, but that was all." (Index Case)

> "Yes, they phoned us up every time. Well, every time I've had any - they phoned us up every time I've been told to isolate; the local council has phoned us up and offered help… Asked if everything was all right." (Index Case)

A common sentiment expressed by participants was that even if they did not personally need support, they appreciated that the service existed for those in less fortunate circumstances. Therefore, the Scottish Government and local authorities continuing to offer a range of support to those who have been asked to self-isolate was deemed important by interview participants. Financial support, such as the Self-Isolation Support Grant, was mentioned as being important in recognition that people may not be able to work during isolation. Informing everyone asked to isolate of the types of support available, and how to access this support, was perceived to be an essential part of Test and Protect's work.

> "If you were somebody who had been working throughout and cannot work from home, then obviously the grant is really good. I know that's already in place, but I think that's really important and that should be continued if we were ever to find ourselves in this situation again." (Index Case)

> "I think it is important that people should be given assistance, I think that that is very important, people should be…encouraged to self-isolate." (Index Case)

8.2.2 Formal support accessed by Index and Contact Case participants

Uptake of Local Authority support was relatively low among Index and Contact Case survey participants, with one in seven (14%) of those offered the opportunity of contact from their Local Authority accepting the offer. Take up did not vary significantly between Index and Contact Cases. Acceptance was also higher among those with a limiting long-term illness (28%, compared with a 10% with a non-limiting illness and 12% with no long-term illness).

Variations in take up of the offer of LA contact were also evident by: area deprivation (21% of those living in the two most deprived SIMD quintiles accepted the offer, compared with 9% of those living elsewhere); household income (with acceptance of the offer declining in line with increased household income (23% among those with a household income of <=£16,900 to 8% among those with a household income of £52,201 or more); perceived financial hardship with 38% of those who reported struggling on their household income during isolation accepting the offer, compared with (7%) of those who felt they managed comfortably on their income.[62] [Table 8.2]

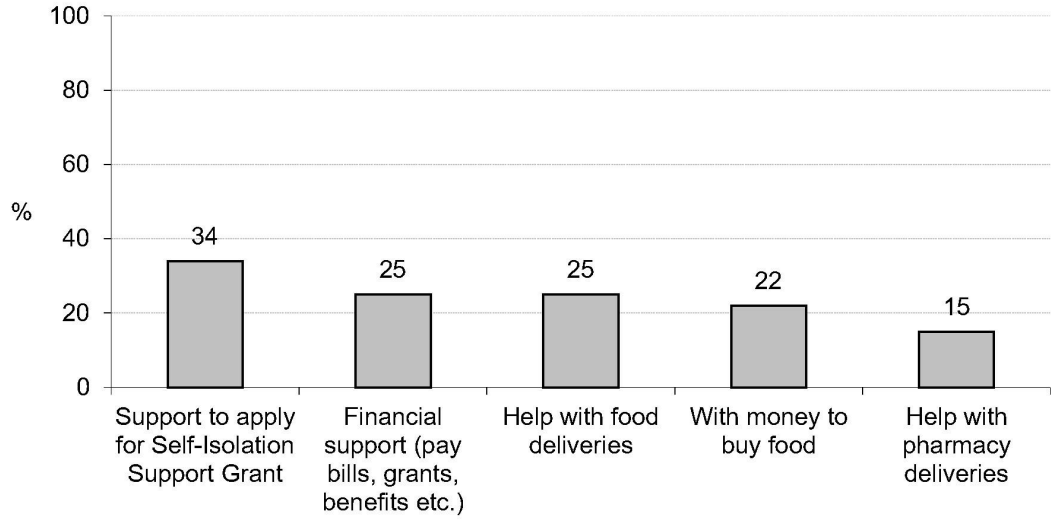
Five percent of Index and Contact Case participants indicated that they contacted the National Assistance Helpline directly. [Table 8.3]

8.2.3 Reasons Index and Contact Case participants accessed formal support

Most survey participants who accepted the offer of support from their Local Authority did so to receive financial and practical support. As Figure 8.2 shows around a third that accepted were interested in support with a Self-Isolation Support Grant application (34%), while a quarter mentioned financial support (bills, access to grants/benefits etc.) (25%), practical help with food deliveries and/or support with money to buy food (22%).[63] A further 15% wanted support with pharmacy deliveries. [Figure 8.2, Table 8.4]

[62] There were no significant variations in the proportions offered and accepting contact from their Local Authority by compliance level.
[63] These figures should be treated with caution due to the small bases.

Figure 8.2 Types of support sought by those who accepted option of their Local Authority contacting them (% All Index & Contact Case participants who accepted LA contact offer)[64]



Just over seven in ten (72%) Index and Contact Case participants who agreed to the initial Local Authority contact also agreed to a follow-up call later in their self-isolation period. Common reasons for doing so included needing, or thinking they might need help: accessing food or other essential supplies (33%); help paying for food or bills (26%); because they thought they had to agree (20%) and/or in case their support needs had changed during self-isolation (19%). [Tables 8.5 and 8.6]

Common reasons for contacting the National Assistance Helpline were for additional information relating to self-isolation, COVID-19 symptoms, schooling etc. (34%). The proportions contacting the National Assistance Helpline for financial and/or practical reasons were lower than the proportions contacting their LA directly for these reasons. [Table 8.7]

8.2.4 How well Index and Contact Case participants' support needs were met

Index and Contact Case survey participants who accepted contact from their Local Authority, contacted their Local Authority directly and/or contacted the National Assistance helpline were asked if their support needs had been met. Most participants who accepted or sought help indicated that their support needs had been met (76%). Three-quarters of those who accepted contact from their Local Authority had their needs met, similar to the proportion who contacted their LA

