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COVID-19

Framework for Decision Making – Assessing the Four Harms of the Crisis



December 2020

COVID-19: Framework for Decision Making

Assessing the four harms of the crisis

Scottish Government
11 December 2020

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Introduction

This paper provides an overview of key analysis and evidence on the ‘four harms’ in support of COVID-19 decision-making.

On 7 May 2020, we published an overview of key analysis and evidence in support of our COVID-19: Framework for Decision Making. We set out the four harms approach and gave examples of the issues under consideration.

In this document, we describe how the four harms approach works in practice and present evidence to illustrate how we used the four harms to support decisions about activities and restrictions through the Route Map process. A subsequent publication will explain the four harms approach in the context of the recent development of protection levels.

We are making this information available as part of our commitment to bring transparency to our work and decisions on the crisis and to support understanding and public engagement with some of the very difficult issues that we face.

In this paper, we recognise four areas of impact - the ‘four harms’:

- First, the virus causes direct and tragic harm to people’s health and we need to consider what aspects cause increased risk of spread of the virus and who is most likely to be affected. Key indicators include the numbers of COVID-19 positive cases, hospitalisations and deaths along with the reproductive number, or R-value.
- Second, the virus has a wider impact on our health and social care services in Scotland; we need to consider how people are using those services and how this impacts on non-COVID-19 health harms. In this paper, we focus on excess deaths, use of NHS services, physical and mental wellbeing.
- Third, the restrictions which Scotland, together with the other UK nations, has necessarily put in place to slow the spread of the virus affect our broader way of living and society, including, for example, the negative effects of increased isolation, particularly for those living alone, and the impact on children’s wellbeing from closing schools. The effect on poverty and inequality may be profound and the impacts will intensify the longer the restrictions on our normal way of life continue. We have identified six dimensions of societal impact and present headline indicator figures for each.
- Fourth, along with the wider negative impacts of the global pandemic, the lockdown and continued restrictions have had an enormous impact on our economy. This is unprecedented and is causing deep uncertainty and hardship for many businesses, individuals and households. We will see more businesses unable to recover and we risk the scarring effects of unemployment and along with permanent structural damage to our economy.

These harms are related: health harms impact on society and the economy, just as the societal and economic effects impact on physical and mental health and

wellbeing. Navigating the right course through the crisis will involve taking difficult decisions that seek to balance these various, inter-related harms so as to minimise overall harm.

The four harms analysis is one part of the *Framework for Decision Making*. It makes a valuable contribution to the implementation to the Route Map¹ and the Local Protection Levels approach. More information on other elements of the Framework can be found at <https://www.gov.scot/publications/coronavirus-covid-19-framework-decision-making/>.

¹ <https://www.gov.scot/collections/coronavirus-covid-19-scotlands-route-map/>

The importance of demographics

Before considering the details of the four harms and to help make informed judgements, it is important to take account of the make-up of the population. The four harms impact differently on different groups within the population according to age, diversity and geography. This section of the report provides that background.

The age distribution of the Scottish population in mid-2019 is shown below. One in seven (14%) people in Scotland were aged 70 and over, two-fifths of people (40%) were aged 50+, and 11% were aged 16-24².

Figure 1 The age profile of Scotland



Looking at the age profile by local authority assists in identifying specific local concerns. It is important to understand the makeup of each local authority area. Figures 2 and 3 highlight the varying age ranges present in each of our local authorities and health boards. Given the importance of age in terms of vulnerability to the virus and the eventual outcome, areas with an older population may wish to assess risk differently to those with a younger population and to take different actions to protect the population.

Looking at the impact of age on health boards raises issues of capacity in hospitals, as an older population is more likely to need hospital and/or ICU care and also aftercare in the community³.

² <https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-19/mid-year-pop-est-19-report.pdf> (page 3)

³ <https://www.nrscotland.gov.uk/files//statistics/population-estimates/mid-19/mid-year-pop-est-19-report.pdf> (pages 13-14)

Figure 2 Age Structure of Council areas 2019

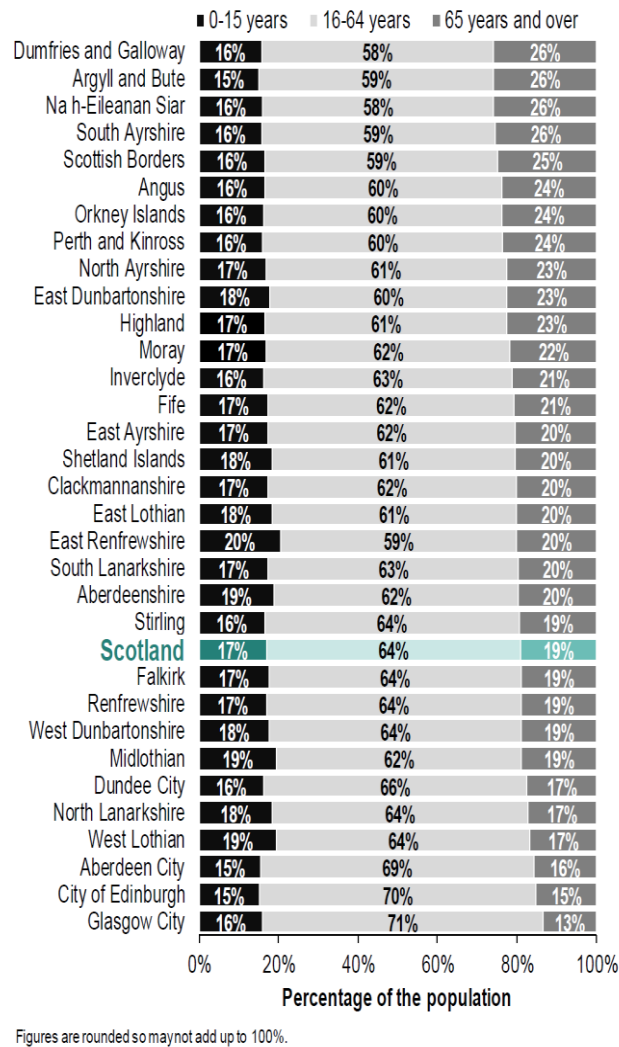
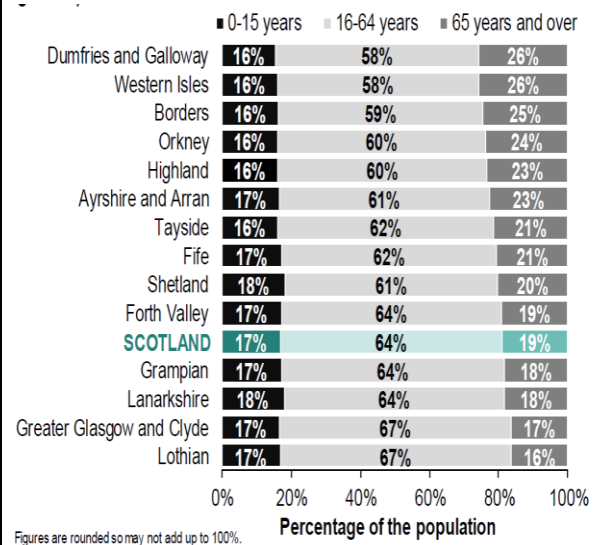
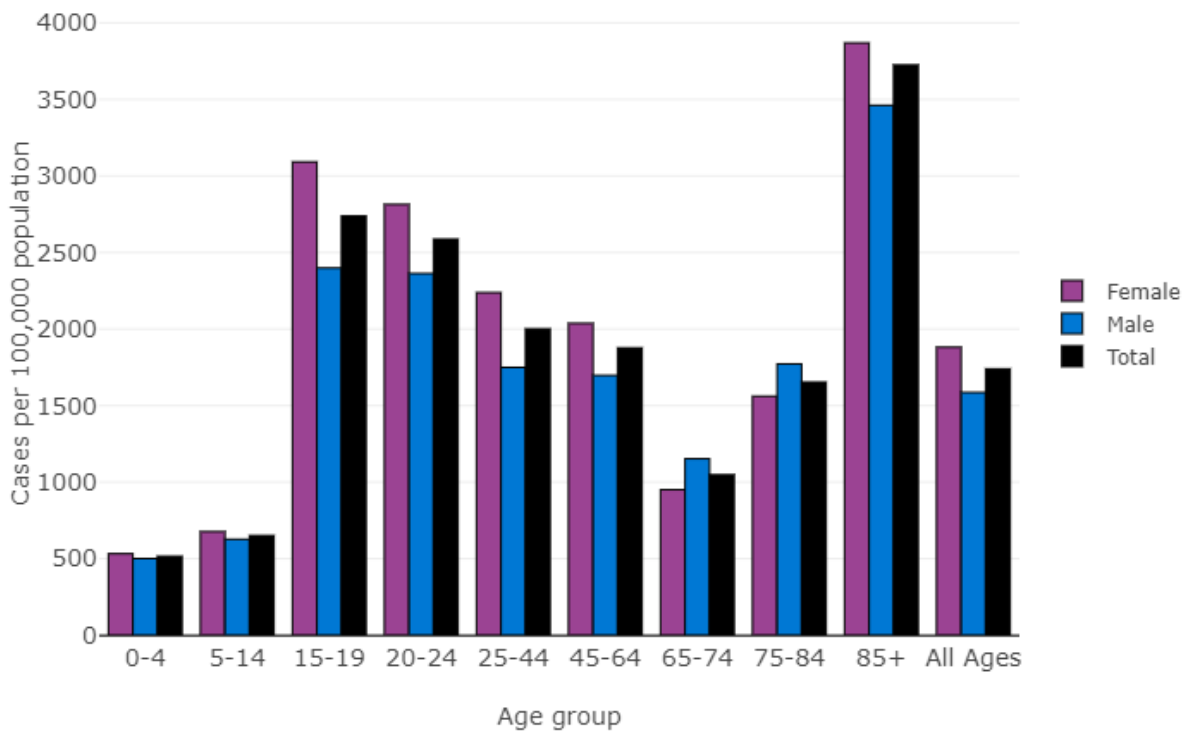


Figure 3 Age structure of Health Boards 2019



As shown in Figure 4, since February, reported cases per 100,000 of the population have been highest for adults in those aged 85+ (3725 per 100,000 of population) and they are now lowest in 65-74 and 75-84 year olds (1047 and 1653 respectively). More women overall have been affected than men (1881 per 100,000 of population compared to 1586).

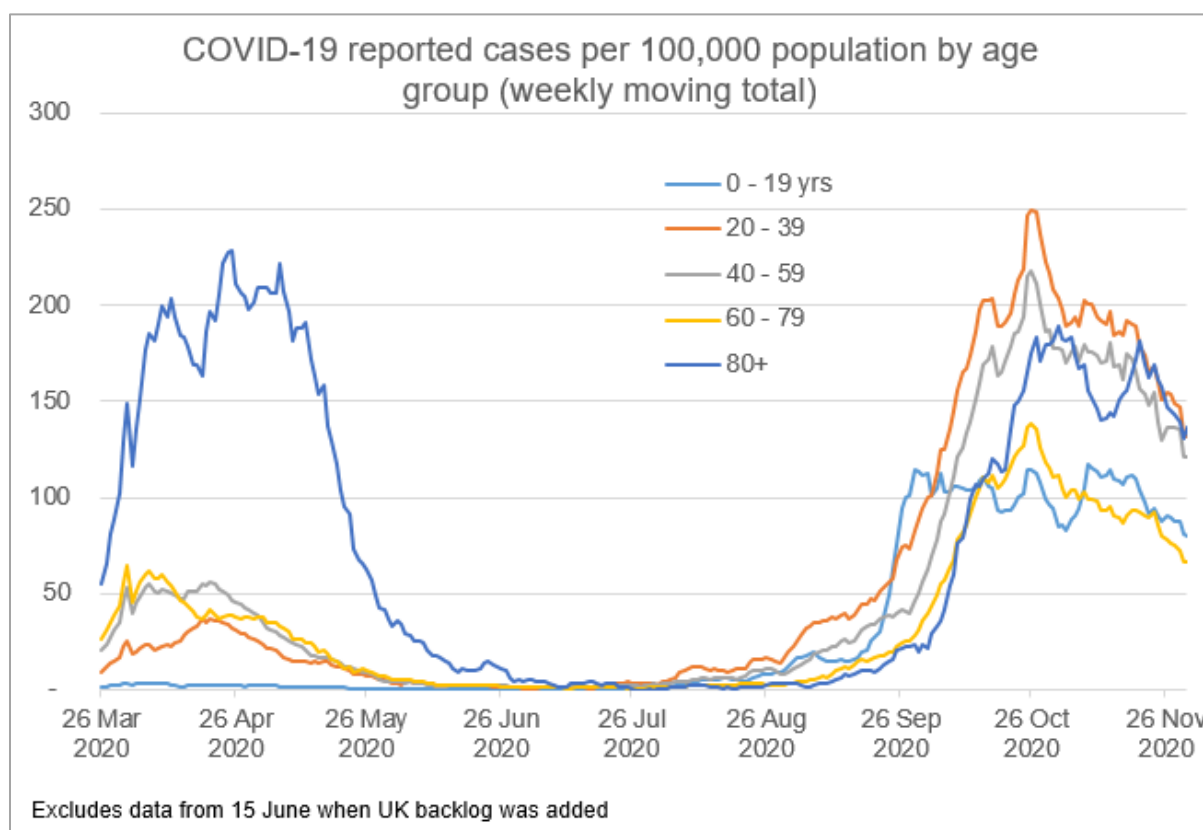
Figure 4 Positive cases per 100,000 by age⁴, (28 February to 29 November 2020)



Understanding a country's age demographics and the pattern of cases across age over time, see Figure 5, can help predict the number of critical cases and assist in more precise planning of availability of hospital beds, staff and other resources.

⁴ <https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/covid-19-statistical-report/>

Figure 5 Pattern of new cases by age over time

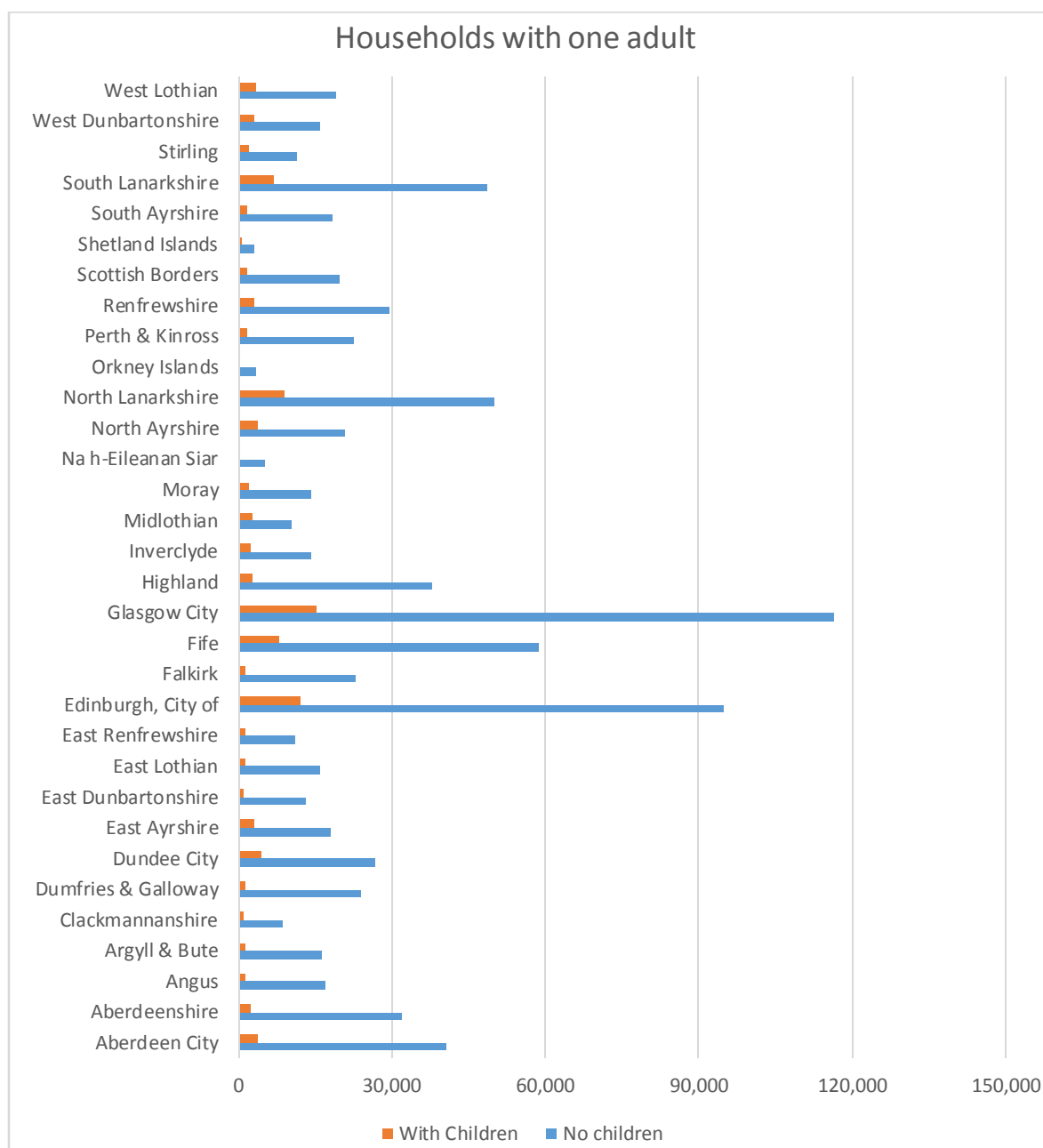


During the first peak of the pandemic, confirmed COVID-19 cases were disproportionately high among older people (aged 80+). However, during the second peak confirmed COVID-19 cases have been more evenly distributed among all age groups. The increased availability of tests could have led to the detection of cases of COVID-19 in a wider range of people, including those with less severe or no symptoms. The confirmed case rate among 20-39 year olds reached 250 weekly cases per 100,000 people in the week ending 26 October and is now at 133 (week ending 30 November). The pattern for 40-59 year olds is similar at a slightly lower rate, and is now at 122 weekly cases per 100,000 people. The increase in cases among people aged 80 and over followed the increases seen in younger age groups. Reported cases in 60-79 year olds has reduced recently and they now have the lowest case rate per 100,000 people (67 weekly cases in the week ending 30 November).

Figure 6 shows the number of adults living alone or with children under 18⁵. As adults living alone are particularly impacted by restrictions on socialising and may also be in more need of support or assistance if self-isolating, the number of single adult households in the population is an important consideration.

⁵ Scottish Household Survey, <https://www2.gov.scot/Topics/Statistics/16002/LAtables2018>

Figure 6 Numbers of single adult households



Throughout the pandemic, we have used ‘the household’ as the basis for restrictions and activities and therefore it is important to understand something about household types in each local authority. For example, restrictions on meeting up can have a particular impact on larger families, more common in ethnic minority families, and on lone person households.

Table 1 shows the makeup of households across Scotland by ethnicity. Households from Asian, Asian Scottish or Asian British backgrounds tend to be larger. Larger households may be disadvantaged in terms of their ability to meet with other households depending on how socialising rules are specified.

Table 1 Average size of all households, and average number of children

Ethnicity	Average number of children	Average household size
White	0.4	2.1
Any Mixed or Multiple Ethnic Groups	0.4	2.0
Asian, Asian Scottish or Asian British	0.7	2.7
African	0.8	2.4
Caribbean or Black	1.3	3.0
Other Ethnic Group	0.9	2.9
All	0.4	2.1

Multi-generational households have been shown to be more vulnerable to transmission. In Scotland, around 260,000 households (10% of all households) include parents living with their adult children. This includes 169,000 couple households with non-dependent children, along with 91,000 single parent households with non-dependent children. There are a further 16,000 “multi-family households” (less than 1% of all households)⁶. This includes multi-generational, unrelated families and siblings. Minority ethnic households are far more likely to be multi-family, particularly South Asian households. (12.8% of Pakistani, 5.7% of Bangladeshi and 5.4% of Indian households.)

Around 53,000 households (2%) lived in overcrowded accommodation under the bedroom standard⁷. Social sector dwellings (4%) were more likely to be overcrowded than private sector dwellings (1%)⁸.

In terms of gender, there is evidence to suggest that men are at greater risk of dying from the disease than women. For example, age-standardised rates for males were significantly higher than for females (164 compared with 113 per 100,000 people in March to October⁹) although recent evidence suggests higher infection rates

⁶ Scottish Census 2011
<https://www.webarchive.org.uk/wayback/archive/20150218151549/http://www.gov.scot/Publications/2014/10/8378>

⁷ This is determined on the basis of the bedroom standard as defined in the Housing (Overcrowding) Bill 2003, taking into account the number of bedrooms available in the dwelling and the type of household that occupies it

⁸ [SHCS 2018 Key Findings](#)

⁹ <https://www.nrscotland.gov.uk/files/statistics/covid19/covid-deaths-report-week-45.pdf>

amongst women than men¹⁰. In the pre-COVID-19 labour market, women were more unequal in terms of pay, participation and progression due to a variety of drivers, including occupational segregation, job valuation, discrimination, and time available to work¹¹.

It would also appear that people of minority ethnicities are at a greater risk of transmission and serious illness, and research is being carried out to determine the reasons for this¹². Some of these may be socio-economic, in that deprivation can play a role in the spread of the virus. There could be a cultural element with large families with several generations living under one roof. Some may be genetic, where some groups react differently to infection with the virus and some may be related to public facing employment in health, care, tourism or retail.

Likewise disabled people are also at a greater risk. Data from Public Health England show that¹³ disabled people had a higher age standardised rate of death involving COVID-19 than those who were non-disabled¹⁴. Again, there will be a range of reasons for this. Whilst some health conditions are known to be risk factors for COVID-19, there will also be wider issues. The wearing of face coverings may not be appropriate for disabled people with particular impairments or health conditions, meaning that they are less protected. Disabled people may be more likely to live in poverty, and deprivation can play a role in the spread of the virus. Disabled people may also be more likely to use public transport or car share for essential journeys and to have limited access to the internet, resulting in their experiencing greater levels of risk. People with learning disabilities, mental health conditions or sensory impairments may find it more difficult to respond to protection guidance and comply with safety advice, exposing them to greater risk.

¹⁰ PHS interactive dashboard shows a 7 day average of 529.7 cases for women and 431.9 for men as of 9 November https://public.tableau.com/profile/phs.covid.19#!/vizhome/COVID-19DailyDashboard_15960160643010/Overview

¹¹ <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2019/03/fairer-scotland-women-gender-pay-gap-action-plan/documents/analytical-annex/analytical-annex/govscot%3Adocument/analytical-annex.pdf>

¹² [Beyond the data: understanding the impact of COVID-19 on BAME groups](#)

¹³ <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbydisabilitystatusenglandandwales/2marchto14july2020>

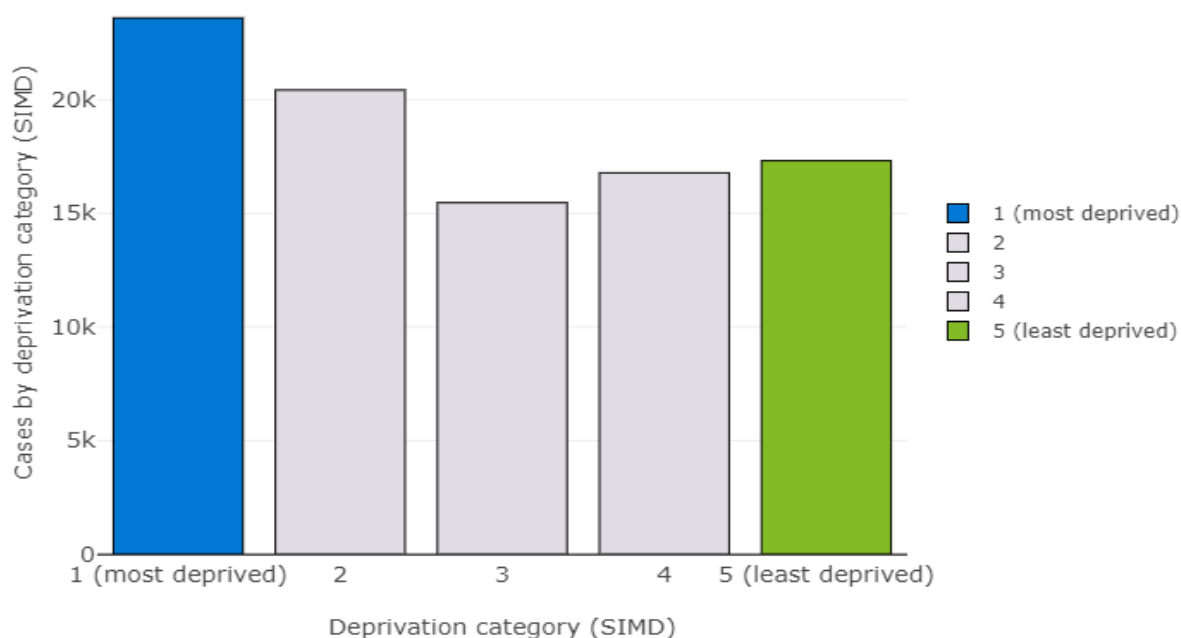
¹⁴ This was true after adjusting for region, population density, socio-demographic and household characteristics, the relative difference in mortality rates between those disabled and limited a lot and those non-disabled was 2.4 times higher for females and 2.0 times higher for males.

