Director of Public Health

ANNUAL REPORT 2021

COVID-2019: 'The Year I Stopped Dancing'

A BOLDER HEALTHIER BIRMINGHAM

Contents

1. Foreword

Cabinet Member for Adult Health and Social Care

It has truly been a difficult 18 months as we have all battled with the impact and devastation of the Covid-19 pandemic. We are still battling to protect our citizens, specifically our older citizens and those with underlying health conditions which leave them more susceptible to hospitalisation.

Birmingham pre-Covid19 already had significantly high health inequalities, with a 10-year gap in life expectancy in some of our inner-city areas compared to our more affluent outer city areas. During the early stages of initial lockdown, we were not aware that some of our communities had higher risk rates, which made them more vulnerable to the virus and therefore at a higher risk of serious illness and death than other communities. Many of these communities worked in our frontline services health, social care, education and the hospitality sector and some lived in intergenerational households which contributed to the spread of the virus.

In response to the concerns being raised in our black and minority ethnic local communities, I organised a Health and Wellbeing Board. There was an overwhelming number of questions and worries that came in for consideration which our local health professionals and Director of Public Health responded too. Following this, a letter was sent to the Health Minister and shortly afterwards a national review took place to investigate the effects of Covid on our BAME communities.

There are many lessons the Government, our health service and local authorities need to learn from. In the event of there being a similar virus threat in the future; we need to ensure we are able to quickly and effectively respond to crucially save lives. We will continue to deal with the effects of this pandemic for some time. Our health professionals are still grappling with the consequences and health implications of long Covid, post-traumatic stress and a rise in mental health issues. There is also the impact on education, the economy and those who are struggling financially continues to increase. Evidence has shown that an increase in physical inactivity which needs to be addressed.

The Covid-19 vaccine was a very positive step forward to respond to the pandemic and the

booster vaccine rollout is going well. However, vaccine hesitancy and new variants emerging which are more transmissible and deadly pose a significant risk to recovery. There is a need for Government, the NHS and local authorities to identify social media strategies to effectively respond to those spreading misinformation and mistruths on vaccinations which has significantly contributed to vaccine hesitancy. I would like to urge everyone who is eligible to take the vaccine to protect themselves, their loved ones and their communities.

I would like to thank all our front-line workers, our faith and third sector communities and volunteers who have all stepped up to support our most vulnerable citizens to ensure they were safe, had access to food and were supported. During the dark times, they really emerged as our true heroes.

Councillor Paulette A Hamilton
Cabinet member for Adult Social Care and Health
Chair Birmingham Health and Wellbeing Board

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Director of Public Health

In December 2019 I was called to an urgent briefing by Public Health England to be told about the first signs of a new strain of coronavirus in China. By February 2020 this new virus had spread to large outbreaks in Iran, Italy, and large regions of China and then in March the first case was confirmed in Birmingham.

What followed has been perhaps the most significant challenge to Birmingham since the World Wars. We have lost more citizens to Covid in the last year than to the World War 2 blitz bombing of the city. The impact of Covid has fallen hardest on our most disadvantaged communities through a combination of employment-related exposure, poor baseline health and more challenging living circumstances. Over the last year we have experienced a roller coaster of rising and falling case rates, hospitalisation, and death. The pressure on communities, businesses, education settings, the voluntary and public sector has been immense. It is only because of the strength of partnership and collaboration across the City that we have avoided an even greater loss of life.

Through this report are woven the voices and images of citizens and their lived experiences during the pandemic. It has been important to capture these experiences as we went through the pandemic so they could inform and shape our response. We have used creative arts as well as surveys and community researchers to capture these experiences and I hope they will provide a lasting history of the pandemic as well as their value in real-time as they shaped our response.

I am humbled to have stood alongside so many leaders in our communities working together to protect citizens from the pandemic. There have been many moments where humanity and compassion have been at the heart of our response. Examples such as the universities who came to our aid in the Spring 2020 manufacturing field hand sanitiser for social care, the Council working with the food banks of the City and BCVS to supplement food stocks and coordinate supplies between different parts of the city, to the faith leaders from our Masjids, Temples, Gurdwaras and Churches who have co-produced guidelines and supported the spiritual resilience of the city, Environmental Health Officers and members of West Midlands Fire Service who went door to door offering support and advice to those isolating to ensure they were safe and supported, and our elected members and politicians who set aside political differences to jointly lobby to the support and help as a City we needed. I am also grateful to the hundreds of Covid Community Champions and our Community Engagement Partners who answered our call to volunteer and help us raise understanding and awareness in communities, their wisdom and advice have helped keep us authentic in our response and approach to support citizens.

I want to pay a special note of thanks to the Public Health Teams of Birmingham City Council and West Midlands Public Health England, it has been a privilege to work alongside these teams who have battled day and night over the last 18 months to support our response. From developing local guidelines, attending hundreds of community meetings to answer questions and share information, contact tracing and following up with citizens to ensure they have the information to protect themselves and their families, producing detailed daily data reports, supporting schools and universities to manage outbreaks and working with care homes to protect their residents. They have been every bit as important as the doctors and nurses in our pandemic response, and I am grateful for their professionalism and their fortitude.

The list of those who should be thanked is long and many will be invisible to most of us as they worked quietly and diligently to protect us. To them, as citizens of Birmingham, we all owe a huge debt of gratitude.

Now, as we move into a world in which we live with Covid-19 with the benefit of safe and effective vaccines, we must reflect on the journey we have taken and respond to the legacy of Covid.

The impact of the deaths and disability caused by the disease itself and the impacts of the restrictions that have saved lives but have also affected mental wellbeing, education and employment.

We must address the inequalities that disadvantage so many communities across the City. Coming into the pandemic we had a 10-year life expectancy gap within the City, high levels of diabetes, cardiovascular disease, obesity and low levels of health literacy, these all made our communities more vulnerable to the threat of infectious disease and we must reduce these vulnerabilities for the future.

So we must learn from the challenges and experiences of the pandemic and our response, we must move forward and rebuild better, being bold in our ambition to address the inequalities that disadvantaged so many of our citizens in the face of the pandemic, and we must prepare because sadly another pandemic will come at some point again and we must be ready.

Dr Justin Varney
Director of Public Health
Birmingham City Council

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2. Purpose

The core purpose of the role of the Director of Public Health (DPH) is independent advocacy for the health of the population and system leadership for its improvement and protection".1 The DPH annual report provides insight and recommendations on the health of a population. It is used alongside the Joint Strategic Needs Assessment (JSNA) and local intelligence to inform local policymaking that can influence the wider determinants of health. The 2020/21 DPH annual report reflects on the journey of Birmingham through the coronavirus (COVID-19) pandemic.

Quantitative and qualitative data from research conducted throughout the pandemic tell the story of the crisis. There is a focus on the experiences of Birmingham's citizens, the inequalities that have been exposed and exacerbated, as well as the overall impact on the city's population.

There are four main sources for the data used to inform and produce this report:

1. **COVID-19 cases, hospital admissions, deaths, and vaccinations.**

   This includes data from NHS England, the UK Government Coronavirus Dashboard[2], Public Health England Covid-19 Situational Awareness Explorer[3], Birmingham and Solihull (BSol) Clinical Commissioning Group (CCG), Birmingham Community Healthcare NHS Foundation Trust, Birmingham Women's and Children's NHS Foundation Trust, Sandwell and West Birmingham Hospital NHS Trust and University Hospital Birmingham NHS Foundation.

2. **COVID-19 Health and Wellbeing Impact Survey (22nd May until 31st July 2020).[4]**

   The COVID-19 Impact Survey had 3,095 respondents. Compared with the city's census-based profiles[5], respondents were more likely to be older, white, female and report no religion. Compared with national estimates, there was a slightly higher representation of lesbian, gay and bisexual respondents, and disabled respondents. The geographical distribution of responses across Birmingham was varied. The highest participation was from the following wards: Longbridge and West Health, Brandwood and Kings Heath, and Bournville and Cotteridge. The lowest participation was in the following wards: Tyseley and Hay Mills, Lozells, and Bordesley Green (See Appendix B, Table 17).

1 *ADPH, "Current Directors of Public Health," September 2021. [Online]. Available: https://www.adph.org.uk/current-directors-of-public-health/. (Accessed: 15 November 2021)*
2 *Official Coronavirus (COVID-19) disease situation dashboard: Vaccinations. [Online]. Available: https://coronavirus.data.gov.uk/ (Accessed: 17 November 2021).*
3 *PHE COVID-19 Situational Awareness Explorer. [Online] (Downloaded: 18 November 2021).*
4 *J. Varney, "Initial findings from Covid19 Health & Wellbeing Impact Survey," August 2020. [Online]. Available: https://birmingham.cmis.uk.com/birmingham/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=yvZpCRcz3Ml85R9bK3lHnG9SpGWX9Q%2Flf3M3fXWhzdmPehkZWibWfA%3D%3D&rUzwRPf%2BZ3zd4E7Ikn8Lyw%3D%3D=pwRE6AGJFLDNlh225F5QMaQWCtPHwdhUfCZ%2FLUQzgA2uL5jNRG4jdQ%3D%3D&mCTIbCubS. (Accessed 15 November 2021).*
5 *Office of National Statistics/Birmingham City Council. [Online]. Available: https://www.birmingham.gov.uk/downloads/file/4564/2011_census_birmingham_population_and_migration_reportpdf (Accessed: 15 November 2021).*

3. Ethnographic research with 12 Birmingham residents.[6]

This commissioned study was completed by Humankind Research. Focusing on the stories of 12 citizens, it describes their unique experience of the pandemic in Birmingham, highlighting inequalities, support needs and engagement with public services. More information on the participants can be found on the following page. All identifiable information has been changed, including the names of participants.