[64] The five most common types of support are included here. See Table 8.3 for all responses given.

directly. Four in five (83%) of those who called the National Assistance Helpline for support reported that their support needs were met. [Figure 8.3, Table 8.8][65]

Figure 8.3 Whether needs identified to Local Authority and/or National Assistance Helpline were met (%, total and by type of help accepted/sought)

Response	Total	Accepted offer of Local Authority contact	Contacted Local Authority directly	Contacted National Assistance Helpline
Yes (either)	76%	75%	75%	83%
No	24%	25%	25%	17%
Base	*340*	*149*	*205*	*99*

In the qualitative research, those who had received the Self-Isolation Support Grant, or financial help towards utility bills, were appreciative and said that this had helped them. In addition, those who were contacted by telephone with offers of help thought that this was a worthwhile service, even if they did not need any assistance themselves, they thought others could benefit from the offer of support.

> *"[Self-Isolation Support Grant] did cover up the income that was lost for that kind of job, so I would say to that extent it was helpful…My missus did bridge the gap in terms of her work hours. It came down to the same, it just bridged the difference. It was helpful in that way, but apart from that there was no additional kind of positive in relation to it." (Household Contact Case)*

> *"For the self-isolating side and the information you can get, yeah, that's great – but as I said, I didn't take anything. There are people worse off than me that need volunteers so I didn't make use of anything else." (Contact Case)*

Both positive and negative examples of local authority support were cited in the qualitative research. Participants reported receiving the Self-Isolation Support Grant, as well as delivery of food parcels, shopping and financial support with electricity bills. This support was appreciated by the participants.

> "… but financially I got a support grant from the local council because I couldn't…obviously my job I need to go into the house and do it so I couldn't work so I got a £500 Isolation Support Grant which helped…I knew I would be unable to go to work and I'd be missing out on money and yeah I could have done with it basically because it was 10 days of me not working. I think I normally work about 20 hours a week so it was going to be quite a loss of income." (Index Case)

[65] It should be noted that the National Assistance Helpline acts as a means to direct people to their Local Authority for support and to seek out information. The reasons for the differences in satisfaction between those accessing their LA directly and those using the NAH are therefore not clear. It may be that individuals use these different routes for different reasons, but this cannot be deduced from the data.

> "They told me to fill in an online application. I did. I filled in the application and I gave them evidence and they got back to me two days later, saying that my income was too high, but then I explained to them that my income isn't that high this month. I'm getting paid in nine days…and due to me being off for that week, I really am going to struggle to pay my rent, struggle to do things like that. There was a lot of bills to pay, and that was going to be put towards my rent and now I'm in arrears...I've applied for support…and I've got to wait for the outcome." (Index Case)

> "First time [I self isolated], yes, [they helped with food delivery]...They just phoned up and asked if I was all right, if I had plenty of food, and did I have any problems with money or anything? If I did, they said that if I had, I had the number and I just had to contact them and they would help us." (Index Case)

The interviewees who gave mixed or negative feedback in relation to Local Authority support tended to have quite specific issues that they had complaints about. Two participants spoke of applying for the Self-Isolation Support Grant, one unsuccessfully and the other still waiting on the results of an appeal. Participants thought the eligibility criteria for the grant were too narrow and perceived it as more for those on benefits or without any income. Those on lower incomes felt they had been excluded from applying despite their financial difficulties. An individual phoned up for help with a prescription (from a dentist), but was strongly critical of the service when told that no help was possible. A dog owner did think of using a volunteer to walk the dog, but again no-one was available. Finally, participants wondered if a more specific, targeted phone call may be most useful rather than an open-ended call asking if help was needed, for example, if help may be needed with the payment of utility bills.

> "That was easy as I say. I done it…but as I say I tried it and because I never heard anything back I thought well I'm not entitled to it because I was still working. Whereas everything is geared for folk who are'nae working, they're getting all the help. The folk who are on minimum wage doing what they've to do, you work through all the pandemic, we're not entitled to nothin'." (Household Contact Case)

> "I phoned them regarding the prescription there was no support. They said we are sorry we cannot help you…By that time I'd lost confidence in them and I just said I'm not going to bother with them anymore…The one and only service that I used was very poor quality." (Index Case)

> "I thought it was about right apart from it wasn't that easy to find the information about that grant but apart from that I thought everything else was all good." (Index Case)

Some interview participants argued that additional support was needed. For example, there were interviewees who were not eligible for support or said that the support they required was not available in their area. To address these issues and

help more people to isolate fully in the future, participants made a number of suggestions. These included:

- Test and Protect and/or Local Authority to call everyone (including International Travellers) isolating at the start, middle and end of the 10 days self-isolation period to offer support, as people's circumstances may change
- Widening the eligibility of the Isolation Support Grant, for example, to everyone who has lost income as a result of self-isolation
- Further promotion and communication of the full range of support on offer for those who have to isolate and any eligibility criteria
- Provide everyone who is isolating with a written list of sources of support and relevant contact details. Ensure a range of formats are available
- Make it easy for people to find information about isolation support on the Test and Protect website (e.g. add an index and better search options to the Test and Protect website so key messages are easy to find, streamline text communication so it easier to digest, provide a downloadable PDF option to the website)
- Provide resources to help people look after themselves physically and mentally during isolation. This could be in the form of printed materials or links to online support
- Provide additional support for those with caring responsibilities (e.g. so they do not break isolation guidelines to provide this support to others)
- Provide access to local volunteers (e.g. via local council) who can help those isolating
- Access to online interactive activities for children to enable parents with COVID-19 to rest
- Local Authority to provide support to pay bills while self-isolating (for those who do not do internet or phone banking).