Geography

Although many challenges presented by COVID-19 are shared across Scotland, some communities will face particular disadvantages linked to place. People living in rural and island communities, for example, are generally less at risk of community transmission as they will come into regular contact with a more limited number of people. However, this needs to be balanced against an ageing population and more limited access to public and health services including urgent healthcare provision. Issues such as a higher cost of living, fuel poverty, part-time work or 'portfolio careers' and more complex and expensive transport links may make it difficult for individuals in rural areas to manage financially through this period of economic stress. The high reliance on tourism will also be problematic with the need for tourists to keep the economy moving balanced against the increased community risks of virus transmission.

People living in areas of multiple-deprivation are more likely to have higher rates of virus transmission, serious illness or death caused by COVID-19 than those in the least deprived areas¹⁵. Those in more deprived quintiles have experienced more cases (25% of the total) compared to those in the least deprived (18%).¹⁶ They also have a higher risk of poverty, fewer opportunities for social mobility and, in places, poor transport links. People living in some densely populated urban areas may have limited local high quality greenspaces for exercise.

Figure 7 Positive cases by deprivation category (SIMD) (28 February to 29 November 2020)¹⁷



¹⁵ <https://www.nrscotland.gov.uk/news/2020/deaths-involving-covid-19>

¹⁶ Data correct as of 3 December 2020

¹⁷ <https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/covid-19-statistical-report/>

The science behind COVID-19

A summary of the science behind Coronavirus sets the scene for an understanding of the decisions involved in the assessment process.

Coronavirus, like all viruses, is a tiny infectious pathogen. Viruses typically contain genetic information surrounded by a protein coat and viruses use their protein coat to latch on to a host cell and insert genetic material inside. Viruses can only replicate using the cells of a living organism¹⁸. Different viruses can infect animals, plants and even bacteria and always use the hosts' cells to replicate themselves. Viruses are not bacteria so cannot be treated with antibiotics. Sometimes viruses can cause no symptoms and are therefore no threat to their host, while other viruses can lead to disease which can be mild or severe depending on the pathogen, and the characteristics of the host.

Coronaviruses are a group of viruses that have a crown-like (corona) appearance when viewed under a microscope. Coronaviruses are a large family of viruses which can cause illnesses in animals and humans. Some coronaviruses can cause the common cold, with mild symptoms that only last a short time. Asymptomatic infections from coronaviruses have also been described¹⁹. However, two other human coronaviruses, Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS), have been known to cause severe symptoms and even death. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the name of the virus that causes the COronaVirus Disease (COVID-19) so named because it first occurred in 2019. Both the virus and the disease were unknown prior to the outbreak in Wuhan, China in late 2019 and it is possible that the initial source of the virus was from an animal²⁰. COVID-19 spread rapidly worldwide and became a global pandemic because it affected a large number of people in a large number of countries. COVID-19 is a respiratory disease: most people infected will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.²¹

Transmission

COVID-19 is thought to be spread predominantly through droplets of saliva or discharge from the nose. Droplets are particles that carry the virus and will normally settle out of the air in less than 5 minutes. These typically deposit on people and surfaces less than 2 metres from the source. These droplets can be passed to others through direct contact, through close proximity or through transfer on surfaces. COVID-19 is also spread through aerosols, tiny respiratory particles which can remain in the air for several minutes. Aerosols containing the virus can potentially be inhaled by another person, leading to infection²². This is most likely to occur when

¹⁸ <https://www.open.edu/openlearn/science-maths-technology/biology/what-virus>

¹⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7173023/>

²⁰ <https://coronavirusexplained.ukri.org/en/article/cad0003/>

²¹ https://www.who.int/health-topics/coronavirus#tab=tab_1

²² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907587/s0643-nervtag-emg-role-aerosol-transmission-covid-19-sage-48.pdf

people are in close proximity to each other. Aerosols can increase the risk of transmission in poorly ventilated indoor spaces, so spending a lot of time with other people in a poorly ventilated space is not recommended²³. Good ventilation will dilute the air and remove the virus but there is currently no evidence for aerosol spread between rooms or over long distances outdoors.

Transmission is likely to occur from a combination of droplets, aerosols and through direct contact with surfaces. Most transmission is believed to happen when people are in close proximity to each other (under 2 m distance)²⁴. This means that physical distancing, good hand hygiene and cleaning of surfaces remain very important infection control measures.

Both asymptomatic and pre-symptomatic transmission of COVID-19 is now known to occur. This means that people who have no symptoms can still be infectious to others. For this reason, it is advisable to wear face coverings in addition to other measures to help prevent transmission. This is particularly important in indoor environments with poor ventilation or where social distancing is not possible at all times. Face coverings are likely to provide some benefit in reducing the risk of aerosol transmission²⁵. Face coverings will reduce the dispersion of respiratory droplets and small aerosols that carry the virus into the air from an infected person. They also provide a small amount of protection for the wearer against exposure to droplets but less protection against small aerosols.

Surfaces

The primary and most important mode of transmission for COVID-19 is through close contact from person-to-person. Based on data from lab studies on COVID-19 and what we know about similar respiratory diseases, it may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes. This, however, is not thought to be the main way the virus spreads. Several laboratory-based studies have been carried out looking at the survival of the virus on different surfaces. Studies have shown that the COVID-19 virus can survive for up to 72 hours on plastic and stainless steel, less than 4 hours on copper and less than 24 hours on cardboard²⁶. Some studies suggest that the virus could survive a number of days, depending on the surface, but this usually involved using a large dosage of virus in a laboratory environment²⁷. The most important thing to know about coronavirus on surfaces is that they can easily be cleaned with common household disinfectants that will kill the virus. Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.

²³ <https://www.gov.uk/government/publications/emg-role-of-ventilation-in-controlling-sars-cov-2-transmission-30-september-2020>

²⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933225/S0824_SARS-CoV-2_Transmission_routes_and_environments.pdf

²⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/923607/s0760-4a-duration-wearing-face-coverings-170920.pdf

²⁶ https://www.nejm.org/doi/full/10.1056/NEJMc2004973?query=featured_home

²⁷ <https://www.nih.gov/news-events/nih-research-matters/study-suggests-new-coronavirus-may-remain-surfaces-days>

Duration and Proximity

The biggest risks are associated with close contact with an infected individual for a prolonged period of time²⁸. This could be within 2 metres or within the room of someone carrying the virus. Close contact can also include direct contact with infectious secretions, this could be from sharing eating or drinking utensils, or direct contact with an infectious person, such as hand shaking, hugging and kissing. Close contact does not include activities such as walking past a person or briefly sitting across from someone in a waiting room or office. A recent article noted that:²⁹

Contact tracing studies provide early evidence that sustained close contact drives the majority of infections and clusters. For instance, living with the case, family/friend gatherings, dining, or travelling on public transport were found to have a higher risk for transmission than market shopping or brief community encounters.

Setting

Each setting brings different risks. Some settings are particularly high risk, such as care homes, as these usually have many people living under one roof, in a situation where social distancing is difficult. The elderly are among the most vulnerable and those living in care homes often require personal care. Healthcare settings will also have to deal with vulnerable groups due to illness, whether treating COVID-19 cases or for other health-related admissions.

People spend most of their time either in the home or at work. The size of a residential home, number of rooms and number of occupants will affect the ability of an occupant to isolate in the home. More people in the home will increase the potential risk of transmission to others, and this will be exacerbated if there is insufficient space for people to isolate, due to sharing of bedrooms and living spaces³⁰.

Work settings are also important as colleagues will often spend several hours of the day together. In these settings, it is important to consider the space available, shared facilities and ventilation. Social settings are also important, whether this is hospitality, retail, visiting friends and family³¹. Much consideration has recently been given to higher educational settings and risks associated with these.

Assessment of the risk of these settings takes in to account several factors including residential accommodation, class room and lecture space, vocational teaching and sports and social clubs associated with the educational facility³². The demographics of those attending each setting is also taken in to account.

²⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/887618/EMG_Environmental_transmission-02052020_1.pdf

²⁹<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7543342/>

³⁰<https://www.gov.uk/government/publications/spi-bemg-covid-19-housing-impacts-10-september-2020>

³¹<https://www.gov.uk/government/publications/sars-cov-2-transmission-routes-and-environments-22-october-2020>

³²<https://www.gov.uk/government/publications/principles-for-managing-sars-cov-2-transmission-associated-with-higher-education-3-september-2020>

A recent publication from the BMJ provides a good summary of setting risk:³³

Most transmission occurs through close range contact (15 minutes face to face and within 2 m) and spread is especially efficient within households and through gatherings of family and friends. Household secondary attack rates (the proportion of susceptible individuals who become infected within a group of susceptible contacts with a primary case) range from 4% to 35%. Sleeping in the same room as, or being a spouse of an infected individual increases the risk of infection, but isolation of the infected person away from the family is related to lower risk of infection. Other activities identified as high risk include dining in close proximity with the infected person, sharing food, and taking part in group activities. The risk of infection substantially increases in enclosed environments compared with outdoor settings. Aerosol transmission can still factor during prolonged stay in crowded, poorly ventilated indoor settings (meaning transmission could occur at a distance >2 m).

³³ <https://www.bmj.com/content/371/bmj.m3862>

How do we measure the spread of the epidemic?

The R value

What is R?

The R value, or reproduction number, is a way of assessing a disease's ability to spread. It is the number of people, on average, that one infected person will infect.

We use data such as the number of people testing positive or admitted to hospital to help us work out the R number. If the R number is above one, then the number of cases could start to increase exponentially, but if it is lower than one the disease will decline. It is, therefore, important that we keep the R number consistently below one. If we do not, the virus will quickly spread and any relaxation of restrictions will most likely have to be reversed. A sustained increase of R above one would indicate an exponential growth in the number of cases, hospitalisations and deaths, potentially causing very significant harm to Scotland's health, society and economy, particularly if the prevalence is also high.

A related concept, the **doubling time** is the time it takes for the number of new infections to double in size.

What affects R?

The basic reproduction number is affected by several factors:

- The underlying infectiousness of the organism;
- How long people who have COVID-19 can infect others;
- The number of people in the population that the affected patients are in contact with and how intense that contact is;
- If policies have the effect of reducing the number of people someone comes into contact with, that would in turn reduce R; and
- Other factors affecting R include the degree of compliance with restrictions and mitigating measures (behaviour) and the effectiveness of the Test & Protect regime.

How do we measure R?

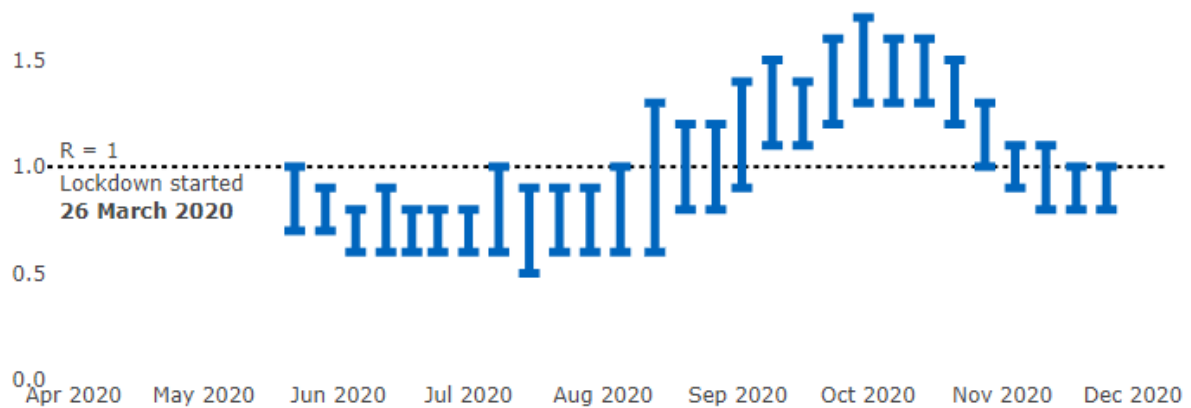
The R value in the *Scottish Government's Coronavirus (COVID-19): Framework for Decision Making* uses and adapts modelling outputs from a number of academic groups to estimate the R value for Scotland at a particular point in time.³⁴ It is calculated through modelling of the path of the virus in Scotland. The epidemiological

³⁴ The UK Scientific Advisory Group for Emergencies (SAGE) are responsible for ensuring that timely and coordinated scientific advice is made available to decision makers to support UK cross-Government. SAGE in turn is informed by a group of academic experts [the Scientific Pandemic Influenza Group on Modelling [SPI-M]]. SAGE meets two or three times each week. Following each meeting updated assumptions and modelling materials are released to Scottish Government. The Scottish Government Covid modelling team then apply these to Scotland.

progression in the Scottish Government model is simulated using one of the publicly available Imperial College COVID-19 models as used for UK level modelling. This uses data on deaths published by National Records of Scotland³⁵ and other data such as contact patterns from the Scottish Contact Survey. Weekly published updates on R at a particular point in time are available in our research series Coronavirus (COVID-19) modelling the epidemic.³⁶

R has varied over time as shown in Figure 8. The current range for R in Scotland (early Dec 2020) is between 0.8 and 1.0. This is unchanged from the previous week.

Figure 8 The value of R over time



Source: Scottish Government – Modelling the Epidemic³⁷

In addition to the modelling, there are other ways to use data to measure the epidemic. Some of this work is carried out by Public Health Scotland, with support from Strathclyde University. They can analyse NHS 24 calls, positive tests, the change in the volume of calls and tests across the country each week, community surveillance of COVID-19 symptoms, and hospitalisation measures (admissions, bed numbers, ICU and deaths). Further surveillance including swab tests (e.g. in dental surgeries) and sero-prevalence in blood samples is undertaken. Excess mortality, and hospital outcomes (including deaths) are also monitored. Remnants of the virus are now also being monitored in wastewater, by SEPA and Scottish Water.³⁸ This range of work presents information on what variations and changes in the genome of SARS-CoV-2 tell us about virus evolution and patterns in transmission regarding the Cov2 strains currently in circulation in Scotland.

Implementing the four harms approach

The four harms approach underpins our assessment of risk and harm, our development of options and restrictions and our ability to make decisions based on a broad appreciation of the consequences of our actions. The next section of this

³⁵ <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/weekly-and-monthly-data-on-births-and-deaths/deaths-involving-coronavirus-covid-19-in-scotland>

³⁶ <https://www.gov.scot/collections/coronavirus-covid-19-modelling-the-epidemic/>

³⁷ This measure is included on the Scottish Government [COVID-19 in Scotland: Indirect health impacts dashboard](#)

³⁸ <https://informatics.sepa.org.uk/RNAmonitoring/>

report defines the harms in more detail, explains how we have assessed each of the four harms – to produce ratings for each harm that inform decision making - and presents some of the key data we have used to arrive at our assessments.

What are the four harms?

The four harms encapsulate the multi-faceted harms of the crisis namely the direct harm of the disease itself, the wider health harm and the broader societal and economic impacts of both the virus itself and our necessary responses to it. The Scottish Government's approach is to suppress the virus to a very low level (the first harm) while seeking to minimise these broader harms. This approach has guided decision making concerning the easing of restrictions during the Route Map process.

Harm 1 represents the direct impact of COVID-19 and ratings for this harm are based on a consideration of transmission risk and the impact on R. The factors taken into account in arriving at the ratings include the setting, indoors or outdoors, the number of people potentially affected, the duration of the activity and the proximity of the people involved, the likelihood of droplet/aerosol production and spread and of touching surfaces and, finally, the possibility and ease of mitigations available. All of these factors are underpinned by the developing scientific evidence base, international experience and experience in Scotland. The highest risk activities are those that take place indoors in crowded, noisy environments with poor ventilation, many surfaces, physical space that makes distancing difficult (for example shared bathrooms, canteens, few entrances and exits) and social environments that tend to discourage distancing. The latter is very relevant for household meetings in private homes where maintaining distancing among family and friends is very difficult.

Harm 2 focuses on the indirect impact of COVID-19 on both health and social care services and wider impacts on public health. Key considerations influencing scoring for Harm 2 include anticipated impact on levels of excess non-Covid deaths and the effects of health and social service changes. The wider public health aspects considered are around physical and mental health and wellbeing. Particular attention is paid to services for the most vulnerable in the community who are often the section of the population likely to suffer most from COVID-19 infection. The physical and mental health consequences of restrictions that limit the possibility of social interaction and exercise are also seen as extremely important.

Harm 3 overlaps to some extent with the wider physical and mental health impacts of Harm 2 so, as part of the assessment process, care is taken not to double count impacts. Key considerations around Harm 3 are safety and security, learning and development, social capital and community cohesion, loneliness and anxiety, economic security, and trust in Government and the social contract. These wide ranging considerations are analysed through a variety of data from health, justice, education and direct public polling. Particular attention is paid to the needs of children and young people whose wellbeing and development are particularly impacted. The impacts of restrictions on those living alone are also a key concern in terms of social isolation. Equalities featured strongly in assessing social harms as we know that diversity groups such as women, disabled people, ethnic minority communities and those from lower socio-economic backgrounds have experienced

particular disadvantage. The damaging effect on poverty and inequality may be profound.

The dimensions of economic harm, **Harm 4** include the direct impact on the economy and are inter-related to health and social harms through the indirect effects that a weaker economy can have on health and society through, for example, the impact of unemployment. The scarring in terms of social and health effects will come via the longer recovery period as we deal with the impacts of higher unemployment and financial insecurity and hardship for many businesses, individuals and households. The impacts will intensify the longer the restrictions on our normal way of life continue: we will see more businesses unable to recover and we risk the scarring effects of unemployment.

Key considerations around economic harms were the parts and sectors of the economy affected as well as their relative importance pre-COVID-19. The consequences for businesses in terms of lower turnover and cashflow, jobs furloughed, as well as the level of capacity at which they could operate, were important considerations. The length of time that economic activity was impacted and the implications on unemployment and redundancies was considered in conjunction with the secondary impacts on health and social harms (harms 2 and 3).

Decision making based on the four harms

During the Route Map decision-making process, which saw the gradual and careful easing of restrictions from the initial lockdown of March and April, the Scottish Government made decisions about which restrictions to ease and when (and also about which new protective measures to implement – such as the use of face coverings).

As set out in the 'Framework for Decision Making'³⁹, the Scottish Government's approach is to suppress the virus to a very low level (the first harm) while seeking to minimise the broader harms of the crisis. This approach has guided decision making and has introduced sometimes complex considerations. For example, it follows that, in making decisions about necessary restrictions on activities and settings, not only is the impact on the first harm considered (e.g. on their transmission risk) but also the impact on the broader harms, in order to both suppress the virus and then minimise the broader harms. Consequently, decisions are not taken solely on the basis of comparing the transmission risk of one setting against another.

Potential options – individual and combinations of measures – were assessed for their impacts on the four harms (in the way set out in this document) and for their viability, for example taking account of how easy they are to communicate and understand, the likelihood of public compliance, the proportionality of any impact on human rights and other legal considerations. Broader considerations also include equality impacts and consideration of tailoring measures, for example to specific geographies and sectors. This is in recognition of the fact that the crisis is impacting differentially on subgroups of the population and different parts of the country.

³⁹ <https://www.gov.scot/publications/coronavirus-covid-19-framework-decision-making-further-information/>

Assessments for each of the measures helped to inform the various Route Map decisions, which were made by Cabinet and then implemented through regulations and guidance as appropriate.

To assess the impact on the four harms, a wide range of evidence and data was used (including information provided by relevant policy and operational teams) including for each option:

- Specific features – the key aspects of the option to be assessed;
- Scale - how many people might be affected by this option (e.g. workforce, users of service);
- Equalities - what we know about the people affected in terms of characteristics, gender, age and other characteristics;
- Occurrence - how often will this occur: daily, weekly, periodically, on demand;
- Geography - does this option affect all areas of the country; are some areas more impacted;
- Mitigations - what mitigation options are or could be put in place to reduce the risk of the option; and
- Alternatives - What alternative approaches could be developed to deliver this option?

The range of options for restrictions and other measures – easing, maintaining, (re)introducing – were assessed using the best available evidence and analysis.

In undertaking this assessment we considered both the risk and impact on individuals and the risk on the population as a whole. Individual use assessments take into consideration likely risk associated with getting to and from a setting, for example, as well as the risk in the setting itself. Overall transmission risk, in contrast, takes into account both how many people participate in or use a particular setting or activity and the interaction that such use or participation is likely to generate indirectly. (For example, we know that opening schools typically leads to much more social interaction by parents and carers unrelated to the school setting – e.g. enabling more to return to workplaces etc.)

As scientific knowledge and practical experience evolves we update assessments as new evidence and information becomes available, mitigations are put in place, and everyone becomes more familiar with the actions needed to participate safely in a range of activities.

Conclusion

We are aware that any restrictions put on our normal way of life have serious consequences, therefore any decisions we make have to consider not only the impact on public health, but also wider healthcare needs, society and the economy. Within this report, we have drawn together evidence on the various harms and wider impacts caused by the crisis and some of the criteria we use to assess evidence.

Evidence is still emerging and the scale and nature of the impacts will change over time. Our evidence comes from a range of sources, and is brought together with experience and insights from other countries, institutions (domestic and international) and our own stakeholders.

High levels of compliance with the core measures of physical distancing, good hygiene, and observance of the specific restrictions related to each level need to be sustained.

We recognise that public tolerance of the distancing measures is hard to sustain and that these measures, in turn, have wider impacts on society and the economy. Central to our considerations is a recognition that the crisis is impacting differentially on subgroups of the population and different parts of the country. A concern with issues of equality is at the heart of our decision-making and analysis going forward.

This document focusses on the evidence and analysis in relation to the four harms that informed decision making during the Route Map process from May to September. To maintain transparency in the decision-making process during the epidemic, we intend to provide further evidence and analysis that has been used to support the levels approach within the Strategic Framework in the near future.

Harm 1

Introduction

Harm 1 is the tragic harm that COVID-19 can cause to people's health. We saw this in the first phases of the pandemic in Scotland, with the daily growth in number of new cases; number of new hospitalisations; number of people requiring treatment in Intensive Care Units; and sadly, the number of deaths related to the virus. Lockdown helped us to bring these numbers under control, but as we move through a second wave and into the winter, we have a renewed focus on the direct harm of COVID-19.

COVID-19 causes direct and tragic harm to people's health. We are tracking daily the extent of the direct health harm being caused by the virus. Data is published every day on the Scottish Government Coronavirus webpages.⁴⁰

Assessing the risk of Harm 1

We are concerned with the impact on R and the prevalence of the virus within the community when we look at Harm 1. Many different factors come into play when we assess risks with this harm. We take into account the science behind the virus, the setting, indoors or outdoors, the number of people potentially affected, the duration of the activity and the proximity of the people involved, the likelihood of droplet/aerosol production and spread and of touching surfaces and finally the possibility and ease of mitigations available.