4. Highlight Reports from the Public Health Data Cell and Birmingham Test and Trace.[7]

The Public Health Division has prepared regular reports highlighting the various COVID-19 related indicators and tracking the pandemic. This includes daily and weekly reporting on cases, deaths and associated health inequalities.

6 *Humankind Research, "Ethnographic research into the impact of COVID-19 on Birmingham," 2020.*
7 *Public Health Data Cell and Birmingham Test and Trace Reports.*

Ethnographic Research Participants

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3. COVID-19: A global crisis with a local impact

The National and International Context

COVID-19 was identified in China in December 2019. The World Health Organisation (WHO) declared a global health emergency at the end of January 2020 because of the rapid escalation of case numbers in China.

The outbreak spread to Italy and Iran in the early part of 2020 and then across Europe, Africa, and South America.

The first cases of UK transmission were reported in England in February 2020. Case rates increased quickly in England.

In early March 2020, the UK Government started to issue advice to stop non-essential travel and contact. At the end of March, the first lockdown was announced. The Coronavirus Act 2020 was published, bringing into law on the 26th March the national lockdown measures to stay at home and protect the NHS from overwhelming demand.

In the following 12 months, society re-opened and then lockdown measures were re-introduced, locally, regionally and nationally. Restrictions were primarily driven by the need to contain the spread of new variants of the virus (Figure 2).

Testing technology evolved through the pandemic, and there was limited access to diagnostic testing in the first wave. It was likely that the data reflected the tip of the pandemic iceberg, which was later evidenced by the number of excess deaths during this period (Figure 13) and the impact on care homes (Figure 15). By the summer of 2020, testing for symptomatic individuals was expanded and accessible to more people. Still, only in 2021, the large-scale role out of asymptomatic testing was possible with rapid home testing kits.

As scientific understanding of virus transmission improved, guidelines were updated on measures to reduce spread. This included the introduction of face coverings in public enclosed spaces and on public transport. In the early days of the pandemic, there was little evidence of transmission from asymptomatic people (people who do not have symptoms).[8] However, it became clear that those without symptoms could transmit the virus.[9]

From the start of the pandemic, it was clear that the restrictions introduced to prevent the spread of COVID-19 and protect us also had implications for daily life. Support was required to help workplaces, services, and communities operate within the restrictions to limit the spread of the virus. The restrictions also had financial, relational and health implications on individuals. By early summer 2020, evidence emerged to support our understanding of this impact, including mental health. This included the Centre for Mental Health report on understanding inequalities and mental health during the pandemic.[10] The evidence and recommendations influenced the commissioned ethnographic research to understand the impact on Birmingham's citizens.

8 *UK Research and Innovation. Can infected people without symptoms transmit coronavirus [Online]. Available: https://coronavirusexplained.ukri.org/en/article/und0006/ (Accessed 17 November 2021).*
9 *Nature. What the data say about asymptomatic COVID infections. [Online]. Available: https://www.nature.com/articles/d41586-020-03141-3 (Accessed: 17 November 2021).*
10 *L. Allwood and A. Bell, "Centre for Mental Health: Covid-19: understanding inequalities in mental health during the pandemic," June 2020. [Online]. Available: https://www.centreformentalhealth.org.uk/sites/default/files/2020-06/CentreforMentalHealth_CovidInequalities_0.pdf. (Accessed 16 November 2021).*

In December 2020, the first vaccines were released in the UK, and the national vaccination programme started in earnest. The vaccines offer safe and effective protection from severe illness and death from COVID-19. The vaccination programme allowed the UK Government to create the road map out of lockdown, which reached its final stage on the 19th July 2021. Many of the legislative restrictions were removed at this stage.

The learning from the COVID-19 pandemic is ongoing. What we know now has been highlighted through the impact of inequalities on health outcomes in the UK. All ethnic minority groups (other than Chinese) had a higher rate of COVID-19 cases than the White ethnic population for both males and females.[11] Despite making up less than 14% of the UK population, Black, Asian, and minority ethnic groups accounted for 19% of deaths in hospitals and 35% of critical care admissions following COVID-19.[12]

Individuals from ethnic minority groups are more likely to work in occupations with a higher risk of COVID-19 exposure, including frontline workers, and are more likely to use public transportation to travel to their essential work.[13] In England, due to underlying pre-existing health conditions, people of South Asian ethnic backgrounds had a higher prevalence of cardiovascular diseases and diabetes which are associated with increased COVID-19 mortality.[13] The risks associated with COVID-19 transmission, morbidity, and mortality can be exacerbated by the housing challenges faced by some members from ethnic minority groups, including living in multigenerational households.[11]

The findings mentioned above reveal the COVID-19 impact on health outcomes at a national level. Birmingham follows a similar pattern as the city faces high levels of deprivation and rich ethnic minority populations.

In the summer of 2021, the nation moved into a period of learning to live with coronavirus. This focused efforts on increasing the protection of citizens through vaccination to prevent further loss of life and protect essential services such as the NHS and children's education.

The Birmingham Context

Birmingham's first case was confirmed on 5th March 2020, and case numbers in the city rapidly escalated. The peak of cases, hospitalisations, and deaths in the first wave came in Easter 2020. However, there have been several subsequent peaks and troughs as the pandemic has surged again and again throughout our city.

Entering the pandemic, Birmingham already had significant health inequalities. Although it was less understood at the start, many of our communities had high rates of the risk factors for exposure and a higher risk of death and severe illness.

A more significant proportion of our population worked in roles that remained frontline and active during the pandemic. In 2019, 15.7% of all employees in Birmingham worked in human health and social care activities, compared with 13.1% nationally. Furthermore, 10.3% worked in education, compared to 8.7% nationally.[13]

11 *Office of National Statistics. Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), England and Wales: deaths occurring 2 March to 28 July 2020. [Online]. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/deathsoccurring2marchto28july2020 (Accessed 29 November 2021).*

12 *Department of Health and Social Care (DHSC) and the Office for National Statistics (ONS) 2020. (COVID-19 Daily Deaths.) [Online]. Available: https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-daily-deaths/ (Accessed 29 November 2021).*

13 *Office of National Statistics. [Online]. Available: https://www.nomisweb.co.uk/reports/lmp/la/1946157186/report.aspx#tabempocc (Accessed: 17 November 2021).*

Living conditions, particularly overcrowding, played a significant role in transmission. We often saw households rapidly become infected once one case was confirmed. In the 2011 Census, Birmingham had 9.1% of households classified as overcrowded compared to 4.8% across England and 4.6% across the West Midlands region.[14]

Certain risk factors were and still are associated with an increased likelihood of severe illness and death. Although Birmingham is a young city, the number of older adults is significant. The city already had significant challenges in many of the clinical conditions that were and still are risk factors (Table 1).

At the start of the pandemic, it was predicted that in the worst-case scenario, there could be as many as 9,000 lives lost in Birmingham in the first wave. Up until the 1st October 2021, the total number of deaths (people whose death certificate mentioned COVID-19 as one of the causes) was 3,020. This is a significant loss to the city and one that will resonate for years to come. It is also a testament to the hard work of many in keeping this loss far lower than predicted.