It is important to note that some of this support should already be available to those self-isolating. For example, Local Authorities can help with paying bills through pre-pay meters, crisis grants or by advising how to talk to energy companies about bill payment over the isolation period. Furthermore, Local Authorities can call people up to three times during the isolation period, but only if people consent to their details being passed on to their Local Authority.

8.2.5 Reasons Index and Contact Case participants did not accept formal support

The majority (83%) of Index and Contact survey participants that were offered the option of contact from their Local Authority declined the offer, with most doing so because they did not need any additional support (84%). Fourteen percent indicated that all the information they needed was available online, while 8% declined the offer of Local Authority contact as they were not sure what support was available and whether they needed it. Reasons for declining the offer of Local

Authority support were generally similar among Index and Contact Case participants). [Table 8.9]

While there were no significant variations by sex or age some groups were more likely than others to decline support because they felt all the information was available online: non-carers (15% declined for this reason compared with 9% among carers) and those living in less deprived areas (13% compared with 19% among those living in the two most deprived SIMD quintiles (19%). [Table 8.9]

On the whole, the qualitative interviewees thought that this formal support was not needed. Family, friends and neighbours could help with shopping and prescriptions, and online shopping deliveries were often already in place. However, a few interviewees did apply for the Self-Isolation Support Grant unsuccessfully, or did not apply as they assumed they would not be eligible. There was also a view expressed that interviewees did not want to take grants or food away from those who were less fortunate and perceived to be in major need. Other issues, such as the provision of dog walking, were not taken up as interviewees did not always think it safe or sensible to hand a dog over to someone else, as there was a risk of transmitting the virus.

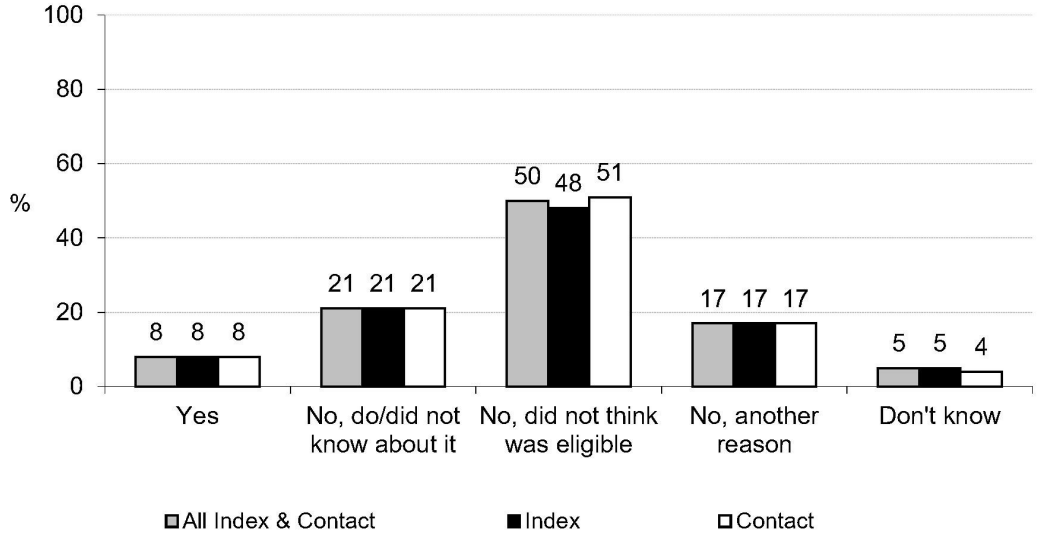
> "The dog one, no, because I just thought, somebody has got to stand at my front door, I've got to hand over the dog and things like that. I just thought that was pathetic to be honest. The food shopping and medication, I get my medication monthly, so that was not a bother. The food shopping I'd done online…I'm terrible, I always make sure that there's plenty in. The cupboards are always full and things like that. I would be taking off of somebody that needs it when we don't need it. Give it to somebody that's maybe needing support. We're fortunate that we didn't need the support." (Index Case)

> "No. That was the thing that was kind of like 'well, that's fine' but we wouldn't…morally we wouldn't to take anything that would take away the opportunity for someone last fortunate than us to…I know that sounds very gallant but I don't mean it that way. It would have been wrong for us to have said 'oh yes, please help us' when we were managing quite fine without it you know?" (Household Contact Case)

8.2.6 Self-Isolation Support Grant (SISG)

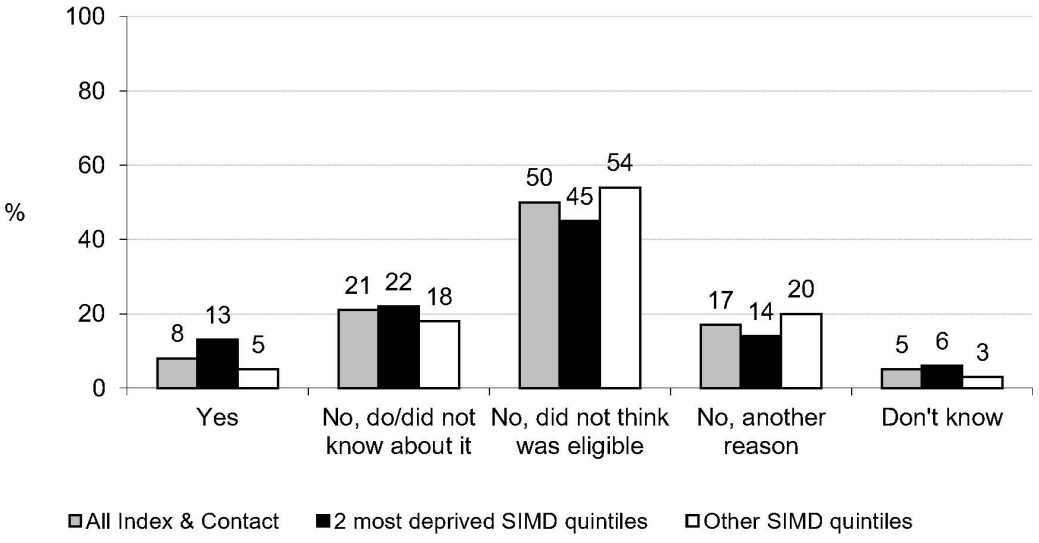
The Self-Isolation Support Grant (SISG) is a form of financial support available for those self-isolating as an Index or Contact Case who are on a low income. At 8%, the proportion of Index and Contact Case participants indicating that they had applied for a SISG was low, with no variation by case type.