In order to assess how risky an activity or setting is for the spread of transmission of the virus, we consider:

- a. Whether the activity is indoors or outdoors. As stated previously, in poorly ventilated indoor spaces transmission of the virus through aerosols is increased, therefore outdoor activities are considered less risky;
- b. How many people will be involved in an activity at any one time. Where people come together in crowds, you are more likely to come into close contact with someone that has COVID-19 and it is more difficult to maintain physical distance. The more interactions there are between different people, the greater the opportunities the virus has to spread; therefore, the higher the number of people attending any event/setting/activity the higher the risk;
- c. How long people will be in close contact with each other is also important as the virus is only likely to spread from people who are in contact for more than 15 minutes although this is dependent on the closeness of contact⁴¹;
- d. The environment that the activity will take place in and whether it is possible to reduce contact with surfaces and whether surfaces will be easy to clean are also relevant;

⁴⁰ <https://www.gov.scot/publications/coronavirus-covid-19-daily-data-for-scotland/>

⁴¹ <https://www.cebm.net/covid-19/what-is-the-evidence-to-support-the-2-metre-social-distancing-rule-to-reduce-covid-19-transmission/>

- e. The age group of people involved in the activity. The evidence shows that the risk of COVID-19 to younger children is very small and they are not a high risk for transmission of the virus. However, young adults, although not as susceptible to the risks of the disease, do play an important role in transmission; and
- f. In order to allow for tracing to work effectively, we need to be able to trace anyone that has been included in an activity and therefore we consider the ease of identifying who took part in an activity and the numbers taking part.

Ease of mitigation

We take into consideration how easy it would be to put mitigation into place in any venue or event against the spread of COVID-19. We consider how many people will be likely to attend, how much space is likely to be available, whether a venue is well ventilated, whether it is an indoor or outdoor venue or a combination of the two, how well staff and customers are able to physically distance and whether face coverings are likely to give an increased level of protection in a given situation. In regulated settings, it is easier to ensure that mitigations, such as physically distancing measures and barriers, are put in place and being adhered to. We can also carry out monitoring and inspection of businesses and ensure that mitigation measures are in place. In informal situations such as family gatherings or house parties, the risks are greater. When people are very familiar with each other, they are less inclined to physically distance from one another and these situations are more challenging to regulate, inspect or ensure mitigation measures are being appropriately used.

Compliance and attitudes

To control the virus in Scotland, everyone has to play their part and, for that reason, it is important that we use a range of data and analysis to look at changes in people's behaviour. This evidence helps us to understand the extent that people are adhering to the guidelines and the areas where they are finding it difficult.

A range of analytical approaches help with this. We have data that tells us about the number of cars on the road and footfall in town centres. We have data from the police, health, schools and other public services that tell us about issues such as use of public service and school attendances. We also have data from weekly public attitudes surveys and polls (including research undertaken by YouGov and Ipsos MORI) that provides information directly from people, about their levels of knowledge and awareness, and their behaviours in different social settings, such as work, school, travelling, healthcare, shopping and businesses. Questions asked in our surveys vary from week to week but enable us to monitor the success of measures, such as avoiding gatherings and meetings with people from other households, minimising the use of shared workplaces and offices by working from home, and using personal protective equipment in relevant situations.

A range of other studies are being carried out in Scotland and the UK to understand people's behaviours during the pandemic. The COVID-19 Health and Adherence Research in Scotland (CHARIS) group at the University of Aberdeen have been running weekly surveys to assess the rates of adherence, the mental and general health of the public, and the triggers for changes in adherence. The UK-wide COVID-

19 Social Study (UCL) asks to what extent respondents are following the recommendations from government such as social distancing and staying at home and the factors associated with compliance including mental health, wellbeing and confidence in government.

Some of these studies are 'opt-in', which means that those likely to volunteer to take part will have some level of interest in the virus and are potentially more likely to adhere to guidance. Whilst bearing this in mind, evidence suggests a high level of reported compliance on a national and general level. 79% in Scotland reported 'complete' or 'almost complete' compliance (i.e. people who rated themselves 6-7 on a scale of 1-7) (YouGov 1-2 Dec). Self-reported willingness to comply and compliance with self-isolation is also high. The vast majority (85%) agree that they would self-isolate and book a test through Test and Protect straightaway at the first sign of Covid-19 symptoms (YouGov 24-25 Nov). Of respondents who had to self-isolate at some point during the last 7 months (n=196), almost three quarters (72%) said they didn't leave home at all during the isolation period, although a quarter (26%) left home at least once (YouGov, 27-28 Oct). Other data from the UK has, however, shown a lower estimate. In regular and repeated surveys undertaken between March and August across the UK, only 18% of people who reported having experienced symptoms of COVID-19 in the last week had not left their home since developing symptoms. This figure does not relate to those who had confirmed cases of coronavirus or who are contacted through Test & Protect.

Data from other sources such as Police Scotland and PHS also provide insight into compliance. Police Scotland report the number of COVID-19 interventions on a weekly basis, and this has been higher during October and November than it was in the previous months. Public Health Scotland also present data on the number of people who they contact, following a positive test result or who need to quarantine following their entry into Scotland. Since 22 June, only a small proportion of individuals with a positive test and confirmed contacts have not been contactable.

A final source of data that provides another perspective on compliance is the 'Scottish Contact Survey'. This shows that the average contacts per day are approximately three quarters higher than the level at the beginning of lockdown (UK comparison 2.8), but less than half of the level pre-lockdown (UK comparison 10.8). Data also show a decrease in the number of people visiting locations, particularly other people's homes. This is down to 28% (26 Nov-2 Dec) from 58% (6-12 Aug).

Harm 2

Introduction

The COVID-19 pandemic is having an impact on our health and social care in Scotland in a number of ways. This includes the impact on our health and social care services, how people are using those services, and how this impacts on health. We also know that the restrictions necessarily put in place to slow the spread of the virus can, in turn, affect many aspects of our population health.

These impacts are not directly attributable to the virus through illness or death from infection, but are the indirect impacts to our health from the requirement to suppress the virus and ensure capacity to respond. These impacts can occur through a wide range of health, family, social and economic mechanisms^{42,43}.

When considering Harm 2, we take a number of factors into consideration. These include:

- The demographics and potential needs of those who would be impacted;
- Whether the intervention or change is universal or targeted and the number/percentage of people who would be impacted in Scotland;
- Whether the restriction or measure would affect excess mortality;
- Whether the restriction or measure would change health and social care service use; and
- The potential impact the change could have on people's physical and mental health

Throughout the pandemic, a number of key data and measures have been important in considering impacts for Harm 2 to inform decision making. These have included the anticipated impact on levels of excess non-Covid deaths, levels of use of Health and Social Care services (emergency and planned use), potential avoidance of health care for non-Covid health issues and changes in population mental and physical health.

Distribution of Harms

We know that the wider health impacts of the pandemic are unevenly distributed across the population. Some groups are particularly vulnerable to the effects of both the pandemic and the potential impacts of social distancing and broader restrictions.

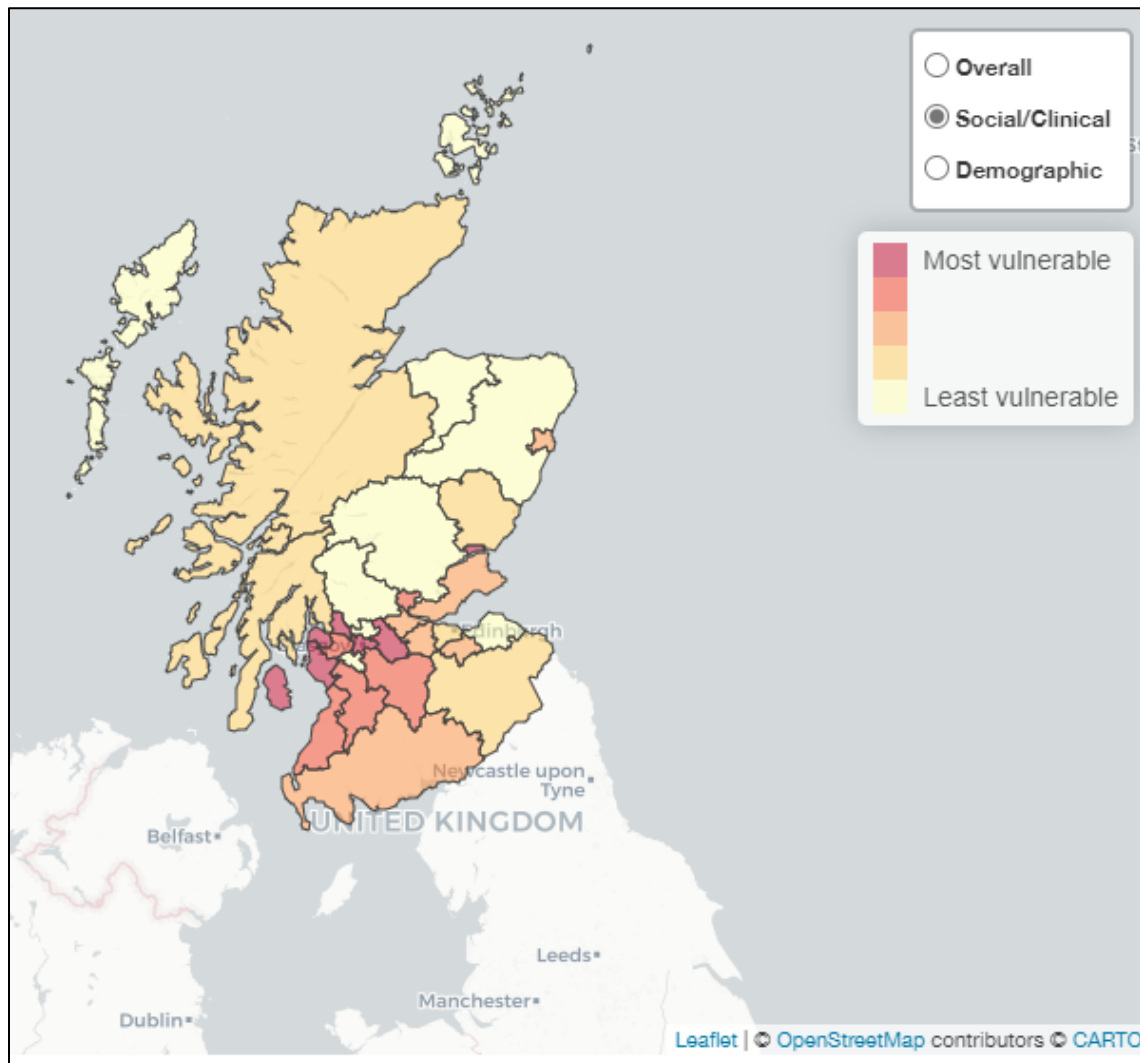
Distribution of harms is likely to closely mirror longer-term, pre-COVID-19 differences in health outcomes across Scotland and across certain demographic characteristics. While certain groups have a higher level of clinical, social or occupational risk of infection, they may also be at greater risk of severe COVID-19 and death.

⁴² Douglas et al (2020) Mitigating the wider health effects of Covid-19 pandemic response BMJ 2020; 369 <https://www.bmj.com/content/369/bmj.m1557>

⁴³ Scottish Government (2020) Equality and Fairer Scotland Duty Assessment of the Health and Social Impacts of COVID-19 <https://www.gov.scot/publications/covid-19-health-and-social-impact-assessment>

ScotPHO have produced maps to illustrate a COVID-19 community vulnerability measure based on available demographic, social and clinical indicators relevant either directly to COVID-19 or to socio-economic factors that are likely to modify the impacts of the pandemic and efforts to delay it. Figure 10 shows a snapshot of clinical and social vulnerability at local authority level.

Figure 9 Local Authority Clinical/Social Vulnerability by Local Authority (Source: ScotPHO Community Vulnerability Index)



Around 180,000 adults in Scotland were defined on medical grounds as clinically extremely vulnerable due to having an existing health condition that puts them at very high risk of severe illness from COVID-19⁴⁴. This group were contacted individually and advised to ‘shield’ themselves within their homes. An additional group of people were advised to follow enhanced social distancing, because pre-existing health conditions or circumstances mean they are at increased risk of severe illness from COVID-19⁴⁵. While these were considered necessary to reduce

⁴⁴ [GOV.UK Guidance on shielding and protecting extremely vulnerable persons from COVID-19](#)

⁴⁵ [GOV.UK Guidance on protecting older people and vulnerable adults](#)

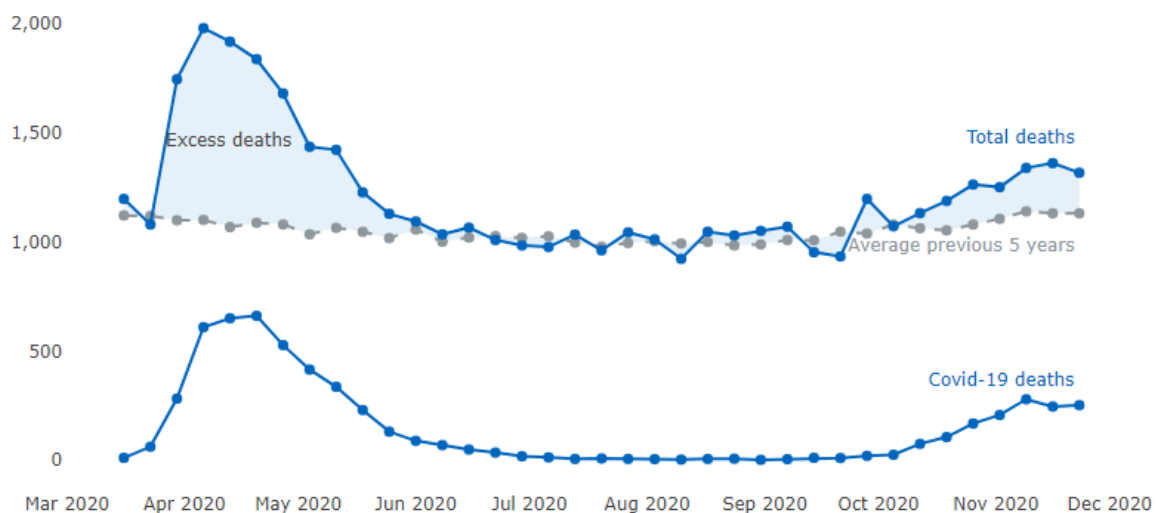
the immediate harm from COVID-19, we know there will be impacts on the health and wellbeing of those shielding or taking additional measures.

Others may also be especially vulnerable to COVID-19’s indirect health harms as they rely on health and social care services. These include the elderly, people with pre-existing health conditions (e.g. Chronic Obstructive Pulmonary Disease (COPD), diabetes, substance use), those with disabilities, and people who receive care at home and care home residents.

Excess Deaths

Excess deaths, over and above those from Covid-19, are one indicator of whether wider health impacts are happening. The National Records of Scotland (NRS) data show that Scotland experienced excess mortality in spring 2020.⁴⁶ NRS also have data which details the main causes and location of non-Covid excess deaths.⁴⁷ In Figure 11 excess deaths are shown as the difference between the weekly average for deaths over the previous 5 years (2015 – 2019) (the grey line), and the blue line showing total deaths in 2020. The other blue line below shows weekly totals for the number of COVID-19 deaths and shows the extent to which COVID-19 deaths have contributed to the number of excess deaths in 2020. There were 186 excess deaths in the latest week (week 48, ending 29 November). The number of deaths where COVID-19 was the underlying cause (215) was actually higher than the total number of excess deaths because deaths from respiratory causes (-32), circulatory causes (-27) and dementia/Alzheimer’s (-4) were lower than the average for this time of year.

Figure 10 Excess deaths, COVID-19 and non-Covid, April-November (Source: National Records of Scotland)⁴⁸



⁴⁶ National Records of Scotland: “Winter Mortality in Scotland 2019/20.” (Published 13 October 2020). <https://www.nrscotland.gov.uk/files//statistics/winter-mortality/2020/winter-mortality-19-20-pub.pdf>.

⁴⁷ <https://www.nrscotland.gov.uk/covid19stats>

⁴⁸ https://data.gov.scot/coronavirus-covid-19/detail.html#2_indirect_health_impacts

Excess deaths are typically seasonal, with more occurring in the winter, with cold weather and influenza outbreaks being the main causes. Many of the enhanced Infection Prevention and Control measures introduced throughout 2020, across social care and healthcare, could have some positive impact on seasonal outbreaks of other viruses (such as influenza and norovirus). This will be monitored closely.

Health Services

The Scottish Government's Scottish Health Survey (SHeS)⁴⁹ demonstrates that almost half of the population lives with a long-term condition (LTC), which may or may not impact on daily life and may require interaction with health care.⁵⁰ Prevalence data⁵¹ also illustrate how many of us depend on the NHS or primary care to manage our health. It is important to monitor major health conditions and service use to assess any impacts which result from COVID-19 measures.

The pandemic has prompted rapid and radical change in how we deliver health and care services in Scotland, in some cases accelerating reforms and redesign which were underway pre-COVID-19. On 17 March, the NHS in Scotland was placed on an emergency footing to protect Intensive Care Unit (ICU) and other hospital capacity so that services could cope with potential demand levels from COVID-19 cases. Boards were asked to suspend all non-urgent elective treatment, which has affected referral and treatment pathways since then. Urgent care services, cancer care, mental health, maternity and paediatrics were maintained throughout. Some planned procedures and appointments had to be postponed and national screening programmes were temporarily suspended. From 19 June, Boards started to gradually and safely restart services.

Trends in activity in the NHS, from March 2020, compared to average rates from previous years are published on Scottish Government and Public Health Scotland dashboards.^{52,53} Changes in the use of health and social care services could stem from a number of factors.

- Reduced availability and accessibility (e.g. care and services were limited or postponed to prevent infection);
- Reduced demand for services (e.g. people felt they could wait or wanted to protect services for those with COVID-19, or because they were afraid of catching COVID-19); and
- A real change in demand (e.g. fewer traffic accidents or sports injuries, better IPC (infection protection and control) meaning fewer non-Covid transmissible infections).

⁴⁹ <https://www.gov.scot/collections/scottish-health-survey/>

⁵⁰ The Scottish Government (2020) Scottish Health Survey 2019: summary report:

<https://www.gov.scot/publications/scottish-health-survey-2019-summary-report/pages/3/>

SHeS data-tables provides breakdowns by age, gender and deprivation for cardiovascular disease and a wide range number of major health conditions. The latest SHeS data table are from the 2019 survey: <https://www.gov.scot/publications/scottish-health-survey-2019-supplementary-tables/>

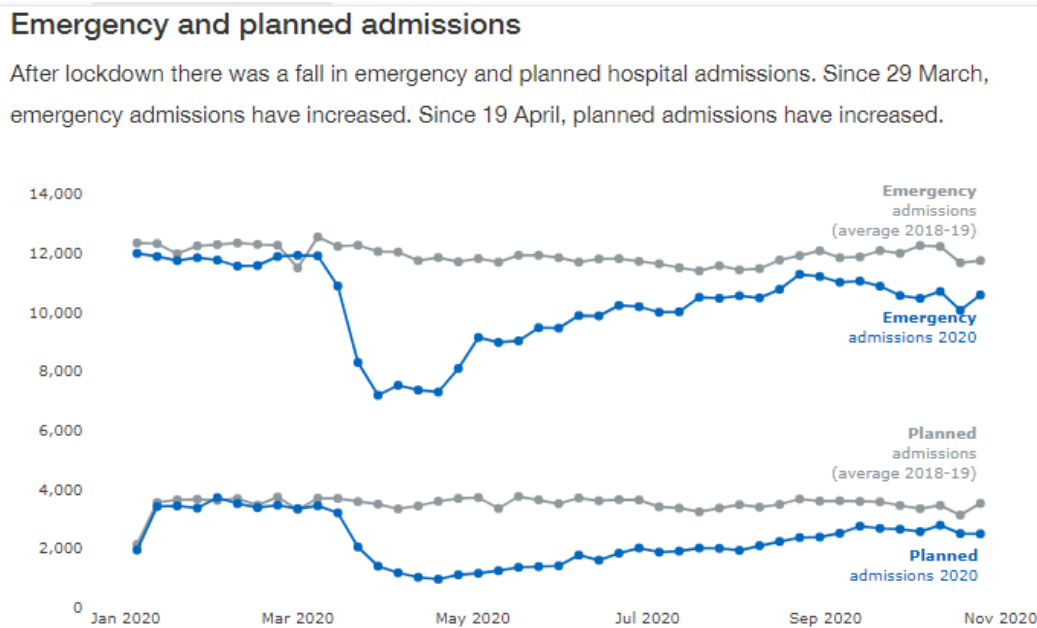
⁵¹ <https://beta.isdscotland.org/>

⁵² Public Health Scotland publishes data on health service provision and use, much of it available for individual Health and Social Care Partnerships and Health Boards on this dashboard: [COVID-19 wider impacts on the health care system](#)

⁵³ Scottish Government [COVID-19 in Scotland: Indirect health impacts dashboard](#)

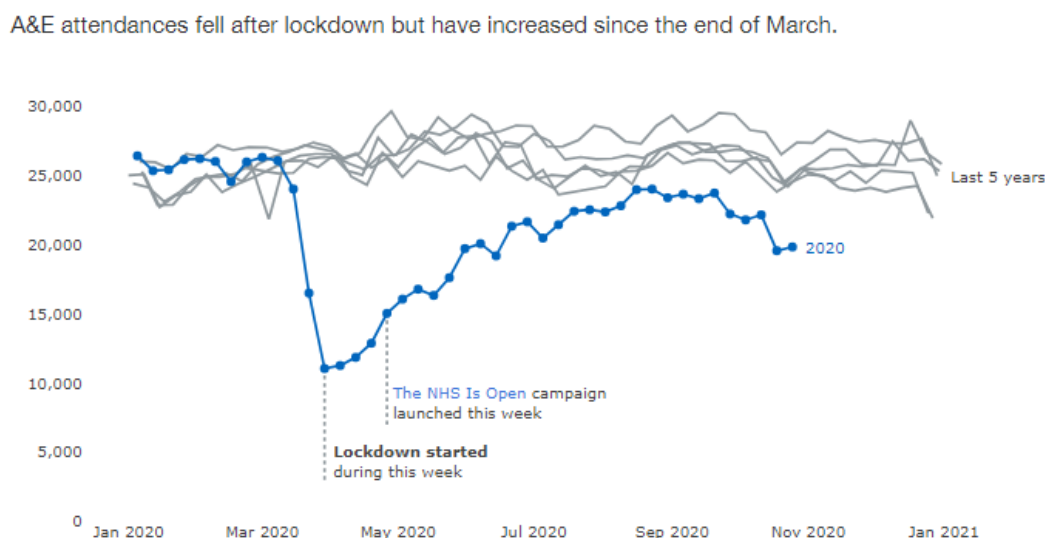
Many changes observed in NHS activity indicators since March reflect the re-prioritisation of services and changes in how care is provided. For example, sharp reductions in acute bed occupancy and planned admission rates were largely because many procedures were postponed in March. Since the national “Remobilise, Recover and Re-design Framework” was implemented from late May, activity rates across most specialisms have been steadily returning to pre- COVID-19 levels.

Figure 11 Numbers of emergency and planned admissions, Jan-Nov 2020 (Source: Scottish Government Four Harms Dashboard)



Other NHS indicators are driven by unforeseen need or demand. Accident and Emergency (A&E) attendances, emergency admissions and urgent referrals for investigation of suspicion of cancer symptoms all fell sharply in March though rates have been rising again since May/June. These changes in demand are of concern if people have not been seeking care and support for health problems, as we may have lost opportunities to intervene to improve outcomes for individuals and reduce future demand on services.