Table 1. Health Risk Factors Comparing Birmingham and England[15]

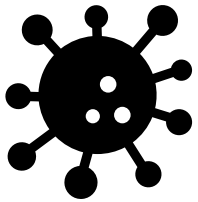
Health Risk Factors	Birmingham	England
Population 65+ years (Count) 2020	149,412	12,508,638
Population 65+ years (%) 2020	13.1%	18.7%
Smoking Prevalence in adults (18+ years) 2019	14.8%	13.9%
Overweight or Obese adults (18+ years) 2019/20	65.2%	62.8%
Birmingham Diabetes prevalence (17+ years) 2019/20	9.0%	7.1%
Diabetes prevalence (17+ years) 2019/20 Birmingham and Solihull CCG	8.7%	7.1%
People with Type 2 Diabetes who achieved all three treatment targets 2018/19 Birmingham and Solihull CCG	8.7%	7.1%
Coronary Heart Disease prevalence (all ages) 2019/20	2.7%	3.1%
Chronic kidney disease (CKD) prevalence (18+ years) 2019/20	3.8%	4.0%
New cancer cases (per 100,000 population) 2018/19 Birmingham and Solihull CCG	436	529

14 *Office of National Statistics/Birmingham City Council. [Online]. Available: https://www.birmingham.gov.uk/downloads/file/9752/2018_ks403_rooms_bedrooms_and_central_heating (Accessed: 17 November 2021).*
15 *PHE Fingertips. [Online]. Available: https://fingertips.phe.org.uk/ (Accessed: 17 November 2021).*

Birmingham's Pandemic on a Page

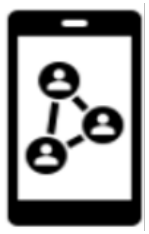
887,745

People tested for COVID-19 up to 30th September 2021.[7]



159,273

Confirmed cases of COVID-19 up to 30th September 2021.[2]



18,782

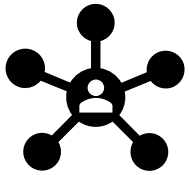
Cases followed up by Birmingham City Council contract tracing teams.[2]

3,020

Deaths where COVID -19 was recorded on the death certificate up to 1st October 2021.[12]

681,788

First doses of COVID-19 vaccine given to Birmingham residents aged 16+ (67.5% of the eligible population), with 622,731 (61.7%) of second doses up to 23/12/2021.[2]



795

Covid Community Champions and 19 community engagement partners working with over 30 different targeted communities.

The Numbers

The COVID-19 pandemic has highlighted the need for accurate and timely intelligence, enabling the response to save lives. The first wave saw a peak of cases in April 2020, the second in January 2021, and the third in July 2021. Sadly, some people were admitted to the hospital, and many tragically lost their life. This section outlines the impact of the pandemic with a focus on testing, cases, hospital admissions and deaths.

Testing

Access to testing evolved throughout the pandemic as new testing kits became available. National policy on testing was developed to respond to the emerging science around transmission between asymptomatic people. There was an initial focus on testing individuals in hospital with symptoms in March 2020. This was then expanded to healthcare professionals over spring 2020 and then, as laboratory capacity expanded (to process the swabs), to symptomatic people using PCR (polymerase chain reaction) testing kits by the summer of 2020.

Birmingham established its first PCR testing site in December 2020. It worked with the Department of Health and Social Care (DHSC) to create a network of a further nine walk-through sites and two drive-through locations (Figure 1). Sites were spread across the city to ensure most of the population were within easy reach of testing. In the autumn of 2020, the new LFD (lateral flow device) became available in large numbers. This enabled rapid results for the testing of asymptomatic people.

These tests were obtained through drive-in/walk-in stationary and mobile testing sites and subsequently via a national postal kit service.

This shift in testing reduced the need for static PCR testing sites. Over the summer of 2021, many of these sites were stood down as the national postal testing service could not cope with demand. However, a contingency of mobile sites remains for deployment into hot spots of outbreaks, such as Operation Eagle.

Figure 1. Deployed Testing Centres in Birmingham (2020-2021) [7]

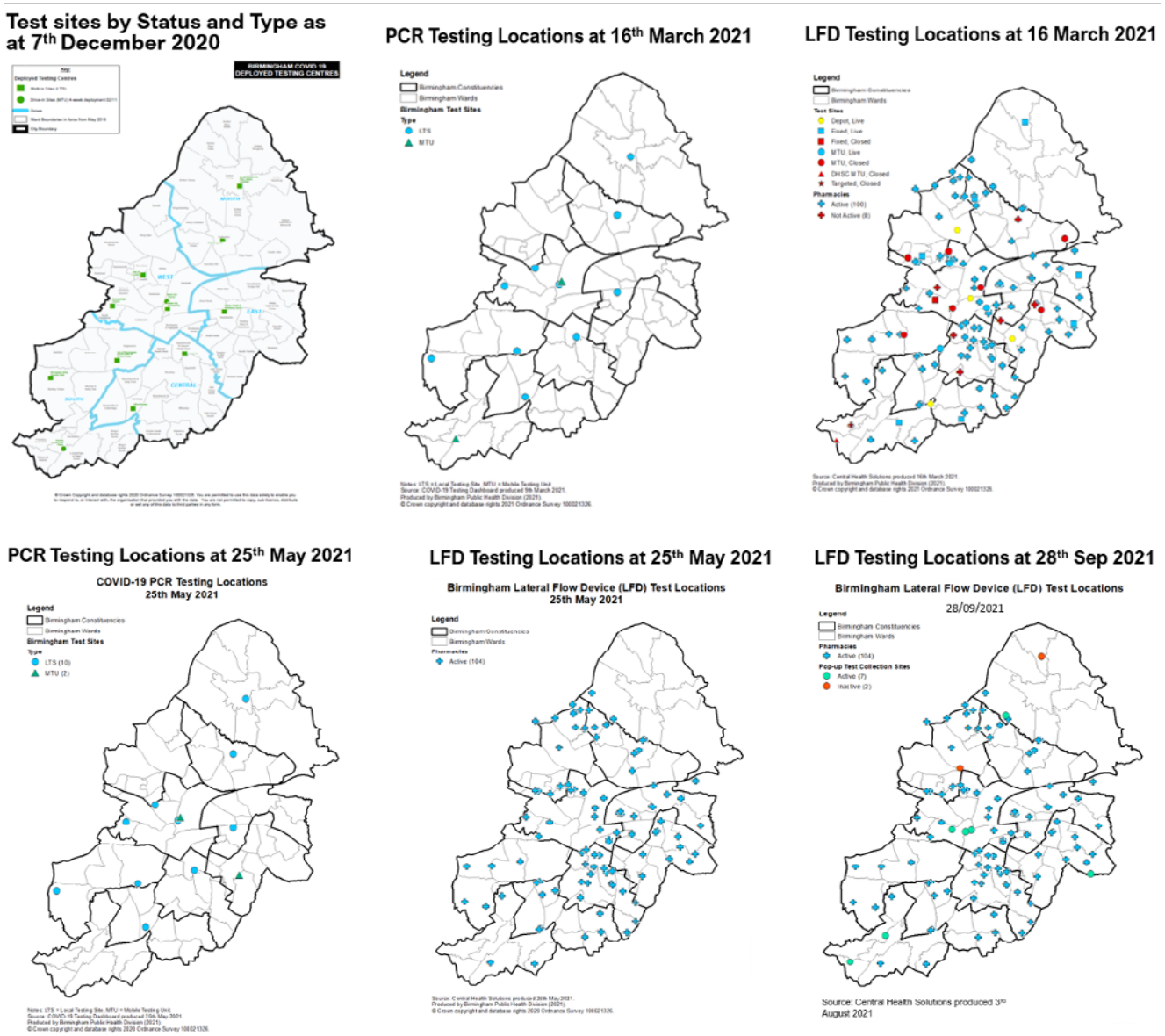
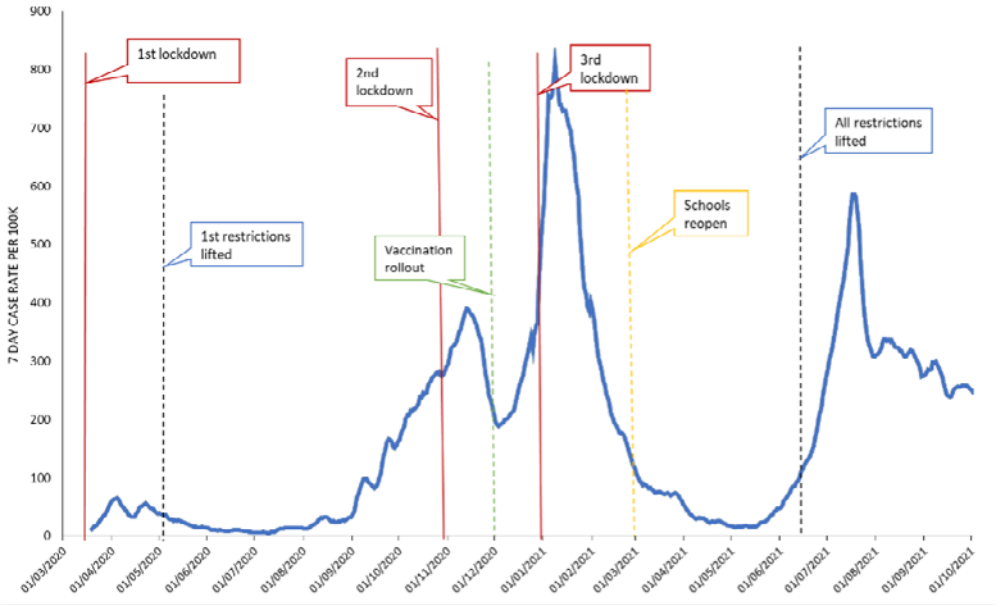


Figure 2. COVID-19 Case Rate (7-day rolling) and alert level thresholds[2]