Figure 8.4 Whether applied for Self-Isolation Support Grant or not by case type (%)



Applications for the SISG were higher among those living in Scotland's two most deprived SIMD quintiles (13%) than among those living elsewhere in Scotland (5%). Applications also varied by household income, with 17% of those with a household income of <=£16,900 and 13% of those with a household income of £16,901-£30,700 having submitted an application compared with 2-5% of those with a household income of £30,701-£52,200 or more. [Figures 8.4 & 8.5, Table 8.10]

Figure 8.5 Whether applied for Self-Isolation Support Grant or not by SIMD quintile (%, All Index & Contact Case participants)



At the time of fieldwork, around a third of Index and Contact Cases who had applied for the grant had been successful in their application (37%), while around a quarter

(27%) had been told that their application was unsuccessful and for a similar proportion (29%) a decision was pending. [Table 8.11]

Most of those who did not apply for the SISG said the reason they did not was because they did not think they were eligible (50%) and/or they did not know about it (21%). The data is indicative that those on lower household incomes were more likely than those with higher incomes to cite lack of knowledge about the grant as a reason for not applying. Whereas the opposite was true when it came to eligibility, that is, those on higher incomes were most likely to state that they did not apply due to perceptions of ineligibility (60% of those with a household income of £52,201 or more).[66] [Table 8.10]

8.3 Formal support for International Travellers

Only small proportions of International Traveller participants directly sought assistance from either their Local Authority (7%) and/or via the National Assistance Helpline (3%), with no significant variations by whether they were on a managed isolation package or self-isolating and testing at home. [Table 8.12]

Among those International Travellers who sought formal support[67], around three in ten (28%) did so in order to access additional information (on self-isolation rules, COVID-19 symptoms, schooling etc.), while around one in ten were seeking support with food deliveries (12%) and/or financial support to pay bills, access to grants/benefits etc. (9%). [Table 8.13]

Most (72%) International Travellers who sought formal support either from their Local Authority directly and/or via the National Assistance Helpline agreed that their support needs were met. [Table 8.14]

The International Travellers who took part in a qualitative interview reported very little support being offered or received in the qualitative research. However, participants acknowledged that they may not have been liable for Local Authority support in any case. International Travellers said they would have benefited from more support in the form of clear and easy to find information on self-isolation requirements returning to Scotland, either directly or via the UK as they reported that clear information was difficult to find online and they struggled to get hold of someone by phone to provide this information. Three of the International Travellers gave mixed or negative feedback on information or support they had received as they perceived that:

- Guidance on the Scottish Government website was said to be lacking or very difficult to find
- Initial phone calls from Test and Protect had been undermined due to the caller providing the wrong dates

[66] Applications for SISG or not applying due to perceived ineligibility did not vary significantly by sex, age, presence of long-standing conditions or carer status.
[67] From their Local Authority and/or via the National Assistance Helpline

- The government, local council and air company were all strongly criticised by a participant for not responding to direct queries when he aimed to return from abroad.

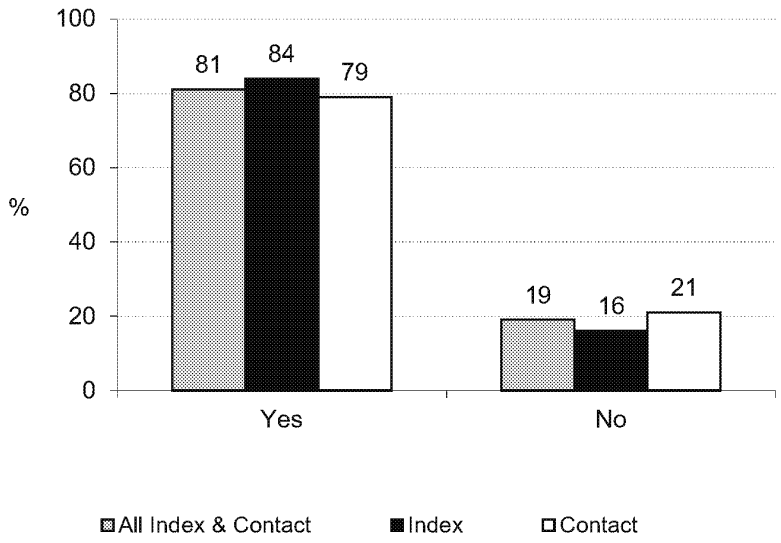
> "As I said, I didn't think it was very good, the fact that initially they had the wrong dates and things was quite poor. I thought that finding the advice yourself on the government website was just quite difficult. It's lots of little bits here and there; you have to click on a link to find the thing you want. There's not just a big document that you, 'Here's a book' or, 'Here's a presentation or a PowerPoint thing' or a PDF that you can just read all the guidance right the way through from start to finish. You have to follow links and you can miss links easily and the fact that they're quite difficult to - the generic or the information that most people need was very easy to find, but just the little tiny details I found quite difficult to find…As I say, when I got the phone calls, because the information was wrong to start with and, being honest, I didn't really pay much attention to them; I was just answering 'yes, no and yes okay' as they went because by then you'd lost confidence that they actually knew what they were talking about." (International Traveller)