Figure 12 Numbers of attendances at Accident and Emergency (Source: Scottish Government Four Harms Dashboard)



Service suspensions and disruptions over March-June have inevitably had an adverse impact on waiting times for secondary care. PHS publish NHS data, at different time intervals, for several important measures and trends (including Referral to Treatment Standards) which illustrate this impact, including the time a patient is waiting from referral to cancer investigation and treatments;⁵⁴ outpatient appointments; and various day case and inpatient treatments.⁵⁵ For example, Figure 14 shows trends in the number of patients on waiting lists and the number waiting more than 6 weeks for one of eight diagnostic tests, with a sharp increase in the latter indicator in March.⁵⁶ At 30 September 2020, 102,716 patients were waiting for the eight key diagnostic tests, This represents an increase of 4.2% (+4,148 patients) from 30 June 2020 and is 17.5% (+15,292) higher than at 30 September 2019. Of those waiting for a test, 53.3% had been waiting six weeks or less (42 days), compared to 35.4% at 30 June 2020 and 82.3% at 30 September 2019. Clearly, delaying tests for potentially serious conditions may have consequences for: eventual patient outcomes if treatment is delayed as a result; for the mental well-being of patients and those close to them given the anxiety delays can cause; for future service demand; and for system and staff resilience as backlogs are dealt with.

⁵⁴ Board level performance against cancer waiting time standards are detailed up to 30 June 2020: <https://beta.isdscotland.org/find-publications-and-data/conditions-and-diseases/cancer/cancer-waiting-times/>

⁵⁵ <https://beta.isdscotland.org/find-publications-and-data/healthcare-resources/waiting-times/> - Most measures are available at NHS board level.

⁵⁶ "NHS waiting times to end September 2020 - NHS waiting times - diagnostics 24 November 2020 - Data & intelligence from PHS. The eight investigations are upper endoscopy, lower endoscopy (excl. colonoscopy), colonoscopy, cystoscopy, CT scan, MRI scan, barium studies and non-obstetric ultrasound.

Figure 13 Number of patients waiting for a diagnostic test; monthly trend (June 2018-Sept 2020) (Source: PHS NHS Waiting Times – Diagnostics)

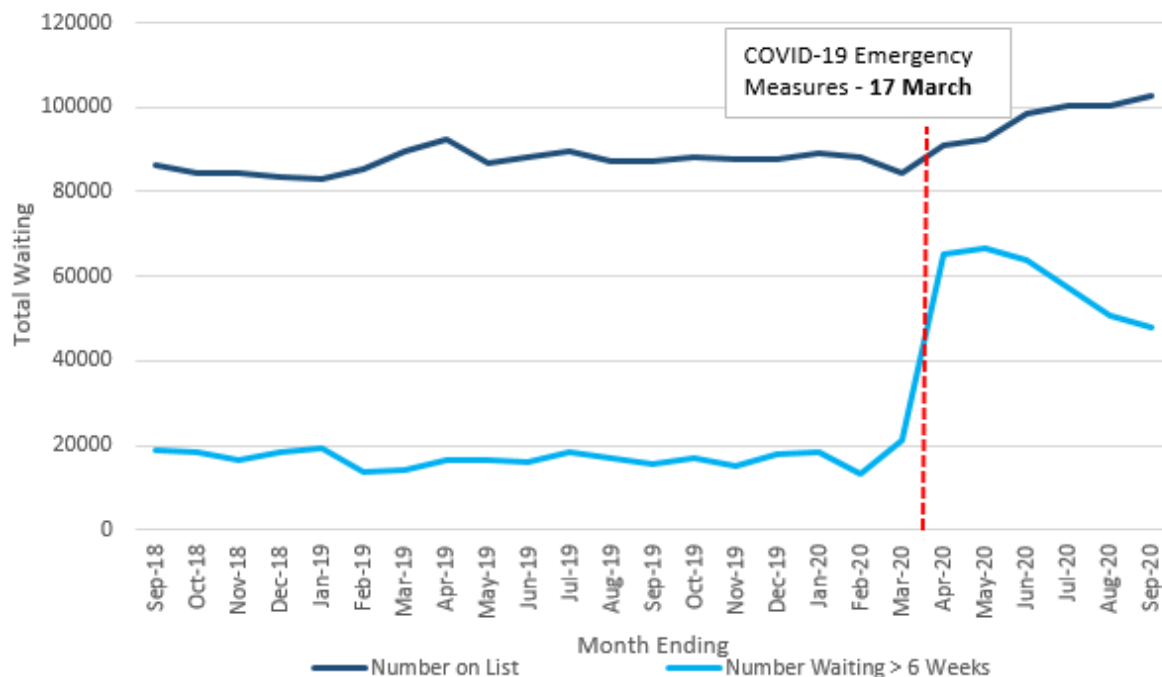
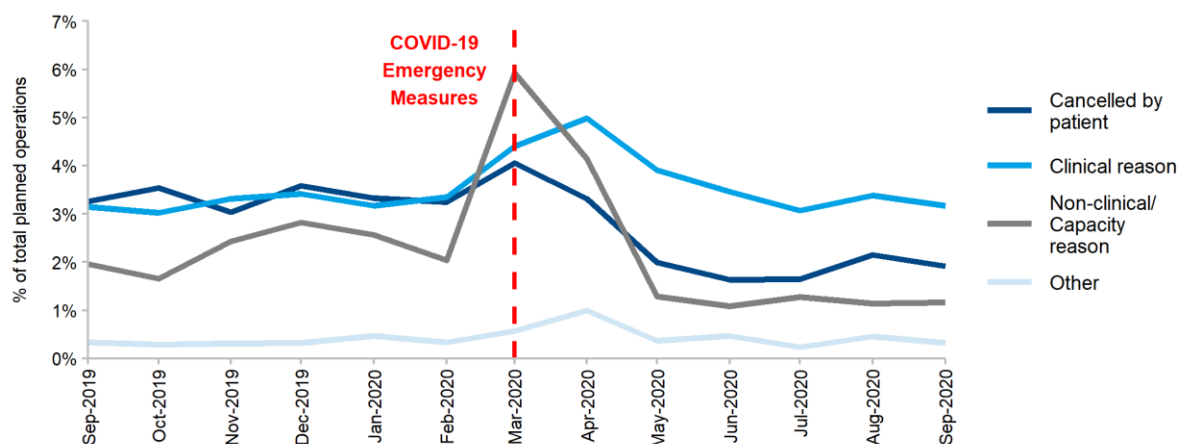


Figure 15, which is based on NHS Scotland data for cancellations on the day or the day before a planned NHS operation, show percentage trends in different reasons for cancellation. From February, with a peak in March, Boards cancelled many operations for clinical and non-clinical/capacity reasons to preserve ICU capacity. However, there was a gradual return towards more usual levels from May as the number of planned operations rose. The total number of planned operations during September 2020 was 17,056, an increase of 23.3% from 13,831 in August 2020 and a decrease of 38.4% from 27,704 in September 2019.⁵⁷

⁵⁷ <https://beta.isdscotland.org/find-publications-and-data/healthcare-resources/waiting-times/cancelled-planned-operations/>

Figure 14 Percentage of NHS Scotland total planned operations by reasons for cancellation, Sept 2019- September 2020 (Source: PHS)



Most people’s interactions with health services are through primary care with their GP, a nurse or another member of the Multi-disciplinary Team. We know that there has been a change in the way in which care is provided by GP practices, with increased uptake of phone and video encounters, rather than face to face consultations in practices, where that is clinically safe to do so. The Scottish Government is currently working with stakeholders to expand the evidence base around current demand for GP services. GPs (for example, those in Deep End Practices) have also been documenting the impact of COVID-19 on their own practices.⁵⁸

Throughout the pandemic, primary care remained available for non-urgent, non-COVID-19-related contacts with health services, patients being encouraged to contact NHS24 or to their GP or use NHS Inform. New community treatment centres were established to divert patients with COVID-19 symptoms away from general practice. There were major changes in how services are delivered including substantially increased reliance on the use of remote consultations either by telephone or the Near Me video consultation service and the roll-out of Pharmacy First.

Weekly polling data monitoring public agreement with the statement, “I would avoid going to a hospital or GP practice at the moment even if I had an immediate medical concern (not related to Coronavirus)” has indicated a reluctance by some to seek help even when needed.⁵⁹ From a high in April when 45% agreed or strongly agreed with this statement, the rate dropped and has been broadly flat for several months, with 25-30% agreeing.

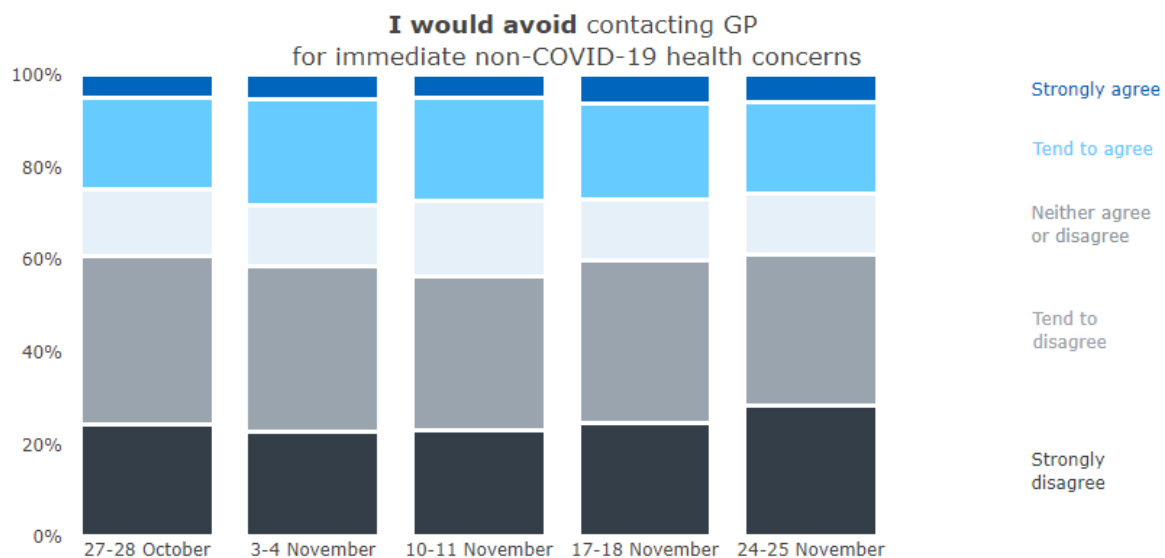
The statement was changed in the week of 27-28 October to, “I would avoid contacting a GP practice at the moment even if I had an immediate medical concern (not related to Coronavirus).” The latest data (23-24 November) shows a similar proportion (26%) to previous weeks agreed with this statement. This continuing

⁵⁸ <https://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/>

⁵⁹ This weekly online panel survey is with around 1,000 adults and is representative of the adult population. Source: YouGov commissioned by the Scottish Government.

reluctance to contact services is concerning as it suggests a relatively high proportion of people are still not seeking medical help and work continues to encourage and inform people to seek care and advice. Responses have been broadly the same across different demographic groups.

Figure 15 Percent agreeing with the statement: “I would avoid going to a hospital or GP practice at the moment even if I had an immediate medical concern (not related to Coronavirus)”



Base approx. 1,000 adults aged 18+, Scotland.

Source: YouGov Coronavirus tracker poll commissioned by the Scottish Government)⁶⁰

We recognise that patient-reported outcomes and experiences since the onset of COVID-19 are a significant gap for person-centred care in current national data. In future, the Scottish Government’s Care Experience Surveys will provide us with invaluable information about COVID-19’s impacts. There is also an emerging evidence base from research which explores the experiences of particular groups of patients and their families which we will monitor.

Social Care and Support

Around 245,000 (1 in 20) people receive social care and support in Scotland and many are particularly vulnerable to COVID-19. The indirect impacts of COVID-19 and measures to contain it are particularly acute for people receiving and providing social care as they already experience socio-economic inequalities across age, disability and gender.⁶¹ It is, therefore, critical to minimise adverse impacts and

⁶⁰ This measure is included on the Scottish Government [COVID-19 in Scotland: Indirect health impacts dashboard](#)

⁶¹ Public Health Scotland (2020b). “Insights in social care: statistics for Scotland. Support provided or funded by health and social care partnerships in Scotland 2018/19.” <https://beta.isdscotland.org/find-publications-and-data/health-and-social-care/social-and-community-care/insights-in-social-care-statistics-for-scotland/>

maximise benefits from our COVID-19 response to minimise compounding existing inequalities. The Scottish Government's *Adult Social Care Winter Preparedness Plan 2020-21* (published on 3 November 2020)⁶² and an accompanying Evidence Paper⁶³ describe direct and indirect health impacts of COVID-19 and actions to help mitigate these.

The recently published Evidence Paper notes a growing body of data and research which demonstrates clearly the significant health and social harms for people who receive social care and support, from restrictions on visiting, on activities inside and outside of home and on mixing with others.⁶⁴ There are also consequences from interrupted or avoided healthcare. These apply to those who live in care homes, who tend to be much older, and those who receive care and support in their homes. Around 60,000 people in Scotland are receiving home care at any one point, while around 56,000 of these are receiving personal care. People receiving social care are often old and live alone, therefore visits from social care staff may be their only social interaction.

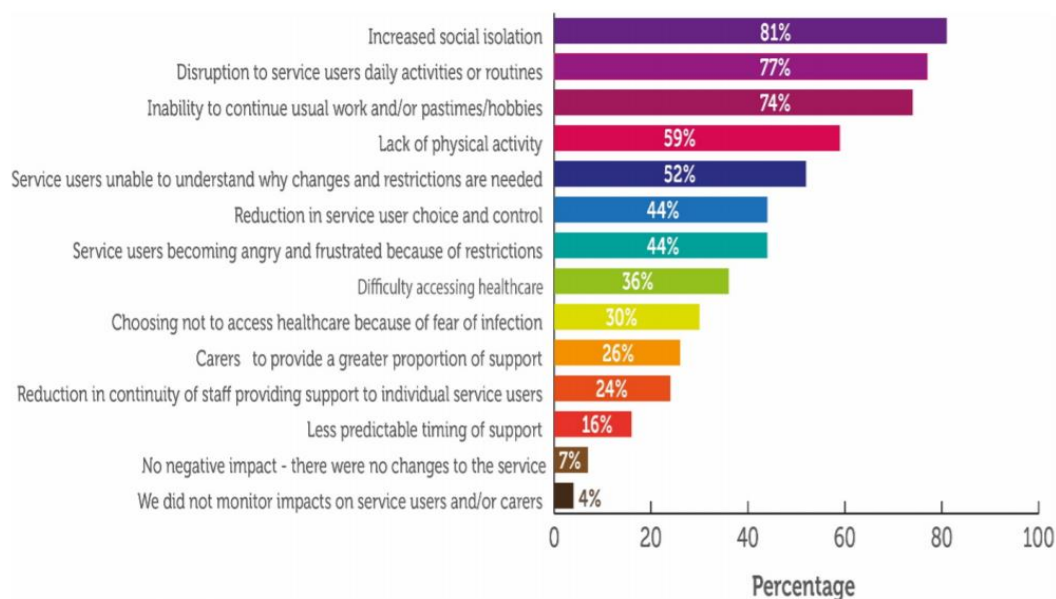
The Care Inspectorate inquiry into Care at Home and Housing Support, found that social isolation, disruption to daily activities, limitations on physical activity and the suspension of re-enablement had all adversely impacted on the health and wellbeing of people who experience care and for their carers. Loss of independence and reduced resilience will increase individuals' future need for care. Lockdown had left many carers exhausted and anxious about the future.

⁶² <https://www.gov.scot/publications/adult-social-care-winter-preparedness-plan-2020-21/>

⁶³ <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2020/11/adult-social-care-winter-preparedness-plan-2020-21/documents/adult-social-care-winter-preparedness-plan-2020-21-evidence-paper/adult-social-care-winter-preparedness-plan-2020-21-evidence-paper/govscot%3Adocument/adult-social-care-winter-preparedness-plan-2020-21-evidence-paper.pdf>

⁶⁴ <https://hselibrary.ie/what-is-the-impact-of-the-coronavirus-pandemic-on-the-mental-health-of-elderly-nursing-home-residents/> - for a review of literature on the mental health impacts of the pandemic on care home residents

Figure 16 Negative impacts on people who experience care at home and carers (% of respondents) (Source: Care Inspectorate 2020)



Unpaid carers play a core and essential role in supporting people with social care needs to lead safe, meaningful lives. There are an estimated 690,000 carers living in Scotland, including 29,000 young carers.⁶⁵ Carers are more likely to be female, be in the 55-64 year old bracket, have a long-term condition or illness and report lower overall general physical and mental health than the general population.⁶⁶ Caring can have adverse effects on carers' financial security, career prospects and well-being.⁶⁷ During COVID-19, the importance of unpaid care has increased due to changes in service provision, fewer opportunities for social care support and activities provided by the voluntary and statutory sectors, fewer opportunities for respite, and some families being reluctant to have relatives move into a care home. A UK-wide survey with over 5,000 carers (Carers UK 2020), carried out in April 2020, found that 70% of carers were providing more care due the pandemic and many were experiencing worry or hardship which could have adverse effects on their own health and well-being.⁶⁸

Population health and wellbeing

The health benefits of the measures brought in to help reduce transmission of the virus are obvious, with a slower spread of infection reducing the risk to individuals and of health services being overwhelmed. However, there are unintended

⁶⁵ Scottish Government (2019). "Scotland's Carers – Update Release." <https://www2.gov.scot/Resource/0054/00548776.pdf>

⁶⁶ Carers UK (2019). "State of Caring. A snapshot of unpaid care in the UK."

http://www.carersuk.org/images/News_campaigns/CUK_State_of_Caring_2019_Report.pdf

⁶⁷ Scottish Government (2015). "Scotland's Carers." <https://www.gov.scot/publications/scotlands-carers/>

⁶⁸ Carers UK (2020). "Caring behind closed doors. Forgotten families in the coronavirus outbreak." <https://www.carersuk.org/for-professionals/policy/policy-library/caring-behind-closed-doors-report>

consequences for population health^{69,70} and balancing these considerations has been a key aspect of informing decisions around the nature and extent of restrictions and the mitigations in place to help to reduce harm.

General wellbeing, mental health and anxiety

There is increasing evidence that mental health is a significant determinant of overall health, establishing mental health and wellbeing as a major public health priority^{71,72}. It is clear from the evidence that the pandemic is taking a major toll on the population's mental wellbeing which has implications both in the shorter and longer-term for individuals and their families, but also for health services and the support available.

The Mental Health Research Advisory Group refocused its efforts to act as a forum for knowledge exchange to inform understanding and development of the Scottish Government's response to COVID-19 and mental health. They consider a wide range of evidence, including the Scottish Government's commissioned SCOVID Mental Health Tracker study⁷³. SCOVID will cover a 12-month period from May 2020. July/August data is currently being analysed and Wave 3 is in the field.

In addition to financial pressures, evidence indicates a combination of social factors, including loneliness and social networks and friendships, are playing a key role in the impacts on mental health and well-being⁷⁴. There is also evidence of longer lasting challenges and of differential impacts, particularly on women (especially young women) and on young people and potential widening of mental health inequalities as the impacts of COVID-19 interact with pre-existing risk and protective factors for mental health⁷⁵. For example, Figure 18 presents some findings from Wave 1 of SCOVID and shows, overall, a quarter of those responding reported moderate to severe depressive symptoms and close to a fifth reported moderate to severe anxiety symptoms. Differential impacts between groups are clearly evident.

⁶⁹ Scottish Government (2020) Equality and Fairer Scotland Duty Assessment of the Health and Social Impacts of COVID-19 <https://www.gov.scot/publications/covid-19-health-and-social-impact-assessment/>

⁷⁰ Douglas et al (2020) Mitigating the wider health effects of Covid-19 pandemic response <https://www.bmj.com/content/bmj/369/bmj.m1557.full.pdf>

⁷¹ World Health Organization (2013). [Mental Health Action Plan 2013-2020](#).

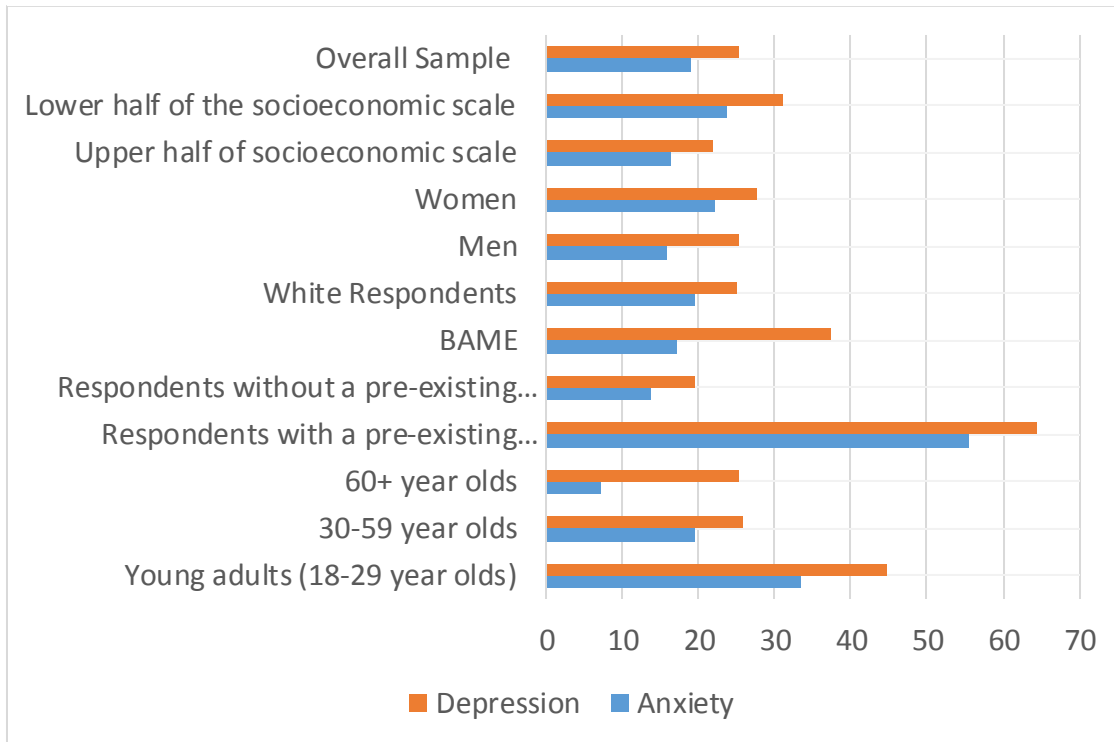
⁷² World Health Organisation (2019). [The WHO Special Initiative for Mental Health \(2019-2023\): Universal Health Coverage for Mental Health](#)

⁷³ [Coronavirus \(COVID-19\): mental health tracker study - wave 1 report: 12 Oct 2020](#)

⁷⁴ Scottish Government (2020) [MENTAL HEALTH AND COVID-19: EVIDENCE AND ANALYSIS BRIEFING \(2\) 12 JUNE 2020](#)

⁷⁵ <https://www.gov.scot/groups/coronavirus-covid-19-mental-health-research-advisory-group/>

Figure 17 Percentage of respondents reporting moderate to severe depression or anxiety symptoms. Wave 1 SCOVID Mental Health Tracker (May/Jun 2020)

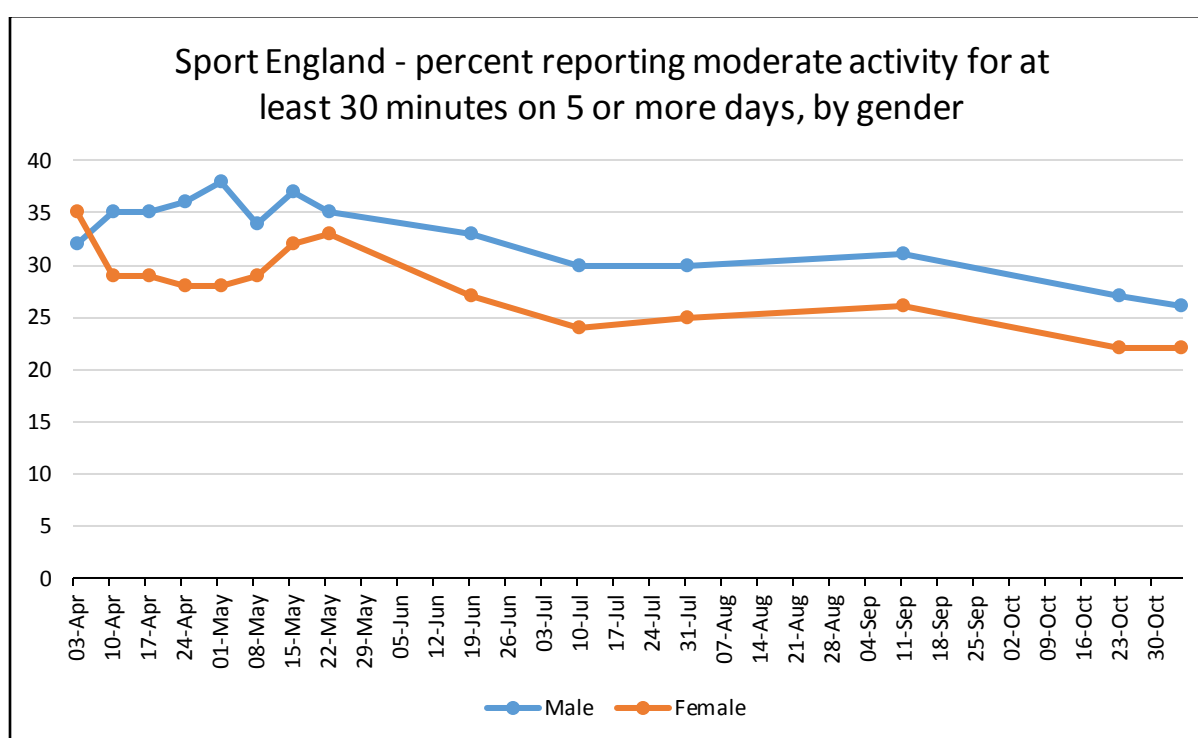


Exercise

Physical activity and sport are a powerful force in transforming lives. Strong evidence, prior to this pandemic has demonstrated the protective effect of physical activity on a range of conditions including coronary heart disease, obesity and type 2 diabetes, mental health problems and social isolation⁷⁶. This reinforces the importance of tracking the impact of the pandemic on activity levels and taking consideration of sport and physical activity encouragement and opportunities when making decisions about the nature of restrictions.