1st March 2020 – 30th September 2021



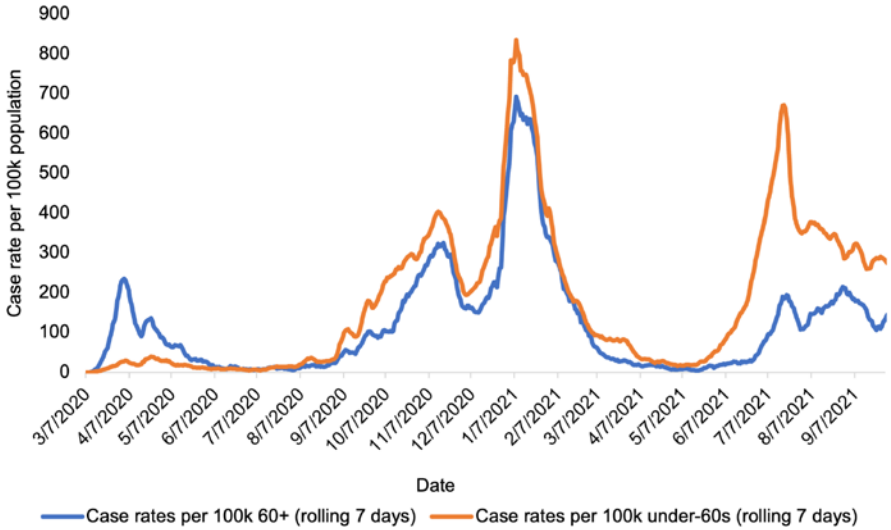
Covid's impact on citizens in Birmingham, affecting aspects of identity and geography, is yet to be fully understood due to the limitation in inequalities data on different communities. A breakdown of cases by age, gender, ethnicity and geography emerged over the first wave. By the summer of 2020, this data was routinely reported by Public Health England West Midlands and analysed and reported on locally by the Council's Public Health team.

Age

Much of the focus has been on the impact of COVID-19 on older adults. In general, they are more susceptible to severe illness and death due to COVID-19. In the first wave, the case rate in those aged 60+ was higher than those under 60 (Figure 3). This reflects the fact that wider population access to testing only became available in the summer of 2020 as before this testing was only done on symptomatic individuals. There may have been much higher rates in younger age groups, but we were unable to identify them. In the peaks in November 2020, January 2021 and the summer of 2021, the pattern of cases in the same age groups was higher in those aged under 60 but followed a similar trend to those aged over 60 (Figure 3). This highlighted that many of our older adults live in intergenerational households and are not isolated from wider community trends.

Figure 3. COVID-19 Case rates in under-60s compared to 60+[3]

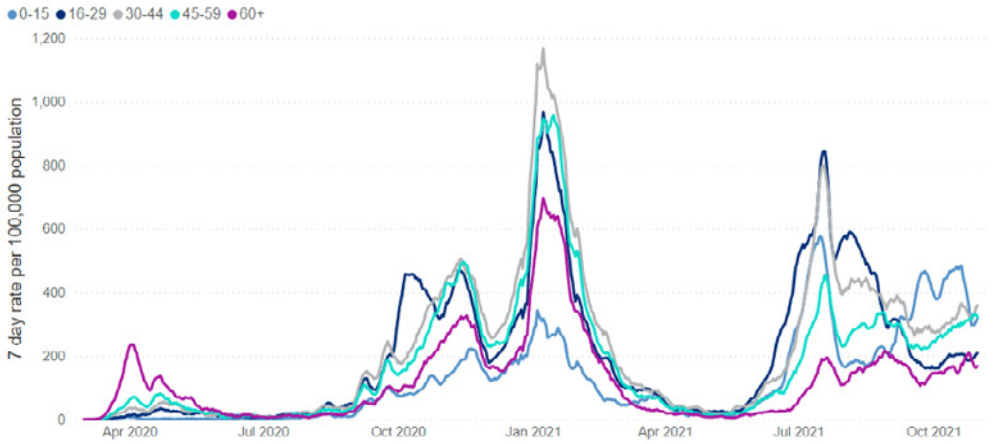
March 2020 – September 2021



As the data improved, we obtained a more granular understanding of case rates in smaller age cohorts (Figure 4). This highlighted spikes in specific age groups, e.g., when students returned to education in autumn 2020. Since the introduction of population-level testing in the summer of 2020, there have been consistently higher case rates in working-age adults (aged 30-44yrs). This is likely to reflect occupational exposure and the impact of intergenerational households.

Figure 4. COVID-19 Case rates by age[3]

1st March 2020 – 30th September 2021



Early in the pandemic, case rates per 100,000 of the population increased in the 60+ age group, peaking in early April and remaining higher than the rest of the population until July 2020. Subsequently, the over-60s followed similar trends to the under-60s but were consistently lower. High rates were seen in November 2020, with peaks in the over and under-60s age group. This dropped dramatically until early December 2020 and rose again in early January 2021, peaking at 834.7 (per 100,000 population) for under-60s and 692.4 among over-60s. Following a fall in early 2021, case rates rose to a peak in July 2021, with higher rates in school-age groups and the working-age population, a reversal in pattern compared to that in the early period of the pandemic. Higher case rates in younger age groups, though fluctuating, has been the pattern up to the end of September 2021.

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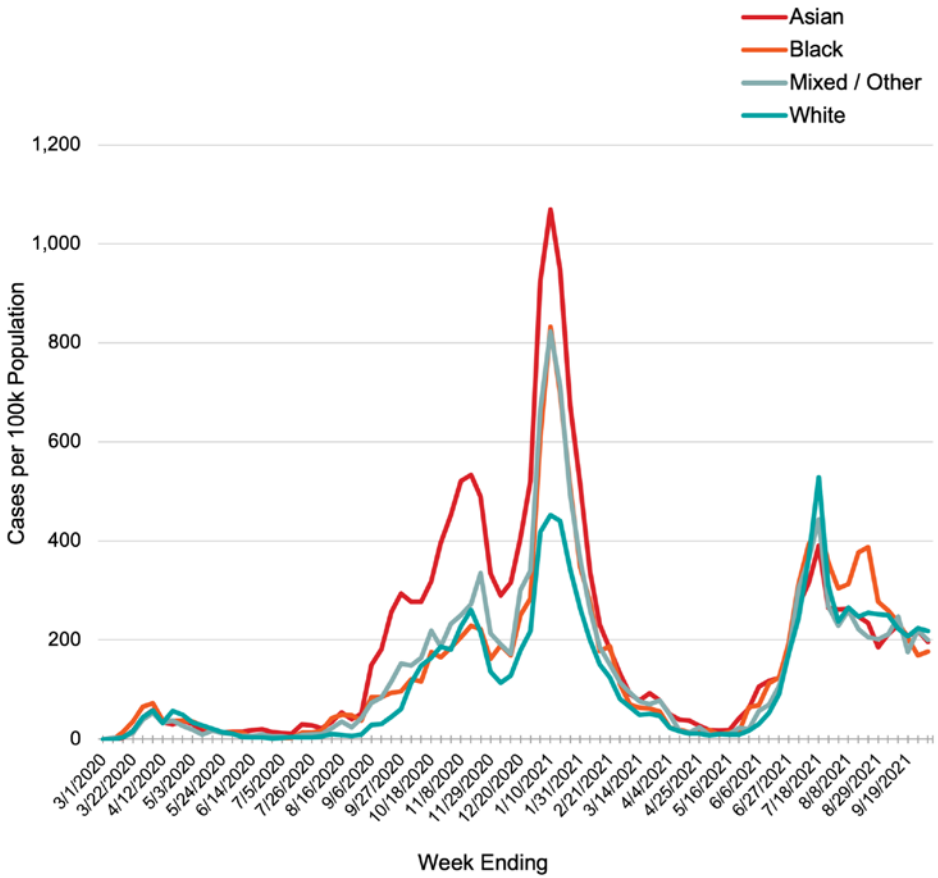
Ethnicity

There have been consistently higher case rates in South Asian ethnic groups, especially Pakistani, Bangladeshi and Indian. This may reflect several factors, including occupational exposure. These communities often work in health and social care, education and hospitality sectors. They may also be part of larger intergenerational households where multiple members of the same household became infected. There may also be an impact of variable testing uptake in different communities.

The pattern of higher case rates in the Asian groups was temporarily reversed around the peak periods in the summer of 2021, when rates were higher in the White ethnic groups and Mixed/other ethnic groups. However, in August, this reverted to the earlier established patterns (of high rates in the Asian groups). This is shown in Figure 5.