> "I think the only thing at the time was the worry of what do I do when I'm coming back to Scotland and that was cleared up by the time I travelled which is the whole thing of if I enter via England where do I quarantine and that was up on the site. It's actually a lot more clearer on the Scottish Government guidelines rather than if you go and look at England, it's definitely a lot more clear." (International Traveller)

8.4 Informal support among Index and Contact Case participants

The majority (81%) of Index and Contact Case survey participants responded that they had support from friends, family or neighbours outside of their household if they needed it, with no significant difference between Index and Contact Case participants. [Figure 8.6, Table 8.15]

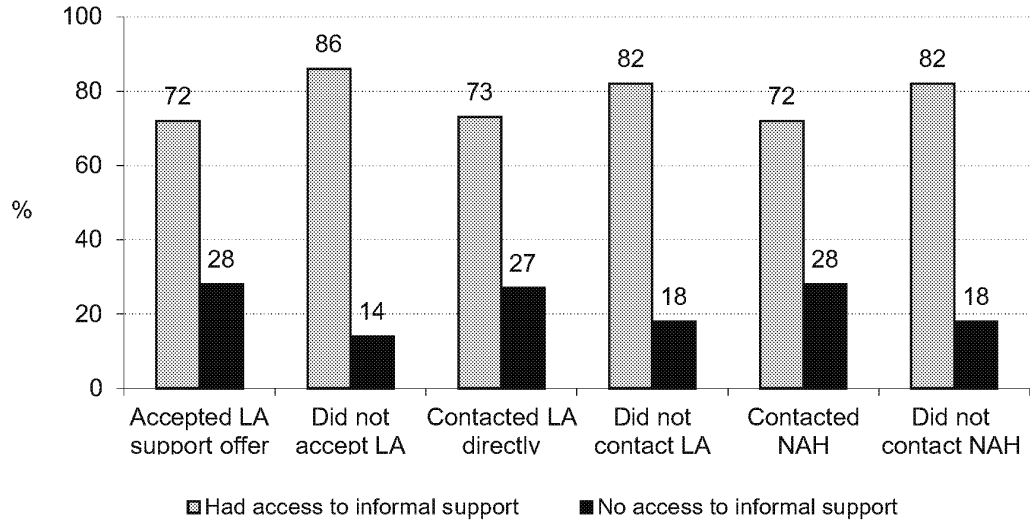
Figure 8.6 Whether have/had the support of friends, family or neighbours while self-isolating by case type (%)



Women were more likely than men to indicate that they had the support of friends, family or neighbours (84% and 76% respectively). Other groups more likely to report having informal support while self-isolating were: those whose ethnicity could be classified as White (83%, compared with 65% of those who chose an ethnicity of Non-White ethnic origin); and those with no long-standing illness or a non-limiting illness (83%), compared with those with a limiting illness (75%). [Table 8.15]

Interestingly, there was an association between availability of informal support (friends, family or neighbours) and accessing Local Authority support. Those who took up the offer of contact from their Local Authority were more likely to respond that they did not have informal support (28% compared with 14% of those who did not take up this offer). Similarly, 27% of those who contacted their Local Authority directly had no informal support compared with 18% of those who did not contact their Local Authority directly for support. [Figure 8.7, Table 8.15]

Figure 8.7 Whether or not formal support offers were accessed by whether have/had the support of friends, family or neighbours while self-isolating by (%, All Index and Contact Case participants)



In the qualitative interviews, participants cited a number of additional support sources that had helped them during self-isolation. The assistance given by family, friends and neighbours, for example, in relation to more functional aspects such as shopping, taking children to and from school and dog walking was reported, as well as in terms of providing emotional support. Participants also used online sources of help for food and pharmaceutical deliveries, information on self-isolation and COVID-19 testing (though they were not always able to differentiate between UK and Scottish Government websites), and maintaining contact with family and friends via FaceTime and similar applications.

Workplaces were also praised for the support they provided during the self-isolation period. These organisations offered help with shopping and deliveries, online childcare, mental health support via resources such as 'Mindapples' as well as phone calls and emails to ask how individuals and family members were coping with self-isolation. Where people had to self isolate because a contact at work had tested positive, employers informed people to self isolate and get a test, even before T&P were in contact. Local pharmacies also helped individuals by delivering prescriptions when it became clear that there was no one available to pick up the orders.

Other ways in which online and social media platforms helped was via online forums and community groups, as well as the ability to keep in contact with friends and family. For example, an interviewee posted about his plight on Facebook, and local takeaway outlets contacted him and delivered meals as a consequence. A local community 'lend a hand' group also helped an individual and family members who were self-isolating.

"I did need to get medication at one point, and I used Amazon to deliver it...I do actually have a friend who lives two doors up and she offered. She was like, 'If you need anything, then just let us know and we'll drop it off,' so I could have asked them. I could wait 24 hours for some more paracetamols, or just got it off Amazon, so that's fine." (Index Case)

"We've got a range of resources through my work, so things like 'Mindapples' is one of them, a bunch of other bits and pieces we've got to support mental and physical health. There's a lot of things that I was doing through that. Just things like meditation and exercises and things that they have set up to support. We've actually got a gym that put up YouTube videos that we can follow and do exercise and so forth. I think having that sort of private bank of things was quite good…" (Contact Case)

8.5 Informal support among International Travellers

Availability of informal support was lower among International Traveller participants than among Index and Contact Case participants, with 61% reporting having the support of family, friends or neighbours outside their household during self-isolation (compared with 81% among Index and Contact Case participants combined). Those self-isolating at home were significantly more likely than those in managed isolation to report having informal support available to them while self-isolating (65% and 41% respectively). [Figure 8.8, Table 8.16]

Figure 8.8 Whether have/had the support of friends, family or neighbours while self-isolating by arrangement type (%)

As was the case among Index and Contact Case participants, female International Traveller participants were more likely than males to report having the support of friends, family and/or neighbours (67% and 58%). In addition, those reporting that

they managed comfortably on their household income while self-isolating (66%) were more likely than others to report having informal support available to them.