SportEngland introduced a COVID-19 tracker survey from 3 April. This ran weekly to the end of May and approximately monthly since. It provides indications on people's physical activity behaviours and attitudes during the pandemic and across different population groups. This evidence is supplemented by other surveys, analyses and evidence, for example, Scottish Health Survey data from Aug/Sept 2020 on activity and sedentary behaviour will be available early 2021 and data from relevant COVID-19 Waves of the Understanding Society Survey are being analysed. An international review of the impact of COVID-19 on diet, physical activity and weight is available⁷⁷.

Figure 18 Percentage of respondents by gender reporting activity for at least 30 minutes on 5 or more days. Sport England COVID-19 Tracker (Apr – Oct)



The evidence indicates a mixture of both positive and negative impacts on physical activity. Whilst some appeared to report doing more than previously, especially during the initial lockdown, a sizeable proportion reported doing less with indications

⁷⁶ [UK Chief Medical Officer' Physical Activity Guidelines](#) (2019). Department of Health & Social Care, Welsh Government, Scottish Government & Northern Ireland Department of Health

⁷⁷ See: <https://www.publichealthscotland.scot/downloads/impact-of-covid-19-disease-control-measures-on-physical-activity-dietary-behaviours-and-weight>

that certain groups were particularly negatively impacted - older people, those on low incomes, people living alone, people self-isolating due to age or a health condition and people in urban areas⁷⁸. Even where there were increases, such patterns do not appear to have been sustained, declining as restrictions eased. We are now moving into winter where the prospect of outdoor physical activity may be more challenging with potential for restrictions on indoor opportunities to have greater negative impact.

Food and alcohol

Poor diet is a leading risk factor for ill health⁷⁹ in its own right and as a contribution towards development of obesity. Obesity has been linked to a range of conditions including diabetes, cardiovascular disease, high blood pressure, certain cancers^{80,81}, mental health problems⁸² and dementia⁸³. A concern is that observed negative impacts on diet, particularly indications of more snacking on high fat and sugar foods, will impact on diet quality and obesity levels in the longer term if sustained and in turn contribute to increases in these linked conditions.

Evidence also links being overweight or obese and an increased risk of suffering more severe outcomes from COVID-19⁸⁴. The impact of our response to COVID-19 on factors such as diet that influence healthy weight are, therefore, of particular importance. In addition, the restrictions on hospitality and thus changing consumption environments, combined with mental health impacts are likely to influence patterns of both diet and alcohol consumption.

Food Standard Scotland have a regular consumer tracker survey and commissioned a COVID-19 Tracker Survey⁸⁵. From these, and other evidence, the indications are of positive and negative impacts on diets. There are suggested increases in cooking more home-cooked meals from scratch, eating together as a family and a reduction in eating takeaway foods. However, of concern are indicated increases in snacking on unhealthy foods and generally eating more out of boredom⁸⁶. It may be some time yet before it is clear what longer term impact this may have on population health, such as on levels of obesity. There are a wide range of actions already underway in *A healthier future: Scotland's diet and healthy weight delivery plan* to tackle diet and weight in Scotland, the importance of which are heightened by the pandemic.

⁷⁸ Sport England (2020) [Sport England: Survey into Adult Physical Activity Attitudes and Behaviour](#)

⁷⁹ Editorial (2017). Life, Death and Disability in 2016. *The Lancet*; 390(10100): p1083-1464

⁸⁰ Abdelaal M, le Roux, C and Docherty, N (2017). Morbidity and mortality associated with obesity. *Annals of Translational Medicine*; 5(7): 101: p.1.

⁸¹ World Health Organisation (2018). [Fact Sheet Obesity and Overweight](#)

⁸² Floriana, S, Luppino, MD, Leonore, M, de Wit, MS, Paul, F, Bouvy, MD et al. (2010). Overweight, obesity and depression: [A systematic review and meta-analysis of longitudinal studies](#). *Arch Gen Psychiatry* 67;3;p229-220

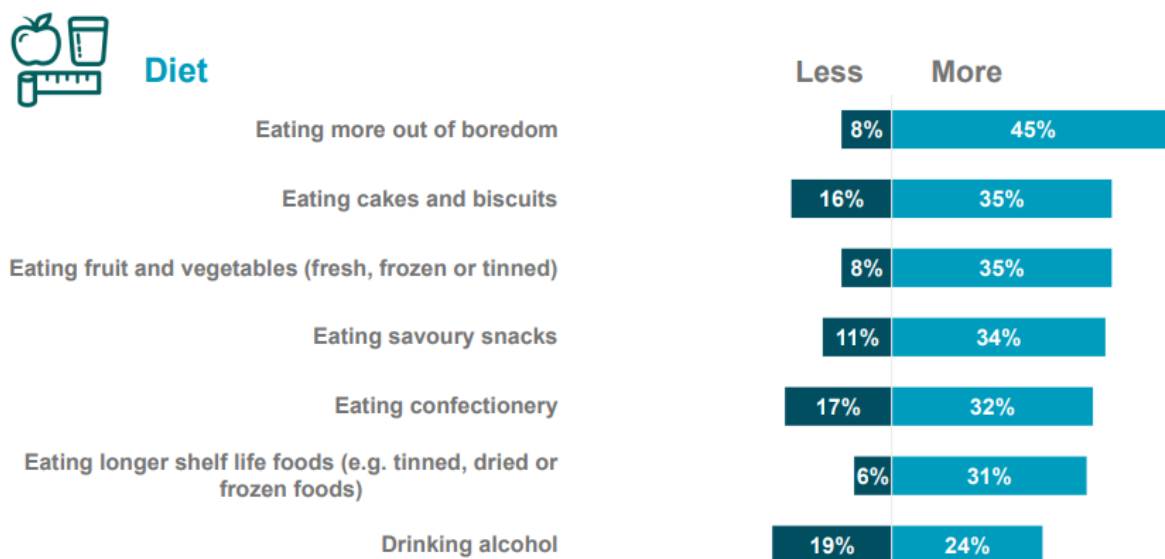
⁸³ Anstey, KJ, Cherbuin, N, Budge, M, and Young, J (2011). [Body mass index in midlife and late-life as a risk factor for dementia: a meta-analysis of prospective studies](#). *Obesity Reviews*; 12(5): 426-37

⁸⁴ Public Health England (2020) [Excess Weight and COVID-19 Insights from new evidence](#)

⁸⁵ [Food Standard Scotland Covid-19 Consumer Tracker Wave 4](#)

⁸⁶ [Food Standard Scotland Covid-19 Consumer Tracker Wave 4](#); and Obesity Action Scotland (2020) [Lifestyle of Scotland's People Since the Coronavirus Outbreak](#)

Figure 19 Percentage of respondents reporting diet behaviours more or less compared to start of Coronavirus outbreak. Food Standards Scotland Consumer tracker survey wave 10 (July 2020)



Harmful alcohol consumption has been recognised as a major, long-lasting public health challenge in Scotland. Harmful drinking presents a risk of physical and mental health problems, as well as social and economic losses to individuals and society⁸⁷. Some of the harms from chronic excessive alcohol consumption include high blood pressure, chronic liver disease and cirrhosis, pancreatitis, some types of cancer, mental ill-health and accidents⁸⁸. People with problematic alcohol use are likely to have complex comorbidities meaning they are more at risk to harms from COVID-19, are more likely to engage in riskier behaviour and find it more challenging to comply with physical distancing⁸⁹.

Combined with substantial changes to the availability of alcohol in light of restrictions on hospitality settings and social gatherings, there is a clear need to understand the impact the pandemic may be having on harmful consumption behaviours. One concern is that the pandemic may lead to the establishment of harmful drinking patterns in a new cohort of people which, in the longer-term, may lead to the harms already outlined and have implications for alcohol support services. The pandemic is also having impacts on services supporting problem drinkers.

A number of measures are being tracked to understand the impacts, including service use and population consumption patterns, with surveys and sales data. COVID-19 has had impacts on alcohol use both at the population level and for those most in need of support. In addition, alcohol treatment services have been impacted with a significant drop in the number of treatment referrals, although this has been recovering to some extent⁹⁰.

⁸⁷ World Health Organization (2018) [Alcohol Fact Sheet](#)

⁸⁸ Mathers C, Stevens G and Mascarinas M (2009). [Global health risks: mortality and burden of disease attributable to selected major risks](#). Geneva: World Health Organization

⁸⁹ Royal College of Psychiatrists (2020) [COVID-19: Information for those who use drugs](#)

⁹⁰ Public Health Scotland (2020) [Drug and Alcohol Treatment Waiting Times report](#)

Population level data suggests there has been a change to the way people drink, with some drinking less as a result of lockdown and feeling the benefits while others reported engaging in more harmful drinking behaviour⁹¹. It is not clear at this stage what the longer term impacts of these changes will be. Further research is taking place to better understand changes in patterns of consumption, including alcohol sales data. Sales data to date indicate a change in drinking patterns following a move from 'on-trade' (i.e. sales of alcohol in hospitality settings) to 'off sales' (i.e. alcohol purchased to be drunk in private settings).⁹²

Drug Use

Drug related deaths in Scotland have been increasing in recent years which is a real cause for concern⁹³. There are demonstrated benefits of problem users engaging with support services⁹⁴ but the evidence suggests that engagement dropped as a result of the pandemic and there is a risk that this further impacts on drug-related mortality further down the line. People with problematic drug use are likely to have complex comorbidities, meaning they are more at risk to harms from COVID-19 and are more likely to engage in riskier behaviour and find it more challenging to comply with physical distancing⁹⁵.

COVID-19 has had impacts on drug use both at the population level and for those most in need of support. A number of measures are being tracked to understand the impacts including service use, the illegal drug market and recreational use. Specialist referrals for drug treatment, use of needle exchange and Opium Substitution Therapy (OST) all dropped with lockdown and were not fully recovered by early July⁹⁶. Drug-related A&E admissions spiked post lockdown which will be of particular relevance to monitor for those areas that moved into the new Level 3 and 4 restrictions. Survey results suggest that recreational drug use has changed – with an increase in cannabis but a decrease in stimulant 'party drug' use, whilst Opiate and Benzodiazepine use remains relevant⁹⁷.

Conclusion

In summary, changes in health care service demand and availability are likely to have short and long term consequences for disease prevalence, disability and mortality due to the changes in unscheduled and planned care, preventative services and people's willingness to seek health care.

As winter approaches, the negative impacts associated with Harm 2 may be further exacerbated. With fewer daylight hours and poorer weather conditions, people are

⁹¹ Alcohol Focus Scotland (2020) [Alcohol Focus Scotland and Alcohol Change UK Polling Statistics Summary](#)

⁹² [UK Alcohol Duty Statistics, May to July 2020 Update](#). HM revenue and Customs

⁹³ [Drug Deaths Taskforce: terms of reference. 5 July 2019](#)

⁹⁴ Dickie E et al. (2017) [Drugs related deaths narrative rapid evidence review: Keeping people safe](#). Edinburgh: NHS Health Scotland

⁹⁵ Royal College of Psychiatrists (2020) [COVID-19: Information for those who use drugs](#)

⁹⁶ Public Health Scotland, (2020) [Drug and Alcohol Treatment Waiting Times report](#)

⁹⁷ [Global Drugs Survey COVID-19 Special Edition: Key Findings Report COVID-19 and drug markets survey – month one summary. Crew, May 2020](#)

more likely to stay at home, have fewer opportunities for outdoor exercise and mental wellbeing may diminish further.

Early evidence shows that the impacts of the pandemic are being felt most sharply by those already most disadvantaged including young people, women, minority ethnic groups, disabled people and those with pre-existing health conditions.

Harm 3

Introduction

The third harm is to our broader way of living and to society that arises from the restrictions which Scotland, together with the other UK nations, have necessarily put in place to slow the spread of the virus. Detrimental effects can include, for example, increased isolation, particularly for those living alone, and the impact on children's well-being from closing schools.

Measurement of social harms is arguably much more complex and nuanced than economic or health measurement. Social harms may be more hidden, less tangible, more subjective, and less quantifiable. We therefore draw on a wider range of data and intelligence to understand them.

We take a number of factors into account. These include:

- Demographics: recognising the differential impacts, for example, on younger people;
- The time horizon and the importance of the longer term horizon recognising future impacts (e.g. consequences of loneliness, poverty, domestic abuse, Adverse Childhood Experiences); and
- The existing socio-economic inequalities in society and how they impact.

The Scottish Human Rights Commission criteria for a human rights-based approach to decision-making provides three additional factors that are used for the assessment process. In summary:

- Maintain minimum services/standards to enable a dignified existence;
- Prioritise the most vulnerable and ensure no discrimination; and
- Limit the extent and duration of any retrogression

COVID-19 affects everyone, but the harms caused by the pandemic are not felt equally. Particular groups (based on Equality Act protected characteristics and socioeconomic disadvantage) are disproportionately affected. It is important to remember that people do not neatly fit into single boxes. People and families will display a combination of different protected characteristics. It is important to remember both the intersectionality of protected characteristics and the wide range of family circumstances that influence the barriers people face and their lived experience. More detailed analysis of the impact of COVID and the four harms across protected groups is available at: <https://www.gov.scot/collections/equality-evidence/>

Impacts on equalities and human rights need to be reflected across all six dimensions (see table below), with analysis and decision-making recognising that the scale and nature of impacts will vary by protected characteristics. While our data sources do not always allow for breakdowns by specific population groups, we do this whenever we can and seek to supplement routine data and surveys with other sources of intelligence to reflect the experience of specific groups

Table 2 Dimensions of social harms

Dimension	Key features
1. Safety and security	Protection of vulnerable children and adults Crime rates, including cyber, and perceptions of crime Domestic abuse Criminal justice
2. Skills, learning and development	Early childhood development Student learning and attainment Career progression Participation in education, employment or training
3. Social capital and community cohesion	Ability to turn to someone for help Volunteering and helping behaviours Ability to influence decisions Digital exclusion
4. Loneliness, anxiety and fear of social interaction	Levels of loneliness and anxiety Effects of covid-19 on aspects of life Intentions post-lockdown
5. Economic security and welfare	Benefits claimant rates Fears about household finances; levels of debt Sense of purpose and self-respect
6. Social contract, trust in Government	Trust in advice and experts Compliance with suppression measures Uptake and satisfaction with services Views that Government is doing a good job

Safety and security

The key factors considered under the heading of safety and security are around the protection of vulnerable individuals and the safety of individuals in the community.

The number of referrals to children’s services decreased during the initial lockdown period, but in more recent months have been in line or slightly above equivalent figures for last year. In the week ending 02 December, 233 children were subject to an Inter-Agency Referral Discussion between Police, Health & Social Work, where there was information suggesting potential abuse or significant harm to a child. This compares with 197 such discussions at the same time last year ⁹⁸.

With people in lockdown, there were increased risks of domestic abuse and child abuse, raised stress and anxiety. Over the period of lockdown and Routemap Phases 1 to 3, many Violence Against Women and Girls organisations observed significant increases in crisis work with victims, with many people experiencing suicidal thoughts, depression and anxiety, increasing substance misuse as a coping mechanism, and/or increased levels of fear, both of the perpetrator and the virus⁹⁹. This position was repeated in a subsequent report updated to include October¹⁰⁰.

Some people find it difficult to self-isolate e.g. the travelling community and homeless and members of LBG community, if forced to stay with family who struggle to accept them.

⁹⁸ <https://public.tableau.com/profile/sg.eas.learninganalysis#!/vizhome/VulnerableChildrenandAdultProtection/Introduction>

⁹⁹ <https://www.gov.scot/publications/coronavirus-covid-19-domestic-abuse-forms-violence-against-women-girls-during-phases-1-2-3-scotlands-route-map-22-11-august-2020/pages/3/>

¹⁰⁰ <https://www.gov.scot/publications/coronavirus-covid-19-domestic-abuse-forms-violence-against-women-girls-during-phase-3-scotlands-route-map-11-august-11-october/pages/1/>

Since lockdown there has been an overall reduction in crime recorded by police. The overall number of crimes recorded by the police between April to October 2020 was 7% lower than the same period in 2019. In April 2020 recorded crime was 18% lower than April 2019. For the most recent month - October 2020 - recorded crime was 8% lower than in October 2019.¹⁰¹

Changes in police recorded crime is one indicator of the impact that the COVID-19 restrictions are having across society. For example, while there has been a reduction in most types of crime, including violence and sexual crime in April to October (compared to the same period in 2019), there has been an increase in some, such as fraud. Some caution is advised before attributing all changes to COVID-19 as longer term trends, which existed before the pandemic, may remain a factor in some types of offending recorded by the police.

In addition, a procedural change was made in April 2020 to how some crimes of which could involve a victim and a perpetrator in different physical locations are recorded (e.g. crimes which could be committed using digital technologies) and this change is likely to have led to additional crimes being recorded. At this stage we are unable to say to what extent this procedural change has impacted levels of recorded crime, though the 2020-21 National Statistics (to be published in September 2021) will provide users with an estimate of the number of additional crimes that were recorded as a result of this change.

Fraudsters are exploiting the spread of coronavirus in order to carry out fraud and cybercrime. Police have reported an increase in coronavirus related scams¹⁰². Many fraudsters choose a scam to employ against a particular grouping of people. For example, they may assume that older people are more likely to be at home during the day, and therefore more likely to be susceptible to doorstep crime. Younger people may be more targeted by online fraud, on the assumption that older people are less likely to use the internet, although this may not be the case in future as more older people go online.¹⁰³ A Scottish Government analysis of fraud recorded by the police in 2018-19 found that 28% was cyber enabled (i.e. the internet was used as a means to commit the crime). The average age of a victim was 47 years old, which was similar to where cases weren't cyber enabled (49 years old)¹⁰⁴.

The impact of court closures during lockdown has been significant. Courts are now returning to normal levels of activity, remote jury centres are in place for High Court trials and plans are in place for remote Sheriff Jury trials. The majority of court business can be resolved without a trial and latest figures published by the Scottish Courts and Tribunal Service (SCTS) show that the volume of cases concluded in October 2020 was 82% of the pre-COVID-19 level¹⁰⁵. However, the number of forecast outstanding trials (cases in the system that are likely to have a trial diet

¹⁰¹ <https://www.gov.scot/publications/recorded-crime-scotland-october-2020/>

¹⁰² <https://www.gov.uk/government/news/coronavirus-COVID-19-increased-risk-of-fraud-and-cybercrime-against-charities>

¹⁰³ https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/safe-at-home/rb_april15_only_the_tip_of_the_iceberg.pdf

¹⁰⁴ <https://www.gov.scot/publications/recorded-crime-scotland-2018-19/>

¹⁰⁵ <https://www.scotcourts.gov.uk/about-the-scottish-court-service/scs-news/2020/11/17/monthly-information-on-criminal-case-throughput>

fixed) were sitting at 37,900 in October 2020, more than double the 19-20 monthly average figure. Modelling by Justice Analytical Services¹⁰⁶ a few months into lockdown predicted that the justice system could take anything between 2 and 9 years to recover from the court closures, with a medium impact scenario of 4 years. Modelling suggested victims, witnesses and accused may wait an extra 3 to 16 months longer to have their case concluded at trial, with solemn courts (high courts and sheriff solemn courts) expected to have the longest waits and times for recovery.

Furthermore, courts are only one part of the system that is under strain. At the moment, prisons are near capacity and have very constrained ability to adopt single cell occupancy in the event of a local outbreak. Physical distancing has also placed severe constraints on criminal justice social workers (CJSW) who can do less group work and adopt more 1:1 approaches. Should court backlogs be "resolved", the main burden of COVID will be shifted to prisons and to CJSW as more custodial and community sentences are issued while there is no clear mechanism in place to deliver these sentences in a timely manner. Delays to justice, whether in the courts or downstream of courts, have serious implications for people's lives. Delays mean victims and witnesses facing prolonged involvement with the justice system that often forces them to relive traumas. They also mean accused people face the uncertainty of a trial, in many cases with their liberties restricted via bail or imprisoned (via remand) for an extended period in advance of their day in court. They also harm the wider community - those in need of CJSW interventions to help manage their circumstances and reduce their risk of re-offending are left without help and the community as a whole faces greater risks as the size and risk profile of the bail community increases.

Skills, Learning and Development

The consequences of the virus on children and young people have been undeniably negative. This ranges from impacts on early childhood development to school learning and attainment to broader participation in education and training. Children and young people have experienced disruption to their education, restrictions on play and social activities and limitations on family visits and gatherings.

While the lives of children and young people have been severely affected by the virus, the role played by children in transmission is limited. A recent review of transmission in children¹⁰⁷ noted that younger children appear to have a limited role in the transmission of the virus although the risk of the disease and transmission of the disease is likely to be higher in older than in younger children. In Scotland, case numbers match with this, and are far higher for older children with most cases in the 18-19 age range followed by the 16-17 age range and dropping off sharply in younger children. There is no current direct evidence that transmission within

¹⁰⁶

https://www.parliament.scot/S5_JusticeCommittee/Inquiries/20200814LettertoJCfromCSJupdateJASCourtsModelling.pdf

¹⁰⁷ <https://www.gov.scot/publications/coronavirus-covid-19-children-and-transmission/>

schools plays a significant contributory role in driving increased rates of infection among children¹⁰⁸.

There are clear risks in terms of equity and excellence, with disadvantaged learners at greater risk of negative consequences from school closures and home-based learning. Research by the University of Exeter, and the Centre for Economic Performance at London School of Economics (LSE), estimated that disadvantaged pupils could experience learning losses of between four and six months if COVID-19 school closures lasted several months¹⁰⁹

The impacts on children and young people are multiple. Children's unregulated activities play an important role in the lives of many children. They can be sources of fun, social interaction, physical activity, supervised spaces and vital provision to enable families to work while children are cared for. For vulnerable children, these sorts of activities go beyond simply being fun, they are a vital part of their wellbeing, development and even safety. Evidence from the OECD points out that the ramifications of the COVID-19 pandemic are more severe for certain groups of vulnerable children, with potential for some far-reaching effects.

The outbreak challenges the resilience of vulnerable children, as it increases, in children's environments, the number of already existing risks (e.g. reduced access to healthy food, high family stress, and absence of contact with supportive adults) and reduces the number of protective factors (e.g. school placements, access to play spaces and extra-curricular activities, and strong child protection systems)¹¹⁰

The COVID-19 Advisory sub-group on Education and Children's Issues commented on the need for children to interact:

the psychological literature unequivocally shows that children rely on social interaction with their peers to meet their broad developmental needs, including learning, well-being and positive mental health outcomes. There are particular impacts for children with additional support needs, for whom opportunities to interact regularly with their peers are especially important to facilitate social skills development and personal wellbeing.