Figure 5. COVID-19 Case Rate per 100,000 Population by Week and Ethnic Group[3]

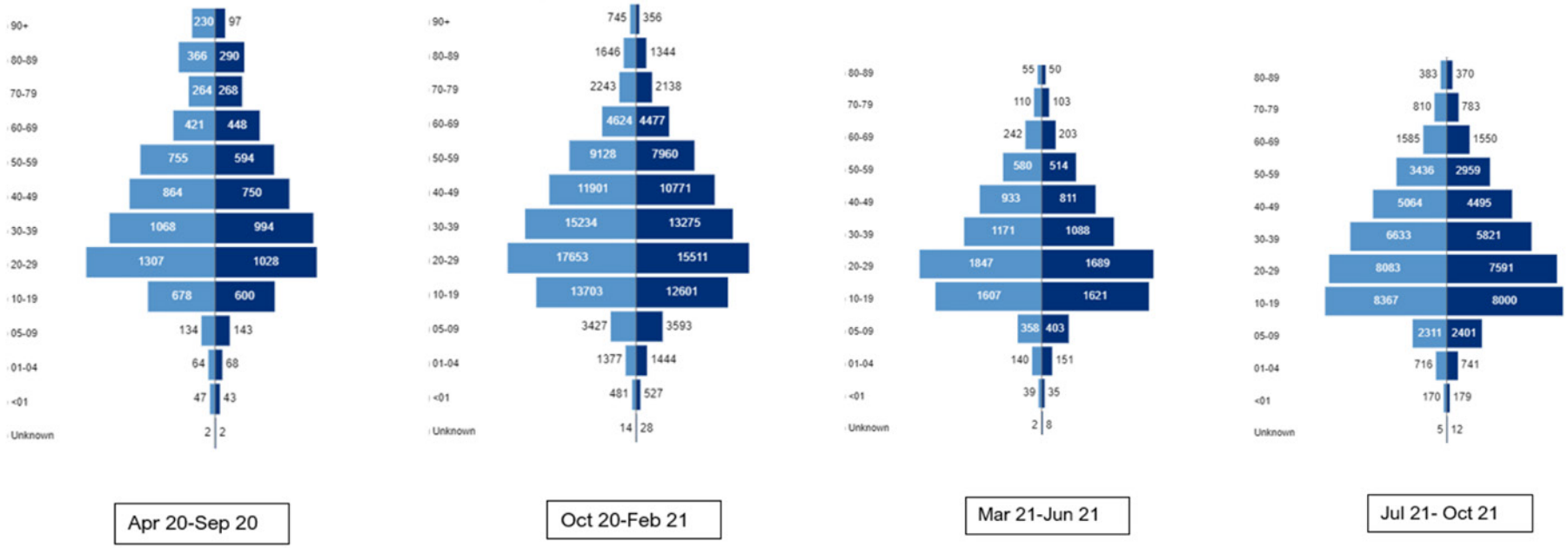


Age and Gender

Case rates were reported by gender from early on, although this has not included transgender people or non-binary genders. Throughout the pandemic, case rates were around 10% higher in women than in men. Between 1st March 2020 and 31st March 2021, for women there were 8,986 cases per 100,000 of the population, compared to 8,057 cases per 100,000 of the population for men (Figure 6). This may reflect occupational exposure in health and social care, or potentially more household exposure to women if they are in a primary caring role in the house for sick members of the family. It may also reflect a bias in testing uptake as, in general, women are more likely to access healthcare than men.

In the first half of the pandemic, the number of cases in the older age groups (65+) was significantly higher than in other groups. By the second half, cases had increased in all age groups except the 80+ age group, with a significant rise in cases in children and young adults. The highest rates were in the 20-29 age group, and cases almost doubled in the second half of the pandemic. The 30-49 and 10-19 age groups followed a similar pattern.

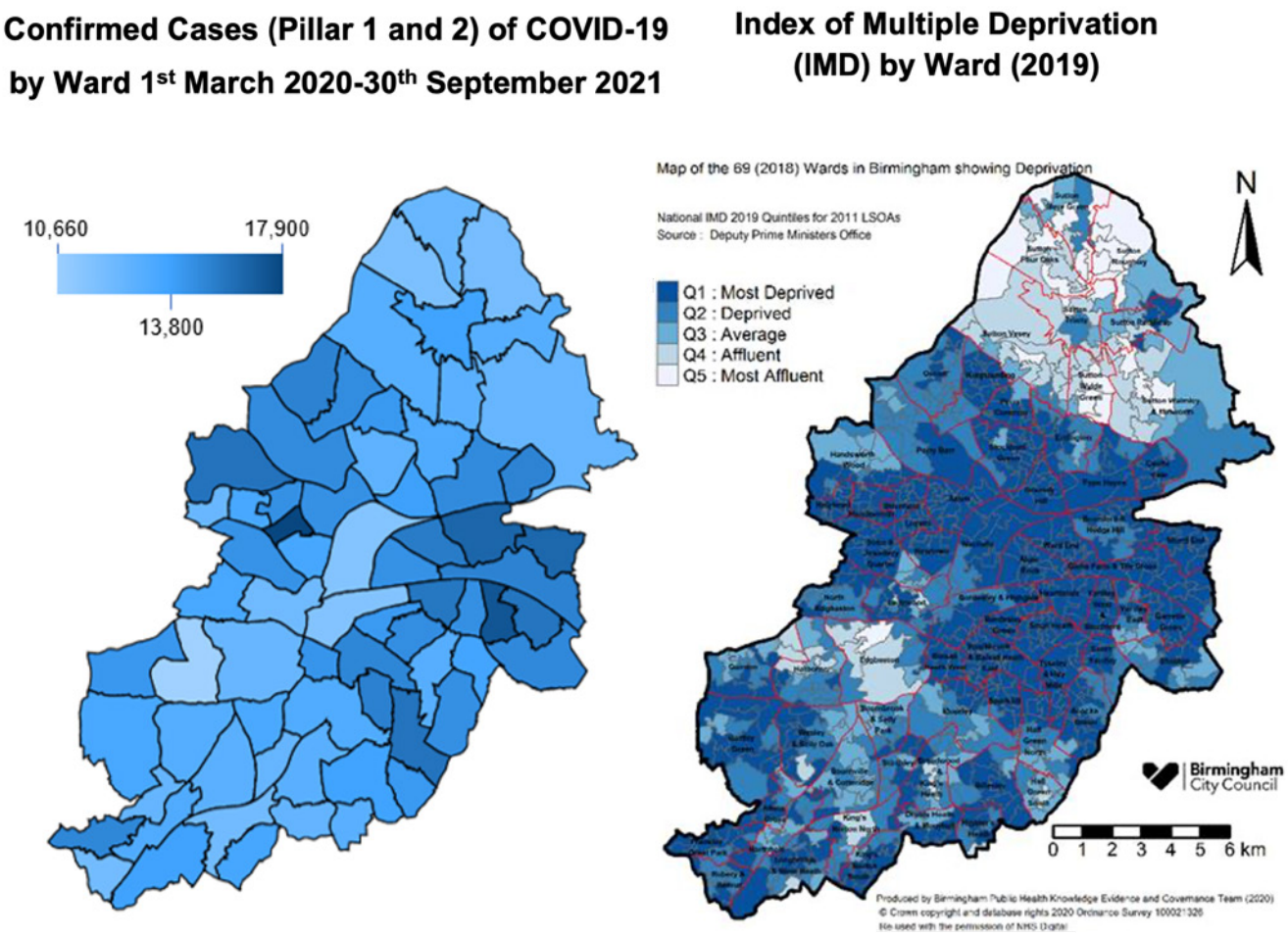
Figure 6. Confirmed cases by age (years) and gender[3]



Place

The city's 69 wards have been used to monitor case rates and analyse patterns following the impact of the pandemic. Although we cannot attribute causality, we can use the geographical distribution of case rates to map over deprivation and other risk factors such as overcrowding to identify trends. Case rates by ward have been highest in the most deprived and ethnically diverse of the city's wards (Figure 7).

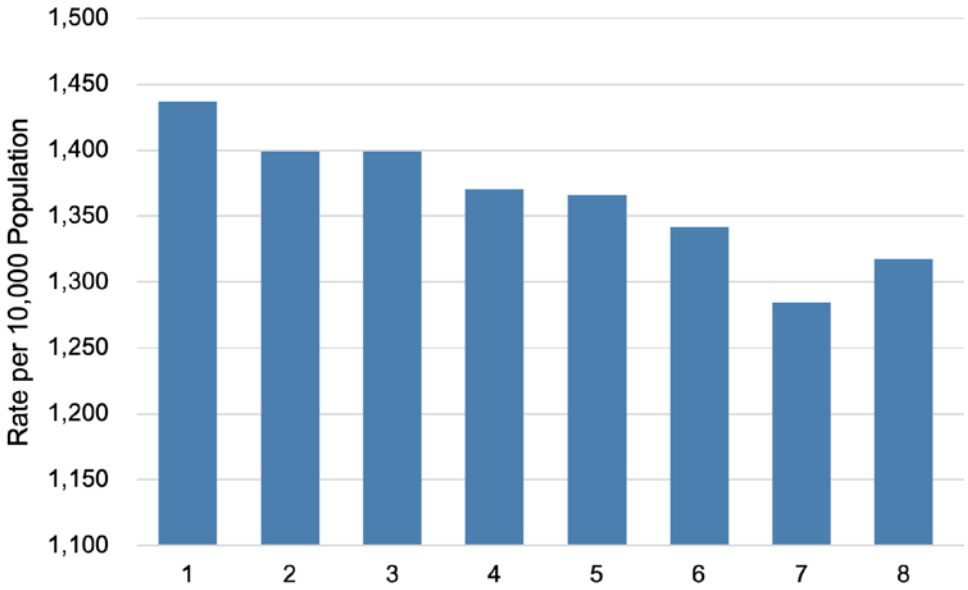
Figure 7. Ward Inequalities in COVID-19 Case Rates[3]



Measuring the relationship between COVID-19 case rates and poverty is achieved through the postcode of residence and the Index of Multiple Deprivation (IMD). From 1st March 2020 to 30th September 2021, the rate of cases was 16% higher (per 10,000 of the population) in the most deprived decile compared to the least deprived decile (Figure 8). There was an over-representation of COVID-19 cases in the most deprived areas of the population. The general trend suggests that the lower the IMD score (most deprived), the higher the case rate.