8.6 Communication with Test and Protect: participant preferences

The majority of participants were contacted by Test and Protect in several different ways. Many reported receiving a text message followed by a phone call, and less commonly a few reported receiving an email. No participants reported receiving a notification on the app. Interview participants were asked what kinds of communications they would find most helpful in aiding them to understand what isolation support was available. A number of forms of communication, and combinations, were highlighted. These include:

- A phone call only
- A phone call combined with a follow-up email, letter or text
- Email, letter, text with the option to follow up with a phone call
- Advertisements
- Communication via the Test and Protect App and website.

Participants who stated that a phone call helped them to understand what isolation support was available did so for a number of reasons. A phone call gave participants a chance to ask questions and to receive an immediate response. In addition, it was felt that a phone call ensured people engaged with the information being shared, whereas an email, text or letter could be ignored or missed. Furthermore, the personal contact of a phone call was deemed important for those self-isolating, particularly those who lived alone. An International Traveller said they would have liked there to be an option of a video call because English was not their first language and they found that being able to see someone's face helped them to understand what was being said.

> "Well for me the one-to-one human voice because the isolation is so acute, the one thing you lost is human contact, to actually have a human being speaking to you is very, very important…it actually made an impact to speak to somebody because it breaks that isolation." (International Traveller)

> "I think a telephone call definitely. I know that, again, maybe not just for me but for people like my parents, so for the older age bracket maybe, but a telephone call I think is better than an email. You can say, 'Oh, I've got a few emails, I'll read them later or I'll read them at my leisure or I might not even read them at all.' I think a telephone call is good because when you're speaking to a person you've got to respond. Well, I feel you're more likely to respond. I suppose you could put the phone down, but you're more likely to respond and engage in a conversation and do have that conversation with a human being as opposed to a machine or an automated message that you're getting." (Contact Case)

Participants who preferred to receive information about self-isolation via an email, letter or text, felt this way as they said it was something they could refer back to whereas they may not be able to remember everything that was said on a phone call, particularly if they were experiencing COVID-19 symptoms or experiencing shock of being asked to self-isolate. Participants had different preferences for emails, letters or texts. Letters were deemed most suitable for those who do not use technology and texts were favoured by some because they thought it was more accessible than emails, which obviously require an email address and access to the internet. Overall, participants thought people should be able to choose the format of the written information.

> "For me, I quite prefer [information] in either an email or a text format, just for the fact that I can refer back to it. That obviously helped me when it came to understanding, do I need to self-isolate for the whole ten days or can I go out? I went to that text and I had a look online, so that certainly helped. Probably something to be made to the online site to make it a bit more clear as well, but certainly for me the email and text was the way I preferred." (Contact Case)

A combination of a phone call and written information was deemed the best of both worlds, with some favouring written information to follow the phone call while others would prefer to receive written information with the choice to follow up by phone if they had any questions.

There were interview participants who found out about isolation support through people they knew rather that Test and Protect. Therefore, it was suggested that information about isolation support should also be communicated via the Test and Protect website, leaflets posted to people's homes and in public places (such as health centres) and advertised on TV, radio, bus stops, Facebook and other social media.

> "Maybe more on TV regarding self-isolation as well and no' basically geared to folk who are on benefits as in in general what everybody can get and what everybody can do to help that that time…Or even on the radio…As I say an email no. Not everybody does have the internet." (Household Contact Case)

Conclusions

Compliance with the requirement to self-isolate

In September 2020, SAGE identified a lack of robust and regular data on compliance with the requirement to self-isolate. Prior to this research, little was known about the extent to which those asked to self-isolate in Scotland managed to comply successfully. Accurately measuring compliance was challenging. When directly asked about how well they managed to follow the self-isolation guidelines, the majority view was that guidelines were followed all of the time. Yet, for many, there was a clear mismatch between their own assessment of how well they managed to follow the guidelines and the separate measure of behavioural compliance derived from other survey responses[68], the latter indicating that 7 in 10 participants fully complied with the requirement to self-isolate.

Compliance declined over the three waves of survey fieldwork and also varied by case type, with Index Cases more likely than Contact Cases to fully adhere. Contact Cases who lived with someone that tested positive were more likely than those that did not live with a positive case to fully comply. Compliance also varied by sex, age, acceptance of Local Authority support and support for the self-isolation strategy.

The research revealed interesting differences in adherence to aspects of the self-isolation requirement by case type. For example, while Contact Case participants were more likely than Index Cases to begin isolating straight away, Index Case participants were more likely to isolate for the correct number of days and/or to stay at home during self-isolation.

While the most common reason given for a delayed start to self-isolation, or leaving home during it, related to the permitted activity of getting or sending a COVID-19 test, non-compliant activities included going to the shops and for outdoor recreation.

Instances of non-compliance with self-isolation requirements were low across all case types although this was likely, in part, due to the opt-in nature of the survey. It was apparent from the qualitative research that participants were not always clear themselves when they breached the guidelines, with those who admitted breaches describing them as minor infractions, with steps being taken to minimise risk to others.