Activities that have some direct provision or wellbeing impact on more vulnerable children score highly in societal benefits. From a public health perspective there is a very high negative impact on the physical and mental health and wellbeing and loss of interactions and engagement for large numbers of children and families.

Schools were closed in March due to COVID-19 restrictions. Throughout lockdown, children and young people whose parents/carers are key workers, and vulnerable children and young people, had access to care and schooling in settings outside of

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<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthcaresystem/adhoc/12536coronavirusanduniversitystudents3to8november2020greatbritain>

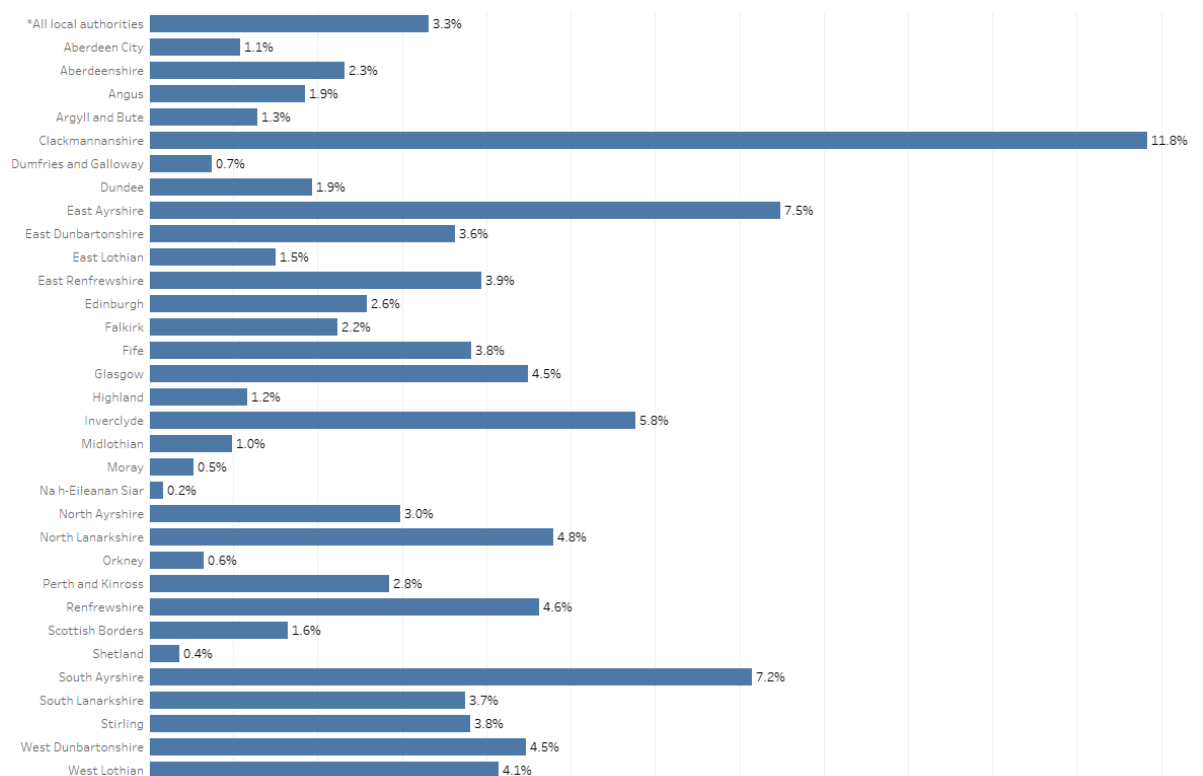
¹⁰⁹ https://www.exeter.ac.uk/media/universityofexeter/collegeofsocialsciencesandinternationalstudies/education/documentsfordownload/National_Tutoring_Service_April_2020.pdf

¹¹⁰ <http://www.oecd.org/coronavirus/policy-responses/combating-covid-19-s-effect-on-children-2e1f3b2f/>

the home. This was so that key workers could continue with their work, and vulnerable children and young people had access to safe support and learning. The number of children and young people at education settings gradually increased throughout lockdown, but remained a very low proportion of all children and young people.

From 11 August, schools started to re-open and pupils began to return to school. Provisional figures for 1 December show that the overall attendance rate at local authority primary, secondary and special schools that are open was 90.5%. The percentage of school openings where pupils were not in school for COVID-19 related reasons was 3.3% (1 Dec) and the absence rate for non COVID-19 related reasons was 6.2% (1 Dec)¹¹¹.

Figure 20 Percentage of openings showing pupils were not in school because of COVID-19 related reasons



Source: Scottish Government COVID-19: daily data for Scotland

Students and young people are also likely to be amongst the worst affected by economic impacts of COVID-19. Young people have historically been hardest hit by recessions and the longer-term consequences of these. Young people may experience lasting damage if they enter the labour market during a recession. If they find a job earnings may be up to 6% lower after one year than they were for non-

¹¹¹ Data will be affected by public and school holidays, in particular the week beginning 12 October, where schools in 29 local authorities were closed for the October break and so were not included in these statistics.

recessionary cohorts and still 2% lower after five years, according to the Institute for Fiscal Studies (IFS). This effect is particularly evident for school leavers¹¹².

Young people themselves are concerned about the impact on their wellbeing and their future. ONS data on the social impact of COVID-19 on young people shows that among young people (aged 16 to 29 years) who were worried about the effect COVID-19 was having on their lives, their main concerns were the effects on schools or universities (24%), their well-being (22%), work (16%) and household finances (16%)¹¹³.

In April 2020, the Scottish Youth Parliament, YouthLink and Young Scot published findings from a survey of 2,421 young people¹¹⁴. At the time of the survey, 11% of respondents were at university and 8% were at college. Of those who answered a question about their employment situation, 36% said they were moderately or extremely concerned. Of those who answered a question about their financial situation, 30% said that they were moderately or extremely concerned.

The most recent study amongst students was run between 3 and 8 November by the ONS who ran a pilot student COVID-19 insight study¹¹⁵, with 4,322 students responding via an online platform from a small sample of universities in England and one university in Scotland. Key relevant findings from these experimental statistics include:

- On average, 65% of respondents indicated that their wellbeing and mental health had worsened since starting in the autumn term of 2020: 33% said 'slightly worse', 32% said 'much worse';
- This represents an increase on the previous wave of the pilot¹¹⁶, when 49% of students reported worsening wellbeing and mental health;
- Reports of worsening wellbeing and mental health were highest among undergraduates who are not first year students (73%), followed by 60% of first year undergraduates, and 52% of postgraduate students;
- 80% of respondents think that COVID-19 poses a major or significant risk to friends and relatives. 66% think that COVID-19 poses a major or significant risk to themselves;
- The mean life satisfaction score for the whole population of students was 5.7, which is statistically significantly lower than the life satisfaction of the general population in Great Britain at 6.5¹¹⁷; and

¹¹² <https://www.ifs.org.uk/publications/14816>

¹¹³ Office for National Statistics, 22 June 2020,

Coronavirus and the social impacts on young people in Great Britain: 3 April to 10 May 2020, available:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/coronavirusandthesocialimpactsoneyoungpeopleingreatbritain/3apriltto10may2020#main-points>

¹¹⁴ Respondents ages ranged from 11 – 25. 92% of respondents were aged 18 or younger; 46% were aged 15 – 17.

¹¹⁵

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthcaresystem/adhoc/s/12536coronavirusanduniversitystudents3to8november2020greatbritain>

¹¹⁶ 12 – 18 October, smaller sample of universities, England only

¹¹⁷ As for 28th October – 1st November 2020

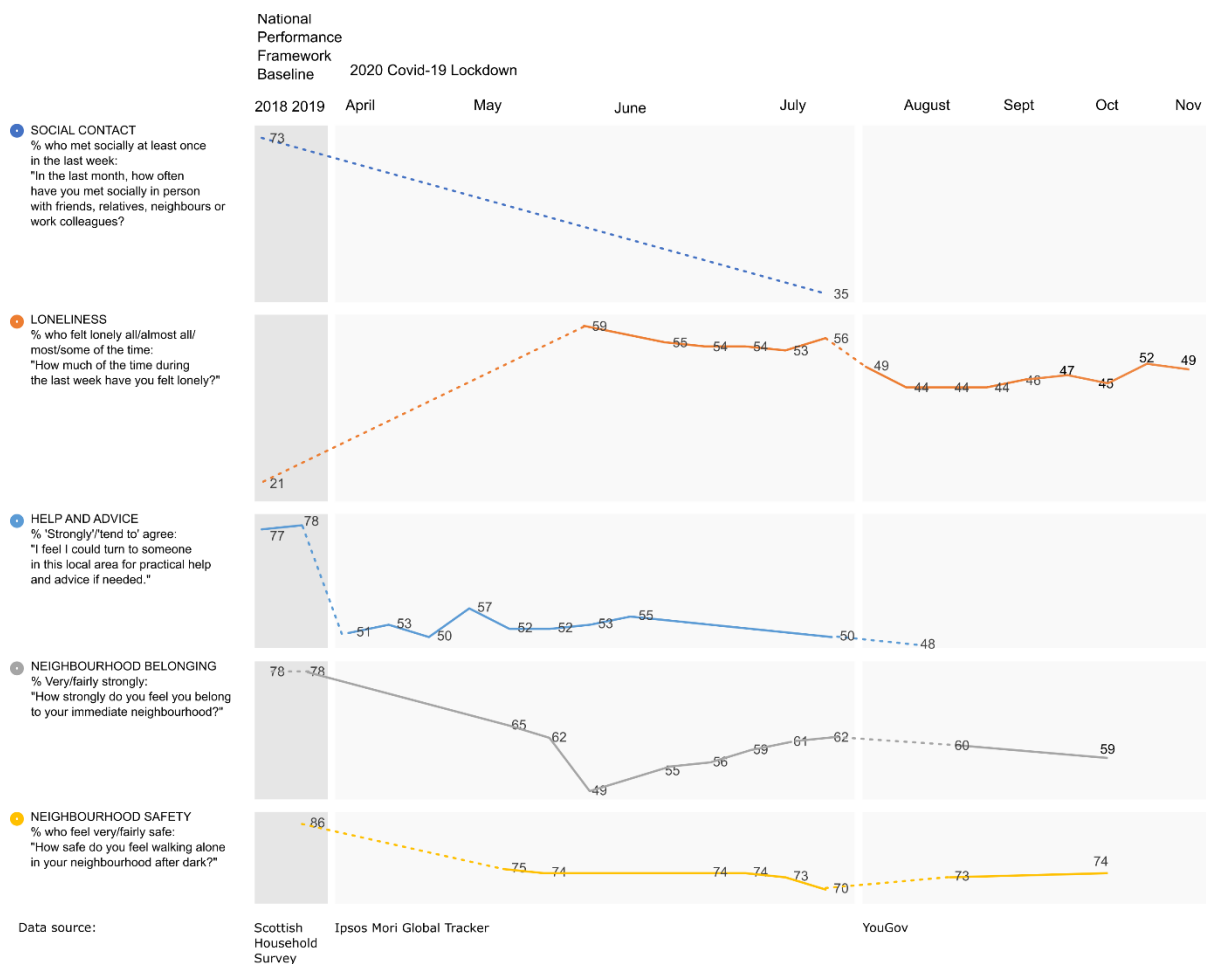
- When asked how anxious they felt yesterday on a scale of 0 to 10¹¹⁸, students reported an average score of 6.5. This is statistically significantly higher than the anxiety rate of the general population in Great Britain (4.3).

Social capital and community cohesion and loneliness, anxiety and fear of social interaction

More than 900,000 people live alone - over a third of Scottish households ¹¹⁹. Social capital, cohesion and issues of loneliness are particularly important when considering this group within the population.

An overview of a small number of indicators shows deterioration in aspects of community cohesion, contact and loneliness, see Figure 22.

Figure 21 Social capital, community cohesion and loneliness



The above indicators show a downward trend in all aspects of community cohesion and a rise in the levels of loneliness. A meta-analysis of public health studies indicated that lack of social connection heightens health risks as much as smoking

¹¹⁸ Where 0 is 'not anxious at all' and 10 is 'completely anxious'

¹¹⁹ <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-estimates/2019>

15 cigarettes a day or having alcohol use disorder. It also found that loneliness and social isolation are twice as harmful to physical and mental health as obesity.¹²⁰

Weekly polling data is used to monitor loneliness and anxiety. A summary of findings on loneliness shows that:

- 47% report that they experienced loneliness in the past week (YouGov, 1-2 Dec) which is higher than the pre-COVID-19 benchmark (21%); and
- Loneliness is particularly high amongst those aged 18-44 compared to those aged 45+ (YouGov).¹²¹

Loneliness may be more of an issue for households and individuals without internet access. In general, older people are less likely to have internet access and even if they do they are less likely to use it:¹²²

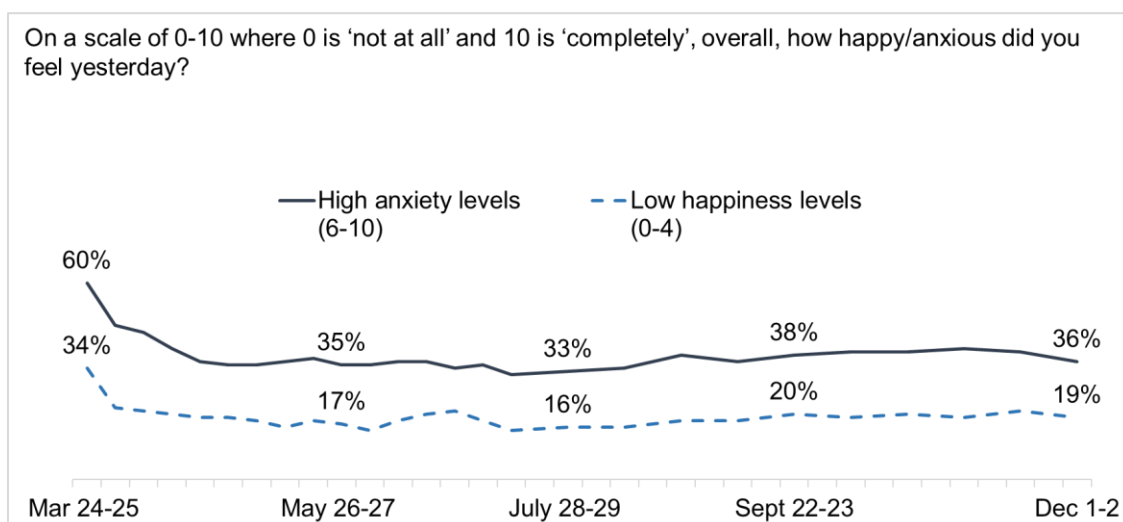
- 36% of households, where all adults are over 65, do not have home internet access, with only 57% of over 65 year olds with internet access using it at all; and
- 60% of households where all adults are over 80 do not have internet access, with 72% of over 80 year olds not using it at all.

People living with low income are less likely to have internet access or to use it: 20% of low income households do not have internet access and 16% do not use it regularly.

Looking at happiness and anxiety, the figures show a degree of stability:

- Over a third (36%) report high anxiety and 19% report low happiness (YouGov, 1-2 Dec) which has remained fairly stable since April, as shown in Figure 23.

Figure 22 Happiness and anxiety reported



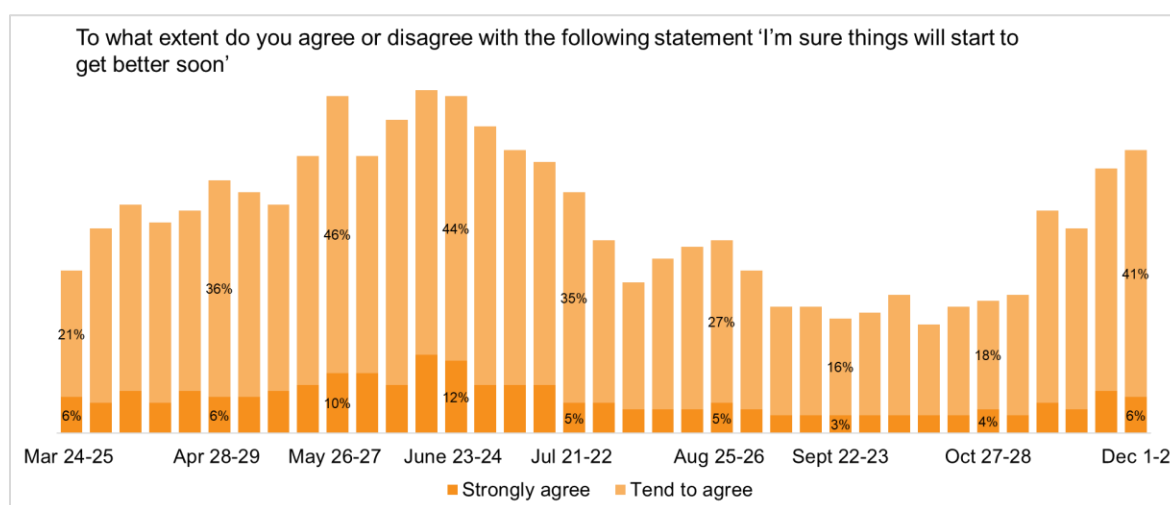
¹²⁰ <https://journals.sagepub.com/doi/10.1177/1745691614568352> Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review

¹²¹ <https://data.gov.scot/coronavirus-covid-19/detail.html#loneliness>

¹²² General information: <https://shs.theapsgroup.scot/2019/key-findings/42/> and for additional information: <https://shs.theapsgroup.scot/2019/supplementary-analysis/>

- Worry about the Coronavirus situation (65%) remains high and stable. With the festive period coming up, around three quarters (77%) are worried about increasing the spread of the virus among older and more vulnerable people if restrictions are eased, and around a third (32%) are worried about their mental health (YouGov, 1-2 Dec).
- Optimism that things will start to get better soon has risen in recent weeks, from a fifth (22%) agreeing that things will get better soon at the end of October (27-28 Oct), to almost a half (47%) at the beginning of December (YouGov, 1-2 Dec).

Figure 23 Optimism ‘I’m sure things will start to get better soon’



Economic security and fears

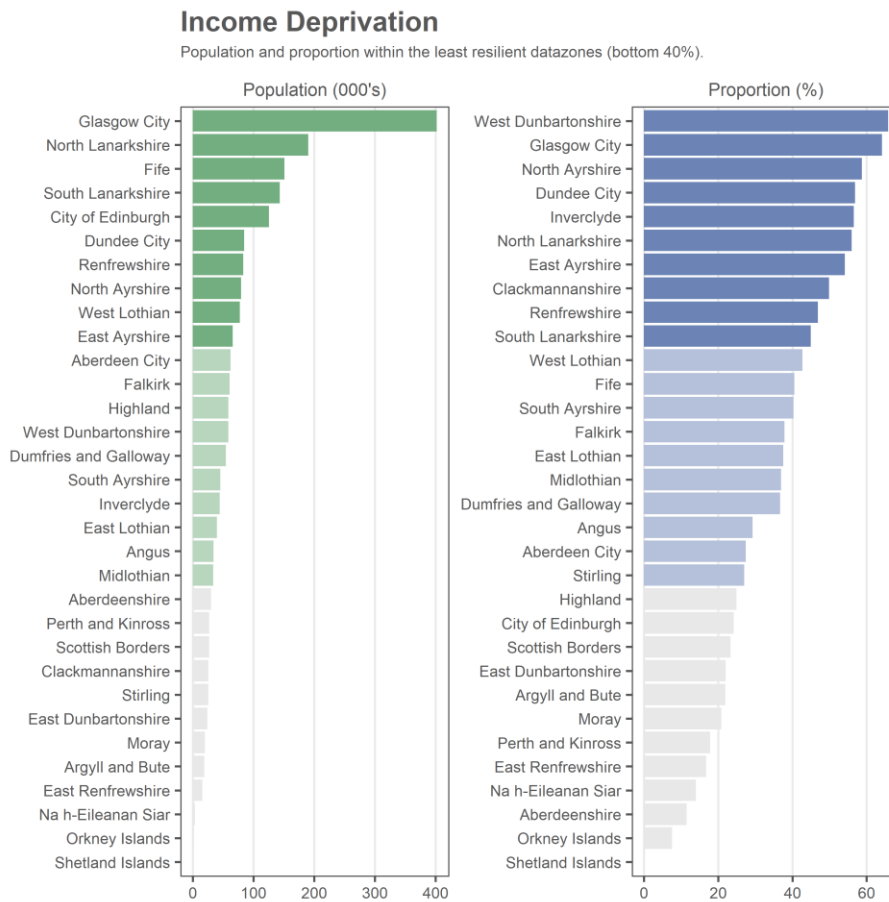
Prior to the COVID-19 pandemic, 19% of working-age adults in Scotland were in relative poverty (after housing costs) equivalent to 640,000 adults; 24% of children (230,000 children) were in relative poverty

Women are more likely to have caring responsibilities which may make it hard to maintain or take on employment if childcare and/or public care services are restricted. Evidence suggests that with school and nursery closures, housework and childcare have fallen more on women than men. Carers UK estimate that the number of unpaid carers has increased in the UK by 50% as a result of the pandemic, bringing the total to 13.6 million. Women are more likely to be providing this care ¹²³.

Income deprivation can be found across Scotland but particular areas of Scotland are more likely to be affected. Recognising this differential impact across local authorities is an important element of the levels approach.

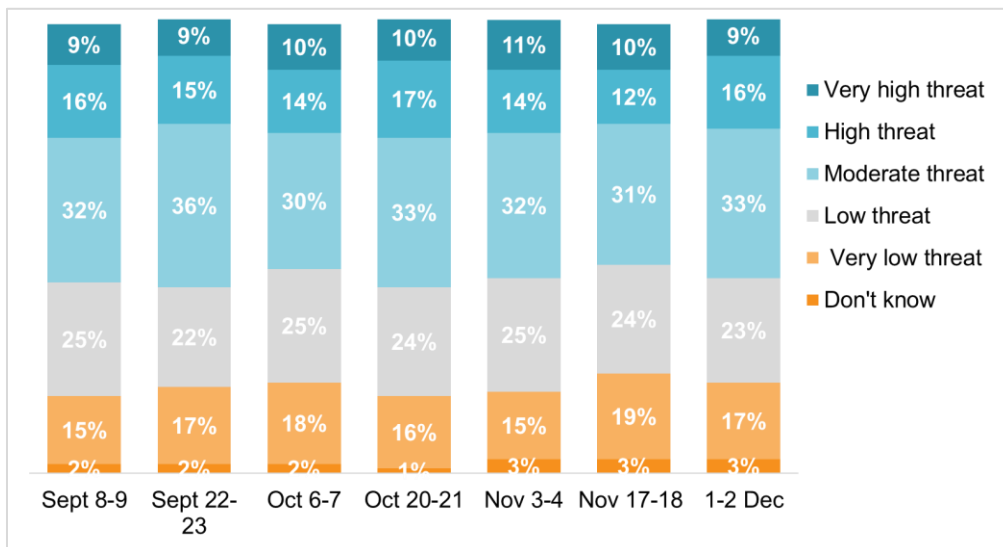
¹²³ https://www.carersuk.org/images/CarersWeek2020/CW_2020_Research_Report_WEB.pdf

Figure 24 Income deprivation by Local Authority



In recent polling, one quarter (25%) perceived a high or very high threat to their job from Coronavirus (YouGov, 1-2 Dec).