Figure 8. Rate of COVID-19 Cases per Population by IMD National Decile in Birmingham[3]

1st March 2020 to 30th September 2021



Occupation

Inequalities in COVID-19 case rates by profession have primarily been reflected in the impact on healthcare professionals, social care professionals, and 'other' professional groups. Despite data on case rates categorised by professional groups not being routinely reported, there have been significant concerns raised around occupational exposure. As mentioned, data on case rates based on the profession is not routinely collected. However, according to the Office for National Statistics (ONS), some ethnic groups are more likely to work in jobs with higher COVID-19 death rates. The ONS has also found that Black and Asian men are more likely to have a job that is linked to higher death rates of COVID-19, including transport. Other services such as security and cleaning also have a relatively high proportion of employment for ethnic minorities.[16]

The largest employment sector in Birmingham. People of minority ethnic groups make up a high proportion of some healthcare professions, just over a quarter of dental practitioners, medical practitioners, and opticians. These professions and others where the proportion is high, including nursing and medical radiographers, involve regular contact with people and disease (see Table 2).

These occupations cannot be carried out from home and may have contributed to inequalities by profession (excluding periods of legislative restrictions on workplaces).

Table 2. Profession (2020) and Concern of Exposure to COVID-19[17]

Profession	Birmingham (2020) Jobs	Birmingham (2020) (%)	Great Britain (2020) (%)
Human Health and Social Work Activities	82,000	15.9	13.6
Wholesale and Retail Trade	71,000	13.8	14.9
Education	54,000	10.5	9.0
Manufacturing	33,000	6.4	7.9

Hospital Admissions

The introduction of social distancing measures and restrictions played a vital role in reducing the number of cases and therefore the number of hospital admissions with COVID-19. Hospital admissions indicated the severity of the virus on our health and the activity and capacity of the NHS. 'Protect the NHS' was aimed to communicate the importance of reducing hospital admissions by staying at home. Hospital admissions with COVID-19 did increase in each wave (Figure 9) and following the rise in cases (Figure 2) between March 2020 and September 2021. In total, during the period until the end of September 2021, there were 22,185 hospital admissions due to COVID-19.

16 *Office for National Statistics, "Why have Black and South Asian people been hit hardest by COVID-19?," 14 12 2020. [Online]. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/whyhaveblackandsouthasianpeoplebeenhithardestbycovid19/2020-12-14. (Accessed 10 12 2021).*

17 *Office of National Statistics, Labour Market Profile – Birmingham Employee jobs (2020) https://www.nomisweb.co.uk/reports/lmp/la/1946157186/report.aspx#tabempocc (Accessed: 17/11/2021)*

Figure 9. Total Number of Hospital Admissions with COVID-19 by Trust[18]

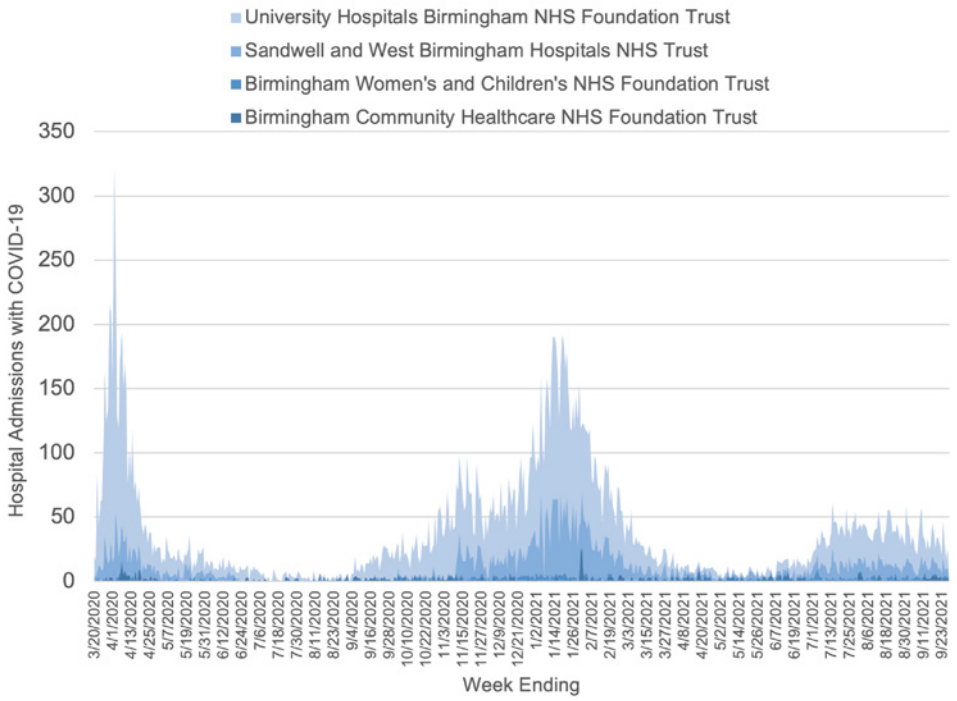
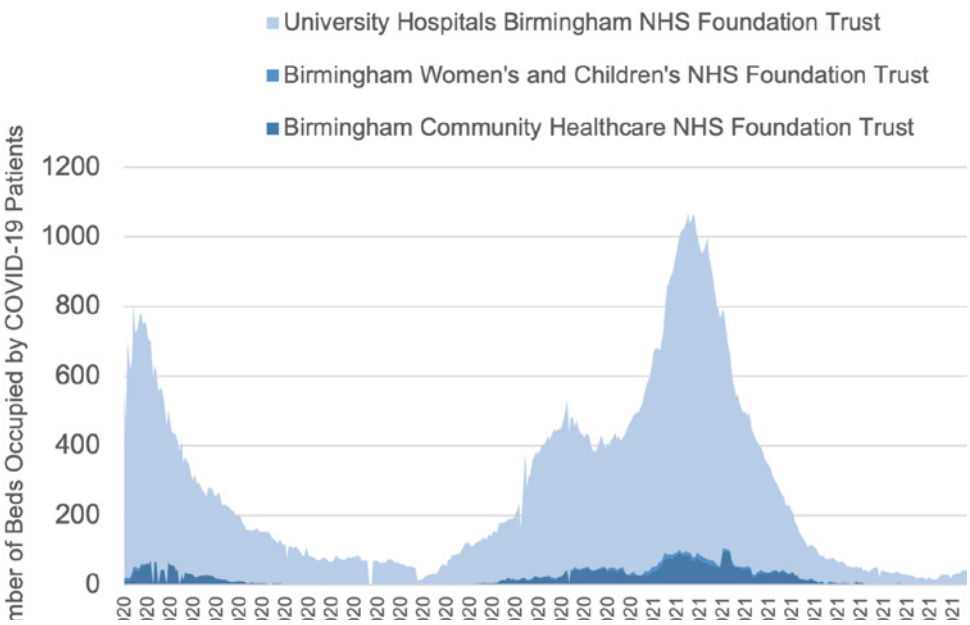


Figure 10: Number of beds occupied by COVID-19 patients (by Trust) since outbreak[18]



The number of beds occupied was higher in the second wave (December 2020 to January 2021), with an average of 927 beds, compared to 285 beds in other periods of the pandemic up to end September 2021 (Figure 10).

The pattern was similar with intensive therapy unit (ITU) beds, which had an average of 113 occupied during the second wave peak periods of December 2020 to January 2021. This is compared to an average of 34 ITU bed occupancy in other periods of the pandemic up to September 2021 (Figure 11).