[68] Behavioural compliance is a derived measure of compliance based on how soon an individual started to self-isolate after being advised to do so, whether or not they left their home/accommodation during this period and how long they were able to self-isolate for. A person's responses to these measures were used to provide a measure of a participant's overall compliance. A participant who complied with all of these measures is described as 'fully compliant'. Someone who complied with some, but not all, is described as 'partially compliant' and a participant who did not comply with any is described as 'non-compliant'.

Knowledge and understanding of the self-isolation requirement

Compliance with the requirement to self-isolate requires both the willingness and circumstances to do so, but also understanding of what it means to self-isolate successfully. One of the aims of this research was to determine the levels of knowledge and understanding of the self-isolation requirement among those asked to self-isolate by Test and Protect.

Awareness, across all case types, of the requirements for positive cases to isolate for 10 days and for a close contact to isolate for the same length of time (even if they later test negative themselves) suggests that the messaging around these requirements has been largely effective. Similarly, awareness of what activities were, and were not, permissible during a period of self-isolation was generally high. However, it was clear that gaps in knowledge exist across different groups of people in the Test and Protect system and around specific aspects of the requirement itself. For example, men and those in the youngest (aged 16-24) and oldest age groups (aged 65 and over) were less familiar than others with the 10-day isolation requirement for positive cases. Men and young people (aged 16-24) were also more likely than others to think that attending a planned medical appointment was permissible during self-isolation and that leaving isolation for outdoor recreation was allowed.

Survey data point to an association between knowledge of the 10-day requirement for positive cases and compliance with self-isolation among Index and Contact Cases. For several activities, and across all case types, there was also a clear association between knowledge of whether an activity was allowed or not and whether a person carried out this activity. While qualitative evidence indicates that this observed relationship between knowledge and compliance may not necessarily be as straightforward as survey data would suggest, addressing the knowledge gaps that exist could have a potentially positive impact on compliance with the requirement to self-isolate. Participants reported that they would like further information and guidance on: permitted tasks during self-isolation; extended isolation periods; requirements for International Travellers; when and how often they should be tested for COVID-19; and how to self-isolate within households with other occupants who did not have to isolate.

Attitudes and views of self-isolation

Willingness to adhere to the guidelines and a belief in the validity of the self-isolation approach have an important part to play in any self-isolation strategy. This research aimed to explore the isolation experience for individuals and the extent to which those asked to self-isolate believed in the strategy as a means of helping prevent the spread of COVID-19.

Acceptance of the self-isolation strategy was high across all case types, and among Index and Contact Cases in particular. There was a consensus that, as a strategy against the spread of COVID-19, it was effective and that individuals were not necessarily best placed to decide whether they should self-isolate or not. Furthermore, among Index and Contact Cases, belief in the effectiveness of the

self-isolation strategy increased with age, indicating potential to further educate younger people on the important role self-isolation plays in preventing the spread of COVID-19. However, nearly a fifth of International Travellers were unconvinced that international travel rules would help stop the spread of COVID-19 and any variants.

While there appears to be a relationship between views on the effectiveness of the strategy and compliance with the requirement, we know that there were likely to be multiple combined factors that lead to successful self-isolation.

The study confirms that self-isolation can be mentally challenging and distressing for some. Irrespective of the reason for self-isolating, around half that took part in the survey reported that the experience had impacted negatively upon their mental health. The burden on mental health was most pronounced among young people aged 16-24 and those who had to self-isolate more than once. Among International Travellers the detriment to mental health from self-isolation was more acute among those in managed isolation, many of whom found hotel quarantine both financially and emotionally challenging.

The association between compliance and perceived impact on mental health, together with the relationship between experience of repeated self-isolation and negative mental health impacts, point to how emotionally challenging self-isolating can be for some people and the impact that mental health issues may have on adherence to self-isolation guidelines.

There was also clear evidence of how financially challenging self-isolation was for some. Young people were most likely to cite that self-isolation had a negative impact upon their employment and income, although this was by no means unique to them. Those living in Scotland's two most deprived SIMD quintiles were most likely to state lost income and/or job loss/missed work opportunities as a result of the need to self-isolate. Improving awareness of the formal support on offer may, in part, help to address some of these challenges.

Testing

The majority of Index and Contact Cases that took part in the research reported being tested more than once. However, given the criteria around international travel and self-isolation, it was not surprising that International Travellers were the case type most likely to be tested multiple times.

Conducting the survey fieldwork over waves revealed a decrease in Index and Contact Case participants reporting being tested as a result of experiencing symptoms and a corresponding increase in the proportion tested after being identified as a close contact. The observed increase in home testing, and the proportion receiving test results within an hour, coincided with the introduction of free lateral flow tests. Home testing kits were most commonly used by those living in Scotland's more deprived areas. The consensus was that the instructions for testing were clear and easy to understand.

It does appear to be the case that Index and Contact Case participants whose last test result was positive were more likely than those testing negative to fully comply with the requirement to self-isolate. While the relationship between testing and compliance was likely to be a nuanced one, it may be the case that the messaging around the need to isolate for the required period of time, irrespective of the test result, requires to be restated on a regular basis.

Vaccination

Scottish Government guidance, during the lifetime of this research, was for the public to follow the self-isolation guidelines, FACTS and the COVID-19 restrictions in place, irrespective of vaccination status. Data on vaccination status were collected to learn more about how it related to the requirement to self-isolate and to explore the impact this may, or may not, have on planned future behaviour.