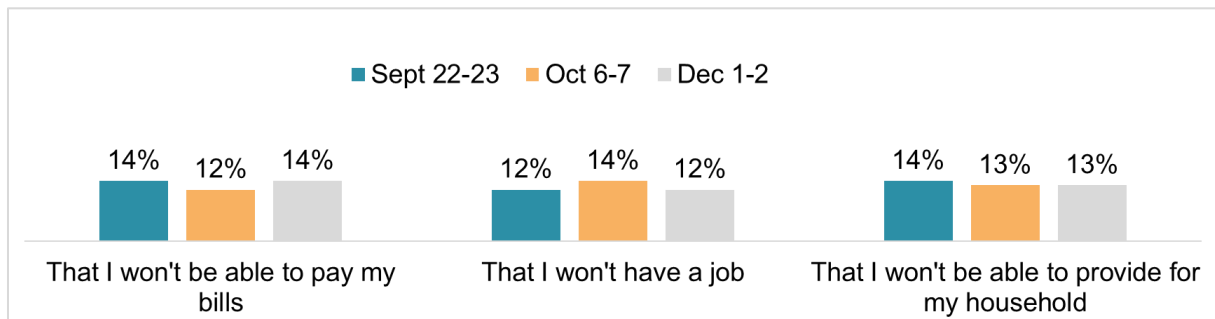
Figure 25 Perceived threat to job amongst those employed



YouGov weekly Scotland survey. Base: Those in employment (n=405-467)

Between one in seven and one in eight of those surveyed were 'very' or 'extremely' concerned that they won't be able to pay bills, have a job, or be able to provide for their household in one month's time.

Figure 26 Proportion of respondents who were very/extremely concerned about the scenarios shown



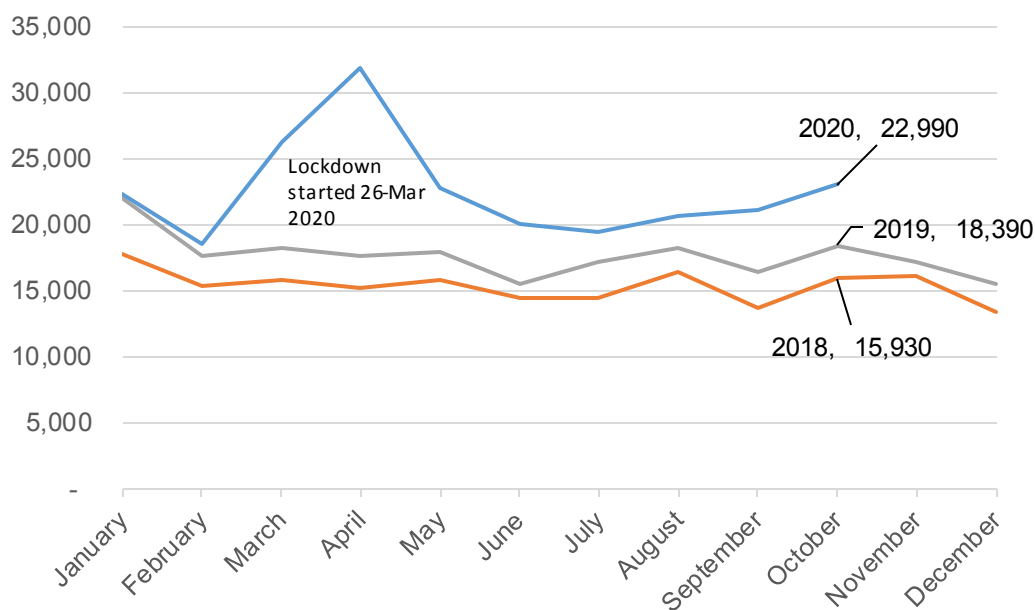
Source: YouGov weekly Scotland survey. Base (n=1005-1012)

One of the key sources of financial support available to those in need is the Scottish Welfare Fund crisis grant. The Scottish Welfare Fund is administered by local authorities. Crisis grants aim to help people who are in crisis because of a disaster or an emergency.

In March 2020 demand for crisis grants started increasing rapidly compared to previous years and peaked in April 2020. Demand then decreased until July 2020, but remained higher than in the same months in 2019 before increasing again in September and October 2020. It is likely that these increases in demand for Crisis Grants have been due to financial hardship resulting from COVID-19.

Applications were 25% higher in October 2020 than in October 2019 as shown in Figure 28.

Figure 27 Scottish Welfare Fund Crisis Grant Applications



Source: [Scottish Government](#)¹²⁴

Having a job can also be challenging as the default of working from home is difficult for some people, particularly those in more crowded accommodation and in lower paid jobs. Additional concerns regarding the costs of working from home during the winter will also affect wellbeing. A business survey shows that in early September¹²⁵

- 27% of people were working remotely;
- 55% of people back at their normal work; and
- 15% still on furlough

The percentage working from home had hardly changed from June when 28% were working from home and 35% were at their normal work. The change in the proportion of people at work has come about from people coming off furlough.

Employees may also be anxious about returning to work. As more parts of the economy remain open or open up, they will need assurance about safety to enable them to continue to work in a safer environment and supporting the functioning of the economy. That should be positive for employees' mental wellbeing. This should also have a positive impact in particular for those in lower socio economic groups and from the BAME community regarding transmission risks, income and poverty and isolation.

Social contact/trust in government

Trust in Government is a crucial underpinning to compliance with restrictions and for supporting general population wellbeing. Clarity about what is required is also important for reducing anxiety and promoting wellbeing. Polling over time shows that

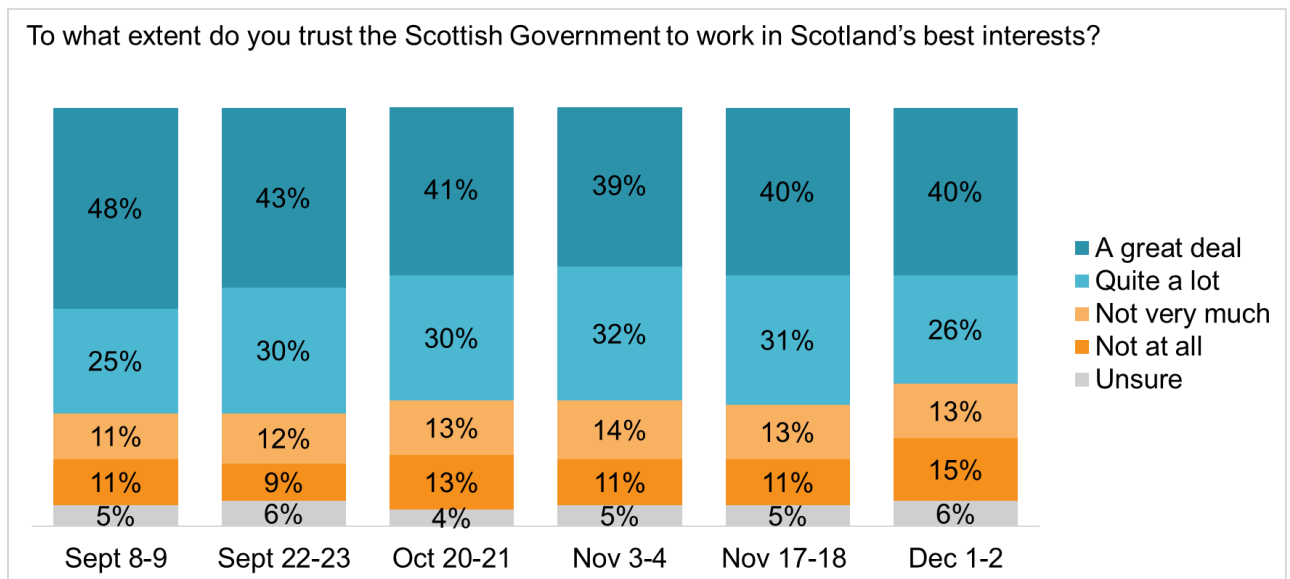
¹²⁴ <https://www.gov.scot/publications/swf-monthly-management-information/>

¹²⁵ ONS Business Impact of Coronavirus Survey

trust in the Scottish Government's approach to handling Coronavirus is largely positive and stable:

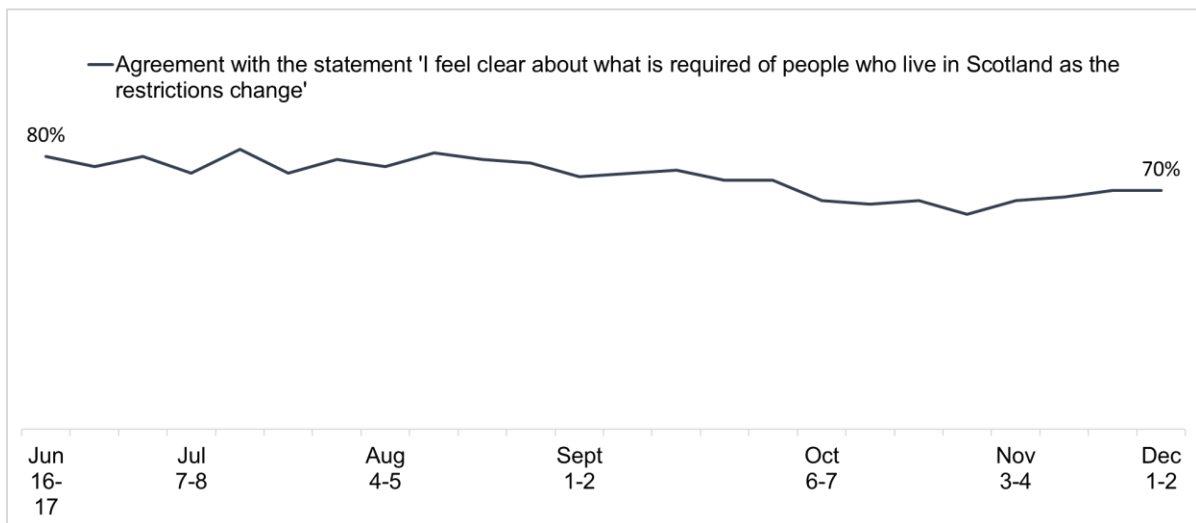
- Three quarters (75%) agree that following the Government's advice is the best thing to do (YouGov, 1-2 Dec)
- The majority (58%) trust the Scottish Government to decide when and how it's best to lift and re-impose restrictions (stable with the end of October) (YouGov, 1-2 Dec)and
- Two thirds (66%) trust the Scottish Government a great deal/quite a lot to work in Scotland's best interests (YouGov, 1-2 Dec). This was 71% at the end of October (YouGov, 20-21 Oct).

Figure 28 Trust in Government



The majority feel clear about what is required of people (70%) (YouGov, 1-2 Dec), stable since the beginning of October, although this is down from 81% in mid-August (YouGov, 11-12 August).

Figure 29 Clarity on restrictions



- Just under a quarter (23%) admit to doing something outside the restrictions or guidance in the past week and 19% have met up with other people in a way that is outside of the guidance (YouGov, 1-2 Dec).¹²⁶

¹²⁶ Non-compliant actions relate to restrictions on meetings/gatherings indoors and outdoors, hugging/kissing, car sharing, travel and face coverings

Conclusions

Approaching the winter, negative social impacts may be amplified. Those already closest to the poverty line will struggle most and may have used up any reserves they had earlier in the pandemic. We know that many families have very limited savings.

In winter weather, outdoors living is less attractive and people may be even more confined in their homes leading to increased problems of domestic violence and abuse. The public mood is worried about the future and unsure what is happening,

There will be fear of increased isolation and loneliness for some groups. We are already seeing increased mental health problems including amongst younger people.

Throughout the pandemic, negative impacts fall most severely on those in lower socio-economic groups, for example, through increased transmission risk, through inability to work from home, income loss from workplace closure, loss of access to health services and confinement in a less suitable home. The impacts are fully set out in other SG publications on COVID-19 and equalities¹²⁷.

¹²⁷ <https://www.gov.scot/collections/equality-evidence/>

Harm 4

Introduction

The economy is central to our wellbeing in Scotland, whether it is through the provision of direct services and goods, provision of taxes to fund public services like health and welfare, or by providing direct opportunities for employment and income.

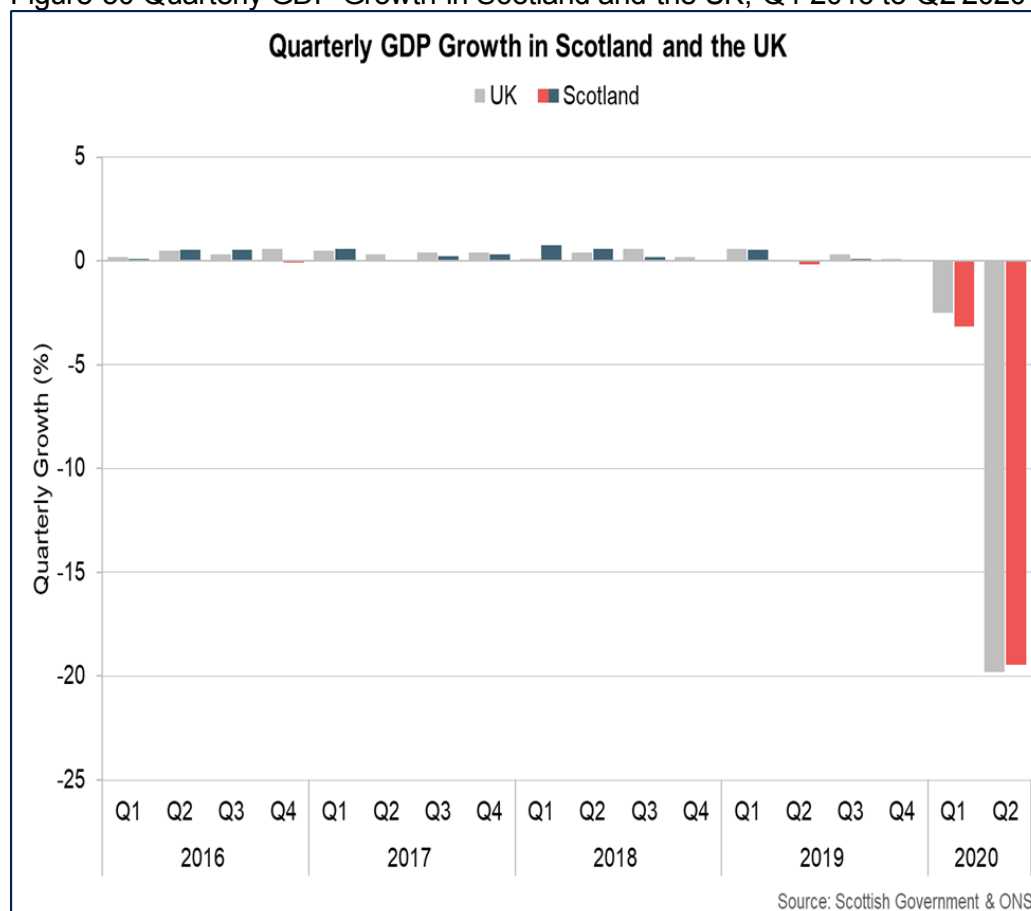
Our business base is diverse and there are many individuals and households across Scotland that form part of it and they are providing goods and services for local communities, as well as to international markets. The impact of COVID-19 has materially changed how we interact with the economy daily and will reset many of these key interactions going forward.

The latest evidence continues to show the scale of the economic shock that Scotland, like other countries, has experienced as a result of the Coronavirus pandemic.

Output, Turnover and Business Activity

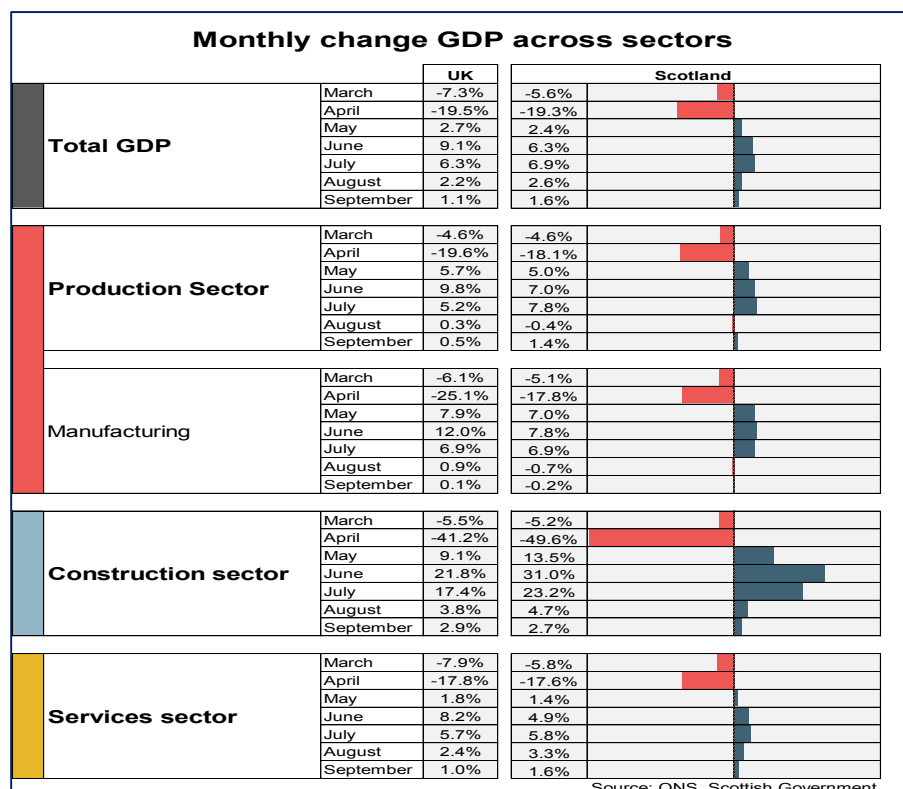
Scottish GDP fell 19.4% in quarter 2 2020 (UK: - 19.8%) – its biggest fall in quarterly GDP on record and it followed a 3.2% contraction in quarter 1 2020. The contraction over this period was similar to the UK as a whole. The size of this contraction is not surprising given that large parts of the economy were required to close during lockdown in order to protect lives.

Figure 30 Quarterly GDP Growth in Scotland and the UK, Q1 2016 to Q2 2020



Monthly GDP figures show the pattern of economic activity following lockdown and partial reopening of the economy. Again, the pattern of change in monthly GDP is similar between Scotland and the UK as a whole. Despite growth in output in the months May to September, Scotland's GDP remained 7.6% below its pre-COVID-19 level in February (UK: 8.2%).

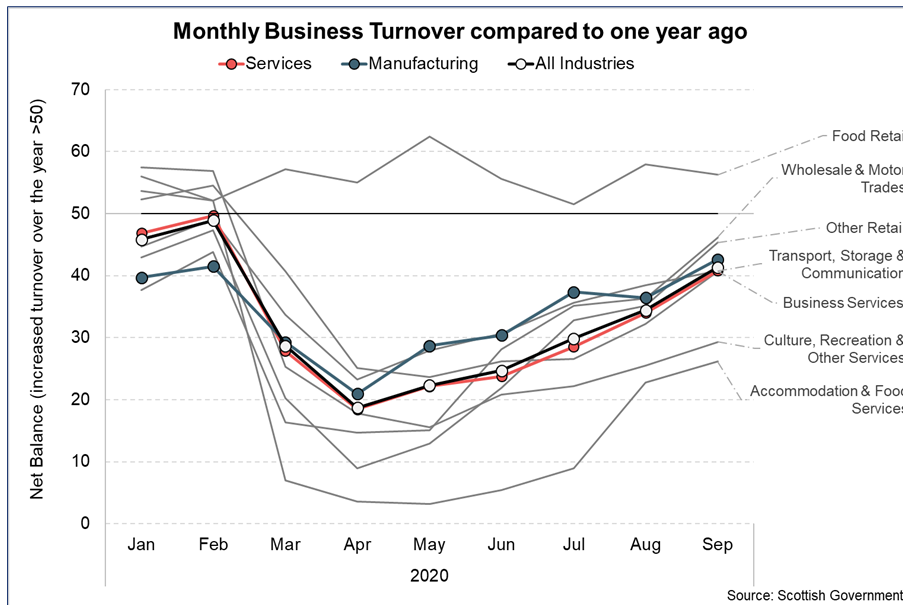
Figure 31 Percentage Change in Monthly GDP, Scotland and the UK, March to September 2020, by Sector



Following large contractions in March to June, business activity in Scotland stabilised and bounced back between July and September, albeit there are signs that the pace of recovery has slowed from August and into September amid continued heightened uncertainty, subdued demand and the introduction of local restrictions.

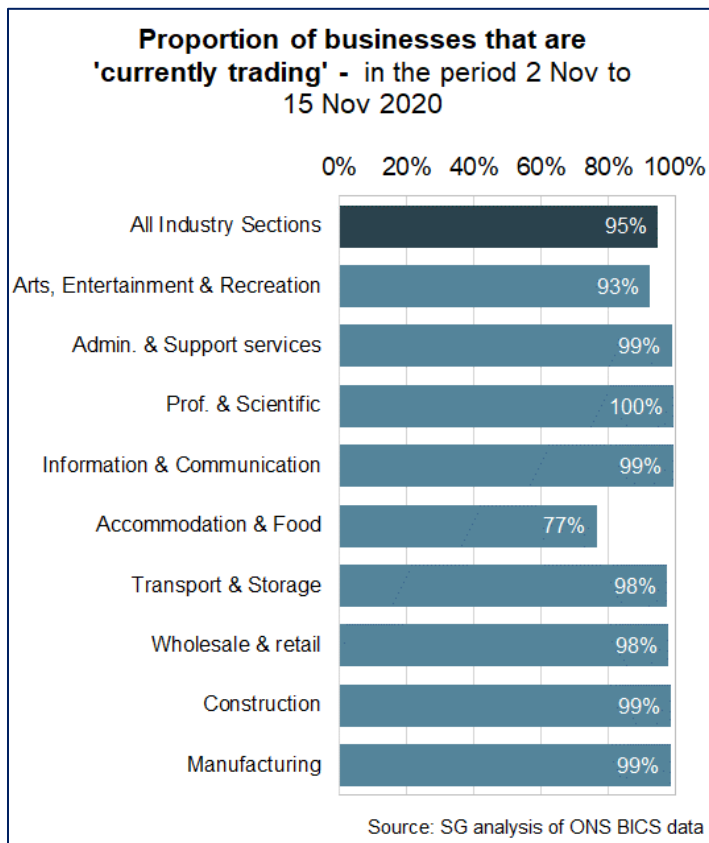
The Monthly Business Turnover Index for Scotland for September indicates that business turnover has continued to strengthen for the fifth month in a row, but remains significantly below pre-pandemic levels. Some sectors of the economy, such as the more consumer-facing sectors, have been particularly hard hit.

Figure 32 Monthly Business Turnover by Sector, Scotland, Compared to the Previous Year



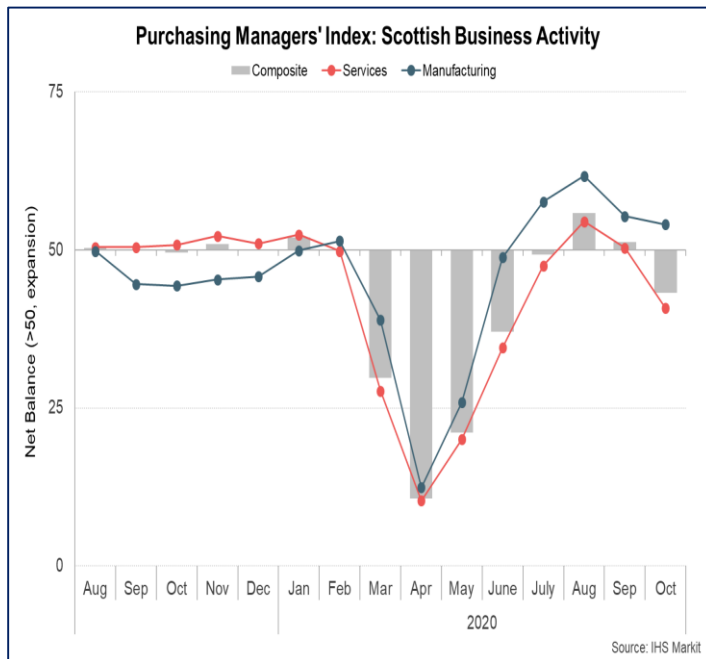
This is reflected in the differences in the proportion of businesses trading by sector. While there are 95% of business trading overall, as at the middle of November, the Accommodation and Food Services has 77% trading and the Arts, Entertainment and Recreation sector has 93% trading. These sectors have therefore been disproportionately affected, with higher proportions of businesses still closed/operating below capacity.