18 *NHS England Hospital Admissions by Birmingham Trusts (Accessed: 25 November 2021)*

Figure 11: Number of ITU Beds occupied by COVID-19 patients by Trust since outbreak[18]

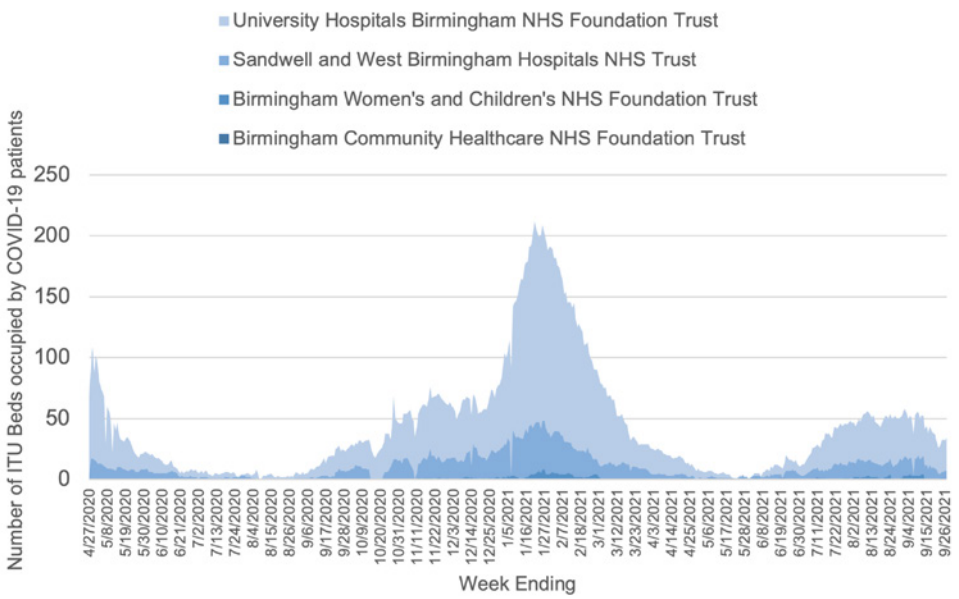
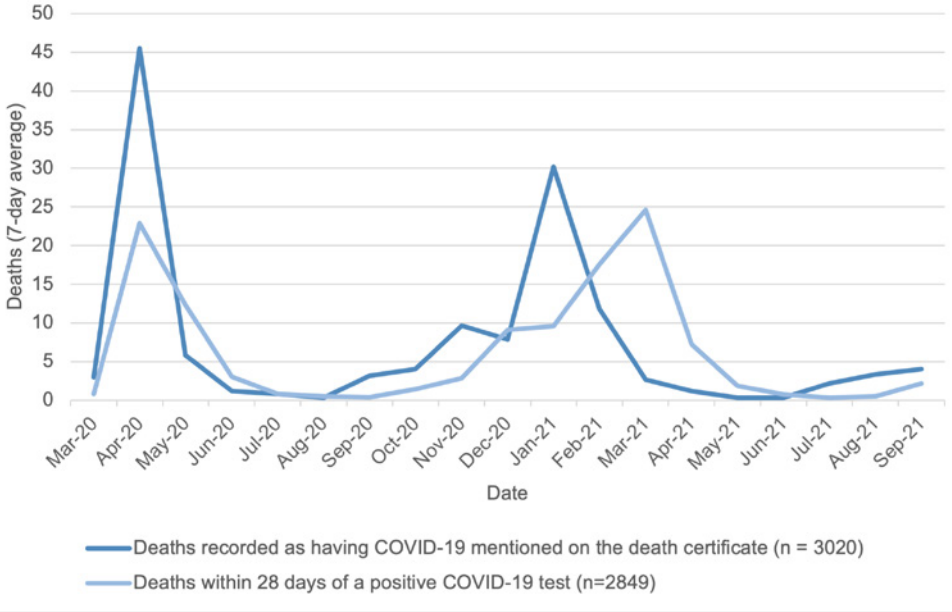


Figure 12. 7-day average daily deaths in Birmingham from COVID-19[12]



Deaths

The number of deaths with COVID-19 confirmed on the death certificate up until October 1st 2021 was 3,020. The highest number of registered deaths from COVID-19 in a week was in the week ending the 17th April when 273 deaths were recorded (Figure 12). There is a slight lag between the reported deaths occurring 28 days after a positive COVID-19 test and the ONS data, which shows the number of deaths with COVID-19 mentioned on the death certificate. There are slightly more deaths (9.5%) recorded as having COVID-19 mentioned on the death certificate than those that occurred within 28 days of a positive COVID-19 test.

Excess Deaths

Excess deaths are the additional number of people who died from all causes when compared with the five-year average during the same time in the year. Excess deaths (Figure 13) illustrates the impact of the first wave, with 1,162 more people dying in April 2020 than the average of the previous five years for the same month. Excess deaths in the autumn and winter were more spread out, with the highest number of excess deaths in Birmingham for that period falling in February 2021 with 373 additional deaths.

Figure 13. Weekly deaths above the 5-year average (excess deaths)[19]

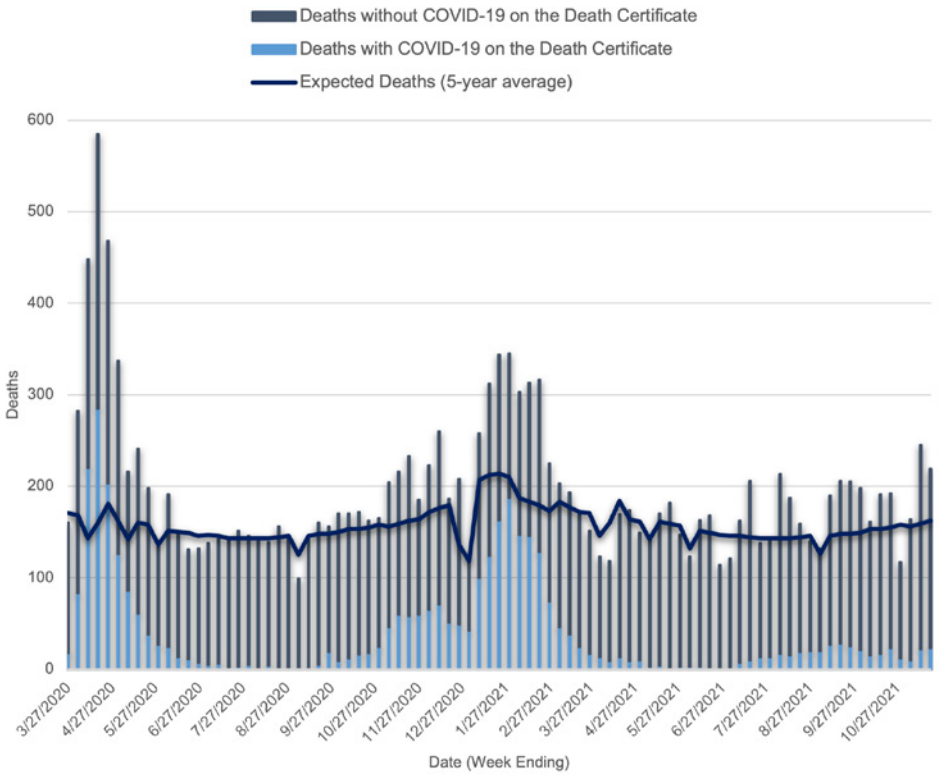
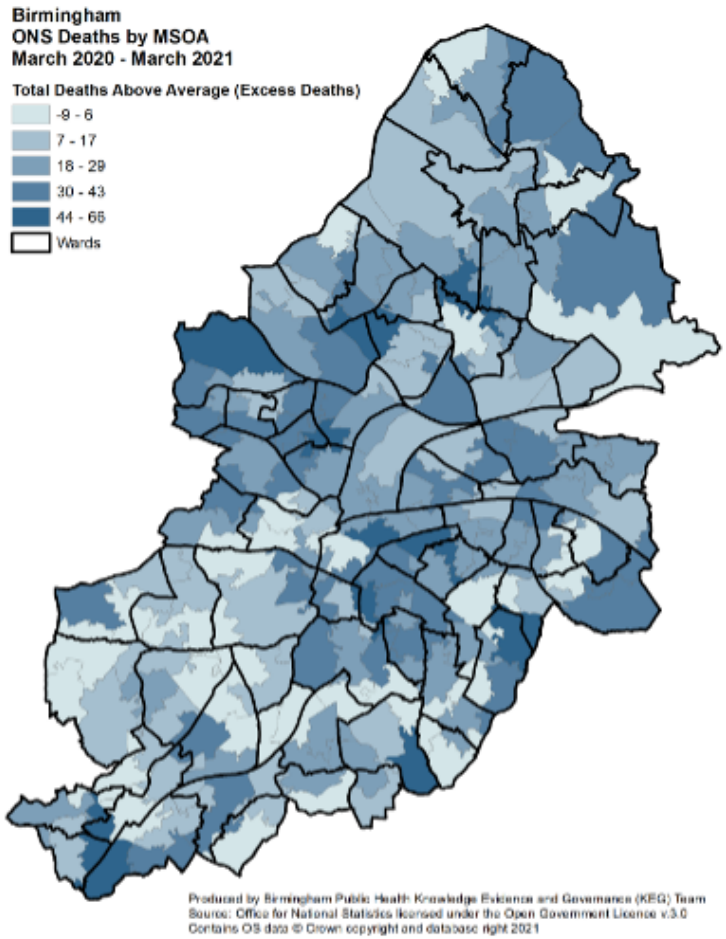