There was little difference noted between current vaccination status (no doses, 1 dose, or both doses) and self-isolation behaviours. However, some interesting differences emerged by age and case type when participants were asked about their likely behaviour once all were fully vaccinated against COVID-19. International Travellers were least likely to report being willing to self-isolate again if asked to do so under these circumstances, while those aged 64 and under were more likely to say they intended to come into close contact with friends or family than those 65 and above. The majority, across all case types, appeared happy to come into close contact with others again once fully vaccinated, and as many as half reported being likely to visit vulnerable family and friends once fully vaccinated. These findings on likely future behaviour will remain pertinent as more becomes known about the protection current vaccines offer against variants of the COVID-19 virus.

Support during self-isolation

It is recognised, and widely accepted, that there were many factors that make self-isolation challenging for an individual. This research aimed to identify and understand more about the support needs and challenges encountered by those asked to self-isolate. The findings identified ways the messaging around formal support could be strengthened, as well as how the support on offer could be adapted to help those self-isolating as much as possible.

Most Index and Contact Cases were aware of being offered some level of formal support, particularly the option of being contacted by their Local Authority, when asked to self-isolate. However, a notable proportion did not recall any formal support offer being made, yet would have liked more support to be available, or at least made evident to them, particularly with regards to the clarity of information on self-isolation requirements and in light of any changes to regulations.

Reported formal support uptake among Index and Contact Cases was low, and this was particularly true for several, potentially vulnerable, groups including: those who did not have the back up of informal support from friends, family and neighbours, those on lower incomes and those with a limiting long-term illness.

There appears to be scope to increase awareness of what formal support was available, how this can be accessed, and from whom. Of concern was the apparent lack of knowledge of the Self-Isolation Support Grant among those most likely to be eligible for it – e.g. those on lower household incomes. Building the profile of the formal support on offer could have positive impacts on both compliance with and experiences of self-isolation, particularly among some sub-groups of society who could benefit from extra support during the 10 days. Acceptance of Local Authority support was associated with compliance with the requirement to self-isolate.

Findings indicate that, when accepted, the formal support on offer during self-isolation was mostly well-received and effective at meeting the practical and financial support needs of those seeking support. That said, many asked to self-isolate were clear that they did not need formal support. Family, friends and indeed employers played a crucial role in providing practical and emotional support during self-isolation, and it is likely that many will choose to access these support sources in the future even if more formal support is available.

How to access background or source data

☒ may be made available on request, subject to consideration of legal and ethical factors. Please contact socialresearch@gov.scot for further information.

Appendix A

Key definitions used in this report include:

- Self-isolation: refers to the approach under the Test and Protect system whereby individuals are asked to remain at home or in managed isolation (see below) for a period of 10 days from: the onset of symptoms (or longer if the symptoms have not gone), contact from Test and Protect, or return from international travel. Those asked to self-isolate should not leave their house/accommodation unless this is solely to get or return a COVID-19 test and should not receive visitors from outside their household. Where possible, those self-isolating should try to maintain physical distancing from others within their household who have not been advised to self-isolate.
- Index Case participants: those asked to self-isolate as a result of testing positive for COVID-19.
- Contact Case participants: those asked to self-isolate as a result of coming into contact with someone who tested positive for COVID-19. Two types of Contact Case were included in the study (i) those who lived in a household with an Index Case and (ii) those who came into close contact with an Index Case but did not live in a household with them.
- International Travellers: those asked to self-isolate after return from travel outside of the UK (see Chapter 5 for details of changes to the requirements for self-isolation that took place during wave 3).
- Managed isolation: refers to an arrangment for International Travellers where self-isolation takes place as part of a quarantine package in a hotel.
- Subjective/self-assessed compliance: this refers to responses to the question where participants were asked to provide an assessment of their compliance with self-isolation requirements.
- Behavioural compliance: this is a derived measure of compliance based on how soon an individual started to self-isolate after being advised to do so, whether or not they left their home/accommodation during this period and how long they were able to self-isolate for. When used in combination, a person's responses to these measures (listed in Table 2.3 overleaf) were used to provide a measure of a participant's overall compliance. A participant who complied with all of these measures is described as 'fully compliant'. Someone who complied with some, but not all, is described as partially compliant and a participant who did not comply with any is described as non-compliant.
- Formal support: this refers to key sources of support outside of friends, family and neighbours for those asked to self-isolate and covers the offer of contact details being passed on so that an individual's Local Authority could contact them regarding their support needs (Index and Contact Cases were eligible for this) and potentially up to two further times during their self-isolation, individuals contacting their Local Authority directly (all case types) and

individuals contacting the National Assistance Helpline (all case types). See Chapter 8 for more details on the formal support offer.

- Self-Isolation Support Grant: this is a form of financial support available for those self-isolating as an Index or Contact Case who are on a low income. A one-off payment of £500 is available if an individual is on a low income, is not able to work from home and will lose income as a result of self-isolating.

Table 2.3 Behavioural compliance constituent measures

Self-isolation requirements included in measure of behavioural compliance	Definition of compliance used
Start self-isolating straight away	Starting to self-isolate immediately after being advised to, or in advance of this, OR the only reported activity carried out before starting self-isolation was COVID-19 test-related activity
Do not leave home/accommodation	Not leaving home/accommodation during self-isolation period OR leaving but only reported activity carried out when left was COVID-19 test-related activity
Self-isolate for 10 days	Isolated for 10 days or still self-isolating at the time of taking part

social research

The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

This document is also available from our website at www.gov.scot.
ISBN: 978-1-80201-268-2

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

Produced for
the Scottish Government
by APS Group Scotland
PPDAS919226 (08/21)
Published by
the Scottish Government,
August 2021

GSR
GOVERNMENT SOCIAL RESEARCH
Social Science in Government

Social Research series
ISSN 2045-6964
ISBN 978-1-80201-268-2

Web Publication
www.gov.scot/socialresearch

PPDAS919226 (08/21)