Figure 33 Proportion of businesses currently trading by sector, 2 November to 15 November 2020



The latest business activity survey (Purchasing Managers' Index) reported that Scottish private sector business activity contracted sharply in October for the first time since July 2020 and as new restrictions on economic activity were introduced. The contraction in business activity in October suggests that there is a risk of a further contraction in economic output in the final quarter of 2020.

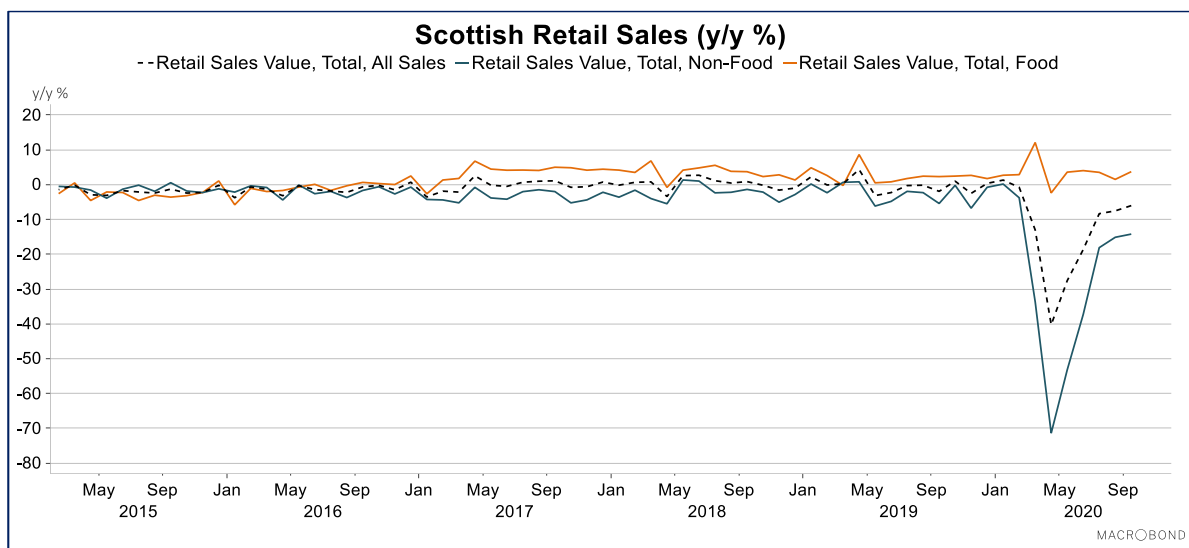
Figure 34 Monthly Scottish Business Activity, August 2019 to October 2020



Retail Sales

Scottish Retail Consortium data on retail sales for September reported an annual decrease of 6% in total retail sales in Scotland, improving slightly from the 7.5% annual fall in August and further strengthening from the record fall in April (40.3%). Food sales increased by 3.7%, while non-food sales fell 14.2%. The combination of restrictions, pressure on incomes, subdued sentiment and heightened uncertainty continue to impact consumer activity.

Figure 35 Scottish Retail Sales

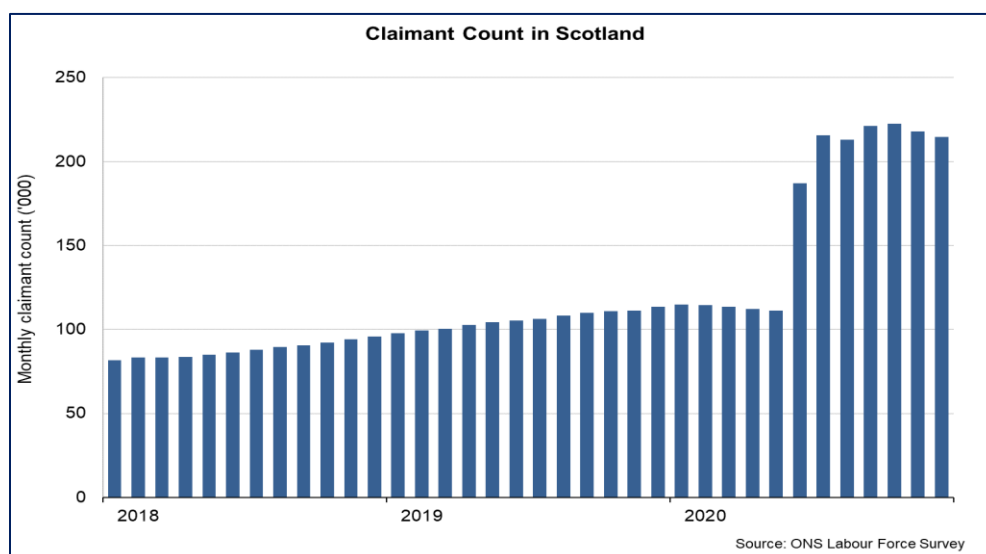


Labour Market

The impact of the pandemic on Scotland's labour market is also continuing to emerge and is likely to worsen over the coming months. The most recent labour market figures for the period until July to September 2020 show:

- Unemployment rate remaining at 4.5% and Scotland's employment rate rose by 0.4 percentage points over the quarter to 74.0%;
- At the end of August, the Coronavirus Job Retention Scheme was supporting around 10% of employees in Scotland;
- HMRC experimental early release data for October 2020 show 71,000 fewer people were in pay-rolled employment compared with March 2020 and for employees still working, the average hours worked per week (in the 3-months to July-Sept 2020) was 27.6 hours, down 11.7% (3.7 hours) from the same period one year ago;
- New job opportunities are depressed across almost all sectors with vacancies at 62.2% of their 2019 average, (ONS Adzuna data, 6 November); and
- Scotland's Claimant Count in October (Jobseeker's Allowance and claimants of Universal Credit who were claiming principally for the reason of being unemployed) is 93% higher than in March and has been over 200,000 for each of the 6 months to September (Figure 37);
- We are likely to see some rises in inequality with young people shown to be particularly impacted so far with potentially long lasting scarring effects (greater falls in employment for young people than any other age group, ONS Labour Force Survey).

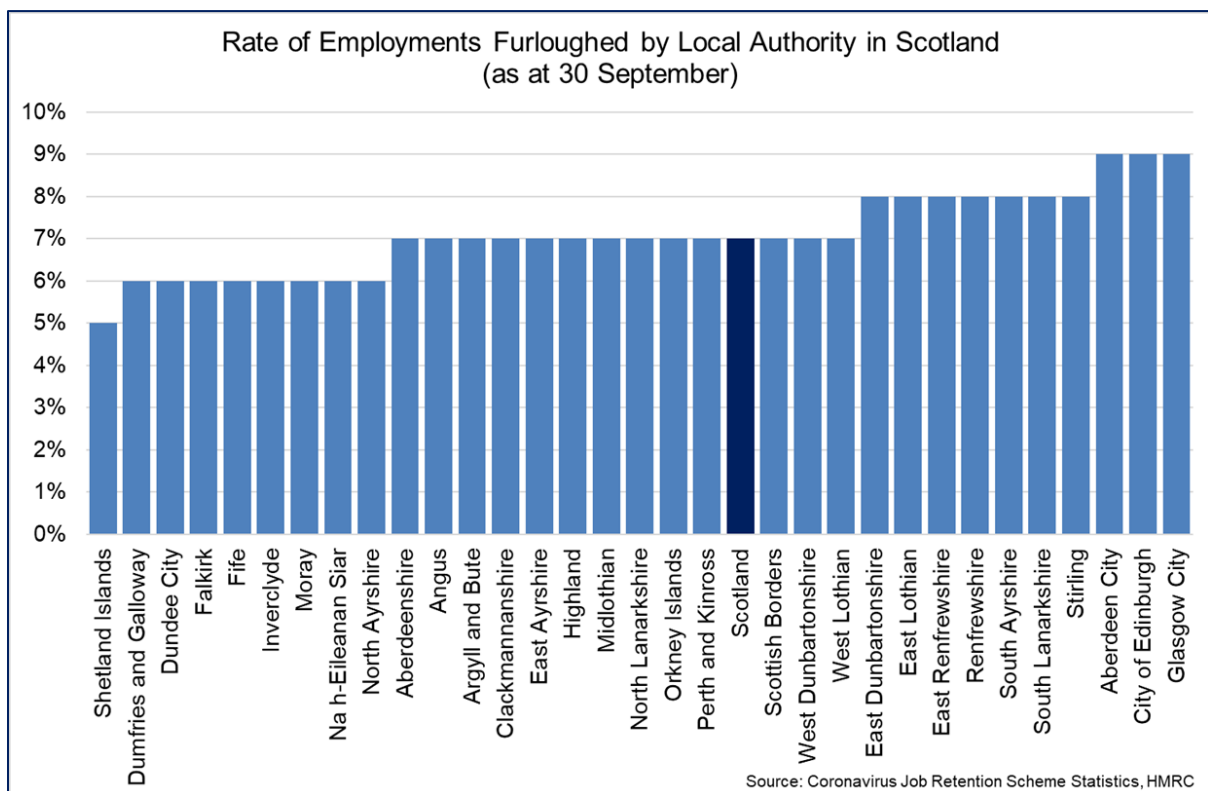
Figure 36 Monthly Claimant Count in Scotland, up to September 2020



Note: Refers to Jobseeker's Allowance and claimants of Universal Credit who were claiming principally for the reason of being unemployed

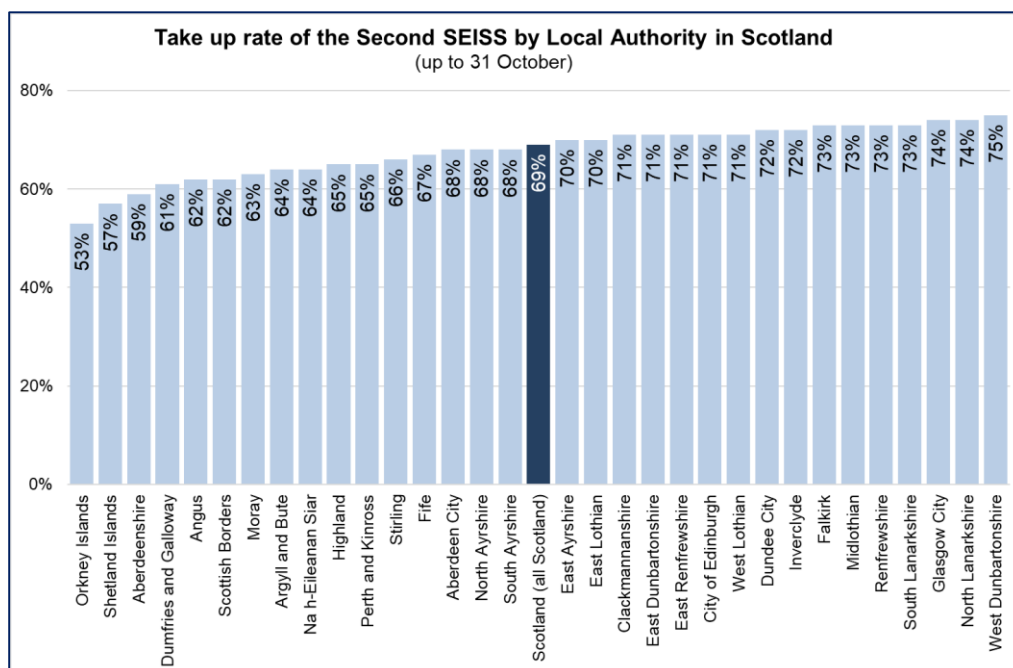
The support schemes that have been put in place have protected jobs and the income of the self-employed. The latest (provisional) furlough scheme data for Scotland shows that at the end of September 2020, 183,200 employments in Scotland were on furlough under the Coronavirus Job Retention Scheme. Of those employments furloughed, 108,000 were on full furlough and 75,100 on partial furlough. The number of employments furloughed continued to decrease during September. The take up rate of employments furloughed varied across Scotland ranging from 5% to 9%. Aberdeen City, City of Edinburgh and Glasgow City had the highest take-up rates (9%).

Figure 37 Take up of the Coronavirus Job Retention Scheme, Scotland, September 2020, by Local Authority



HMRC data show that by end of October, 142,000 claims in Scotland had been made to the second Self Employment Income Support Scheme (SEISS). This represents 67% of eligible population, with an average claim of £2,500. By local authority the take-up rate was highest for West Dunbartonshire (75%), Glasgow City and North Lanarkshire (74%), Falkirk, Midlothian, Renfrewshire and South Lanarkshire (73%).

Figure 38 Take up of the Second Self Employment Income Support Scheme, Scotland, 31st October 2020, by Local Authority

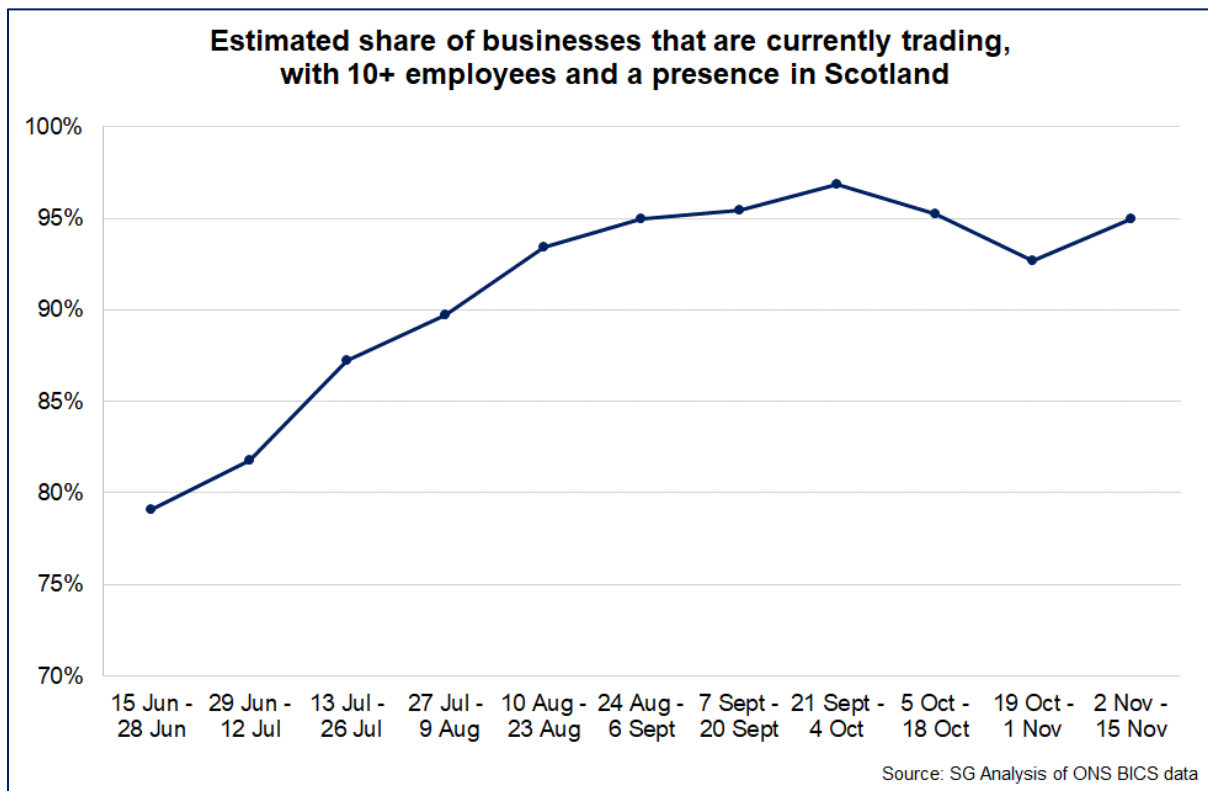


For the second SEISS individuals were able to claim a taxable grant worth 70% of their average monthly trading profits, paid out in a single instalment covering three months' worth of profits, and capped at £6,570 in total.

Business Resilience

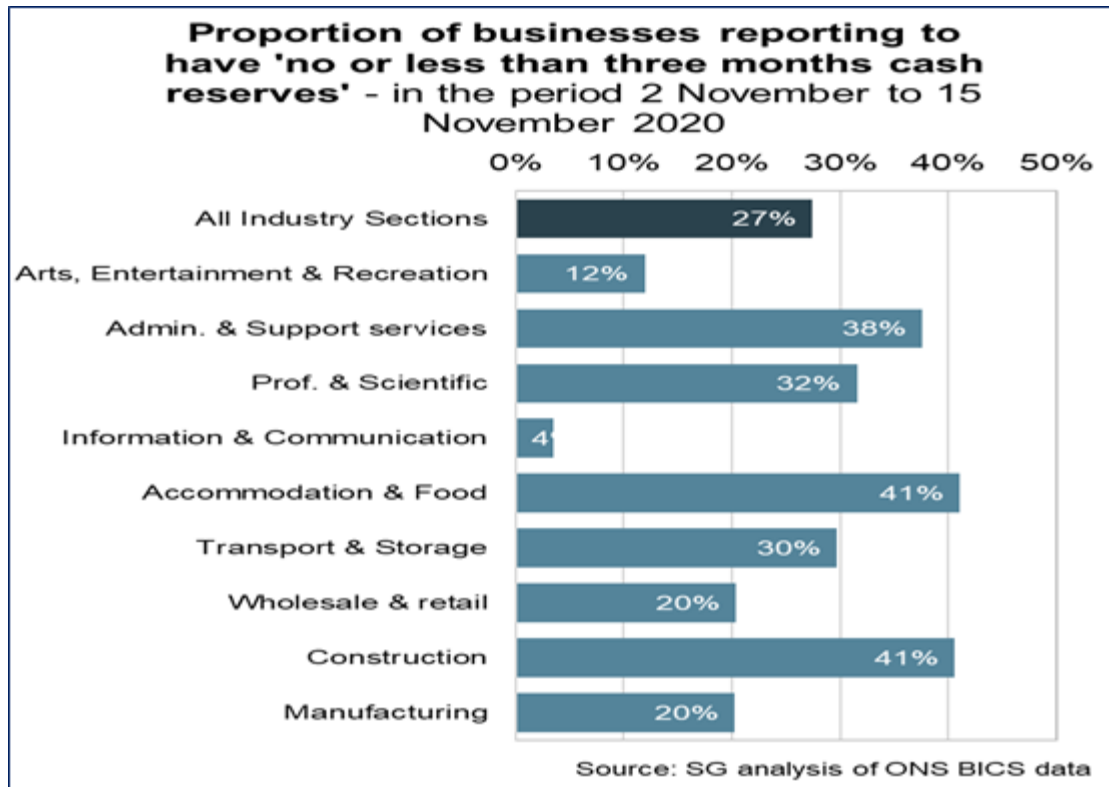
In mid-November, the Scottish estimates of ONS Business Impact of Coronavirus Survey (BICS) data reported that 95% of businesses with a presence in Scotland were currently trading. This has increased substantially since June after falling back in September.

Figure 39 Share of Businesses Trading Over Time, 15 June to 15 November 2020



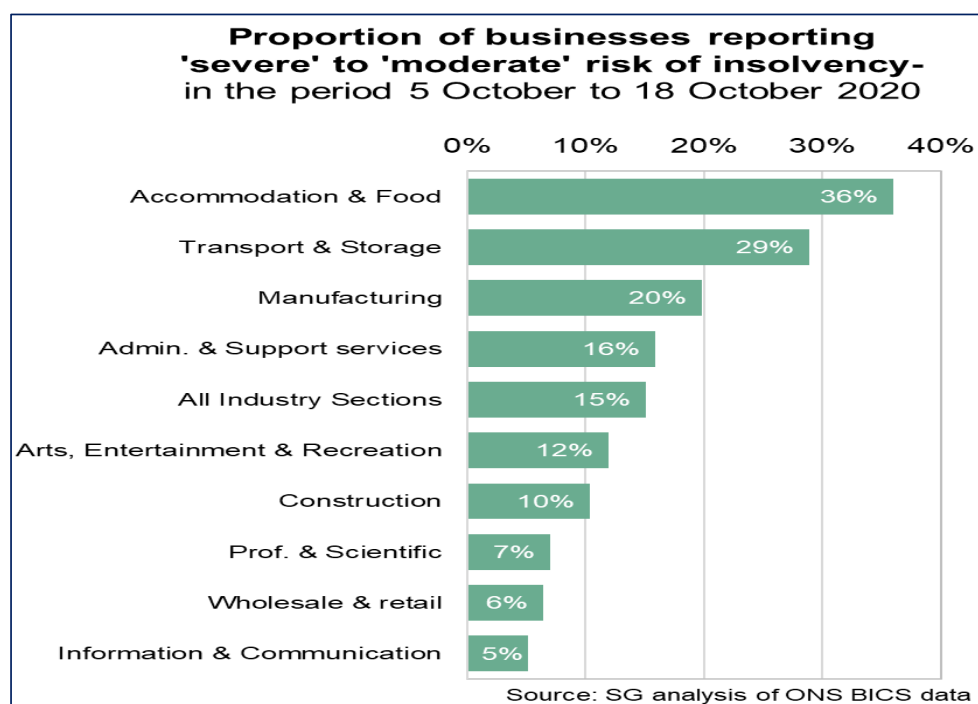
Business resilience is weakening and survey evidence suggests that many of these businesses have very weak cashflow and are facing the risk of insolvency. In the first half of November, 27% of businesses reported they had no, or less than three months, cash reserves. This overall proportion has remained within the range of 26% - 34% since June. However, the rate varies by industry sector, with highest rates for Construction (41%) and Accommodation & Food Services (41%).

Figure 40 Proportion of Businesses Reporting weak cash reserves, 2 to 15 November 2020



In the first half of October, 15% of businesses reported their risk of insolvency was moderate or severe. The Accommodation & Food Services industry was the sector with the highest share of businesses reporting their risk of insolvency was moderate or severe (36.0%).

Figure 41 Proportion of Businesses Reporting risk of insolvency, October 2020



Conclusions

The dimensions of economic harm include the direct impact on the economy and are inter-related to health and social harms through the indirect effects that a weaker economy can have on health and society through, for example, the impact of unemployment. The scarring in terms of social and health effects will come via the longer recovery period, as we deal with the impacts of higher unemployment and financial insecurity and hardship for many businesses, individuals and households. The damaging effect on poverty and inequality may be profound.

There will also be gender and age-related dimensions of economic harms that are important to consider as different groups in society will be impacted in different ways depending, for example, on their labour force participation and on where they live.

As the initial lockdown has been eased, and as business and society have reopened, we have seen a reversal of the output contraction for many parts of the domestic economy. However, not all sectors have come back immediately - or to the same extent - as external demand, consumer demand and business models have changed significantly.

The ongoing (and potentially additional) restrictions to suppress COVID-19 will further weaken business resilience, although the overall economic impact of the restrictions is unlikely to be as severe as the initial lockdown. However, the longer restrictions continue, the less resilient businesses will become.

If sectors of the economy are placed under restrictions which result in them shutting down for a second time, the negative impacts may be amplified. The economic recovery is already fragile and a further sustained period of closure will lead to a

greater degree of structural damage to the economy from which it may take years to recover, with long term scarring in terms of unemployment and the associated negative impacts on health and wellbeing. Many households and businesses will be extremely vulnerable to the impacts of a further lockdown.

The recovery, at present, is K shaped and the sectors that were impacted more in the initial lockdown continue to struggle for viability and may be less resilient if subject to a second sustained period of closure. Many of these are high employment sectors and, even with full furlough available for this period, we risk higher unemployment due to weak business viability. We also risk high rates of business failure in these sectors and this means that, over the longer term, we will lose some of our productive capacity for recovery.

The overall value of the four harms

The four harms approach enables us to take into consideration the many ways in which COVID-19 is impacting on the people, economy and services of Scotland, providing a basis for an overall assessment to be made of the harms individually and collectively. It helps to maintain a comprehensive view of the harms caused by the implementation of individual and groups of restrictions.

It provides a powerful tool for the development of policy response as options can be assessed together to judge their cumulative impact on the population as a whole and on different groups in the population. It enables us to deliver our aim of suppressing the virus to very low levels while minimising the broader harm it causes and it recognises that suppression of the virus is an essential component of any strategy to rebuild the economy and address societal impacts.

Assessing the four harms is an ongoing process with evidence and data regularly updated as new science and data become available and both our experience and that of other countries evolves. This ensures that the up-to-date harms assessments can continue to support our decision making.



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