Figure 14. Map of deaths in Birmingham above the 5-year average[19]

1st March 2020 to 31st March 2021

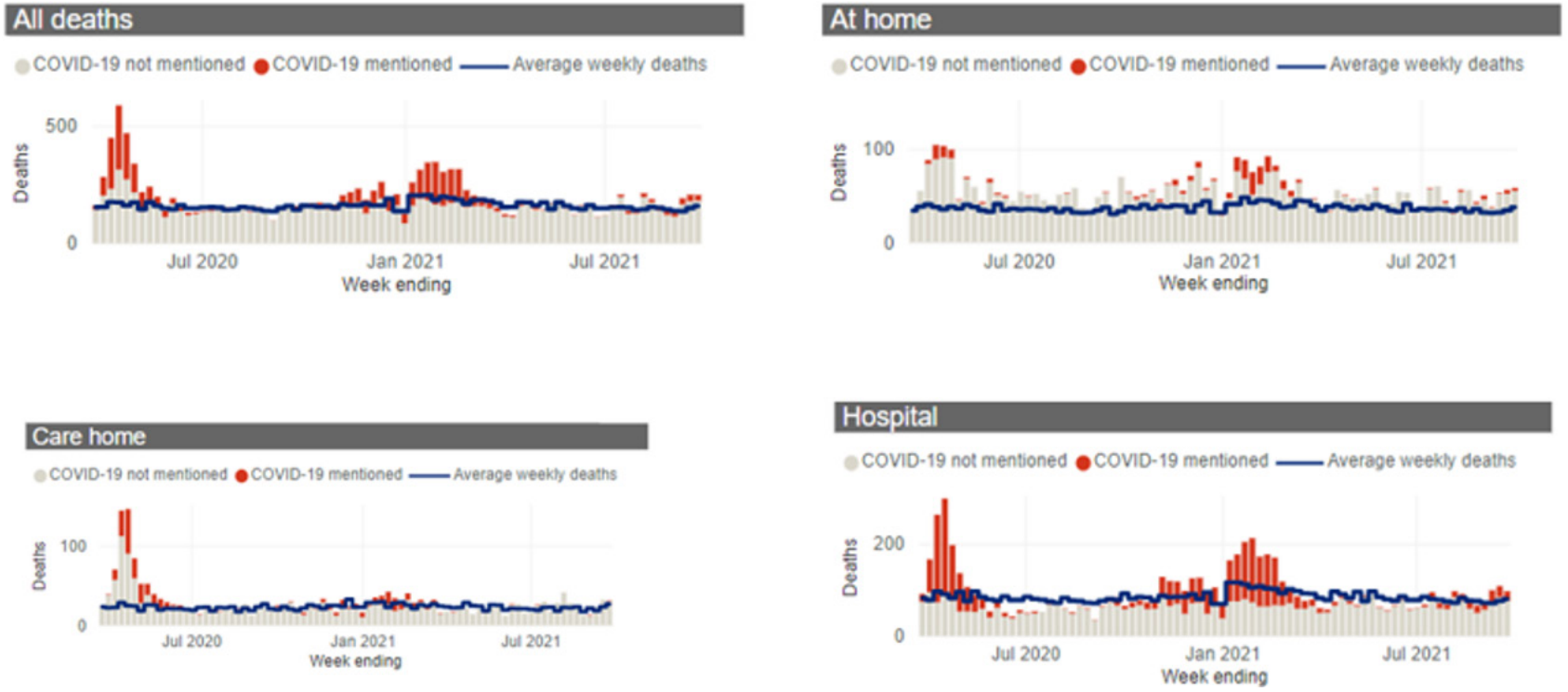


Some of Birmingham's neighbourhoods saw more people die than expected for the time of year, particularly to the east and west of the city (Figure 14). Complete ward-level data for excess deaths is only available from March 2020 to March 2021.

19 *Office of National Statistics, 'Excess deaths in your neighbourhood during the coronavirus (COVID-19) pandemic', https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/excessdeathsinyourneighbourhoodduringthecoronaviruscovid19pandemic/2021-08-03, (Accessed: 1 December 2021)*

There were differences between places regarding deaths and excess deaths (Figure 15). Care homes saw a high number of deaths during the first wave (April 2020). Many of these deaths did not mention COVID-19 on the death certificate, and this is likely to reflect the limited access to testing in the first wave. Deaths at home and at hospital followed a similar trend to that seen in Figure 13, with excess deaths in April 2020 and February 2021.

Figure 15. Place Inequalities in COVID-19 Death Rates: Trends[11]



Vaccinations

The vaccination programme began on 8th December 2020 with people receiving the vaccine developed by Pfizer/BioNTech. People began receiving the Oxford University/AstraZeneca vaccine from 4th January 2021, and the Moderna vaccine from 7th April 2021.[20] Initially, the vaccines were prioritised to be administered to the over-80s, care home residents and workers, and NHS staff.[21] Data on vaccination uptake, extracted on the 23rd November 2021, can provide us with a snapshot of the health inequalities that the pandemic has highlighted. For example, in Tables 3, 4 and 5, the percentage uptake between male and female residents is generally equal with a small divergence as you descend the age groups. It also includes those who are clinically extremely vulnerable (CEV) and those who are at risk.

Less than 75% of the ward have been vaccinated | **75% or more of the ward have been vaccinated**

Table 3. Vaccination uptake (1st dose) by age and gender (up to 23/11/21)[22]

Gender	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID At Risk
Female	93.2	93.9	92.6	90.2	88.3	86.1	84.9	78.5	66.2	58.2	45.3	31.1	87.4	82.2
Male	92.7	93.7	92.1	88.3	85.2	81.1	77.5	66.8	56.1	53.0	40.3	29.9	88.3	80.4

Table 4. Vaccination uptake (2nd dose) by age and gender (up to 23/11/21)[22]

Gender	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID At Risk
Female	92.1	93.0	91.6	88.8	86.5	84.0	81.9	74.1	59.7	49.6	10.6	0.0	83.7	77.5
Male	91.8	92.8	91.3	87.0	83.5	78.9	74.6	62.4	50.2	44.1	9.3	0.0	85.8	76.0

Table 5. Vaccination uptake (booster dose) by age and gender (up to 23/11/21)[22]

Gender	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID At Risk
Female	79.5	84.8	80.7	69.8	58.3	56.2	53.3	41.0	59.0	60.5	37.6	0.0	61.1	49.7
Male	84.3	87.5	83.5	69.5	54.9	51.4	48.3	36.9	56.9	47.3	37.4	0.0	65.3	47.9

20 *Office of National Statistics https://www.nomisweb.co.uk/reports/lmp/la/1946157186/report.aspx#tabempocc (Accessed: 17/11/2021) https://coronavirus.data.gov.uk/details/vaccinations?areaType=ltla&areaName=Birmingham (Accessed: 17 November 2021).*
21 *UK Health Security Agency https://coronavirus.data.gov.uk/details/vaccinations?areaType=ltla&areaName=Birmingham (Accessed: 17 November 2021).*
22 *National Immunisation Management System (NIMS). [Online] (Downloaded: 23 November 2021).*

However, Tables 6, 7 and 8 demonstrate a lower uptake in more deprived communities than in affluent areas, which is more pronounced among younger age groups. For example, there is an 8.4% gap between the most affluent residents and the most deprived residents in terms of % uptake of the 1st dose for those over 80-years old, and this difference is 39.6% in the 16-17 age group. This pattern is seen for 1st, 2nd, and booster doses. Therefore, those living in more deprived areas were less likely to have been vaccinated than those living in less deprived areas.

Uneven uptake of 1st, 2nd and booster doses of the COVID-19 vaccine is also shown in Tables 9, 10 and 11 across ethnic groups. Across the priority groups, uptake of the 1st and 2nd doses of the vaccine are lower in African, Caribbean and Black communities and then Pakistani and Bangladeshi. Booster uptake is lowest amongst Arab, Pakistani and Bangladeshi communities. Still, there is a significant difference in the size of different ethnic groups in different priority groups. For example, the total eligible population of those >80 years from a Pakistani ethnic group is 3,552, compared to 402 from an African ethnic group.

Less than 75% of the ward have been vaccinated | **75% or more of the ward have been vaccinated**

Table 6. Vaccination Uptake (1st dose) by age and Indices of Multiple Deprivation (up to 23/11/21)[22]

IMD Deprivation Quintile	80+ yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID-19 At Risk
Deprived (DQ1)	88.9	91.1	88.9	85.2	82.0	78.2	75.9	67.2	55.5	48.8	33.7	23.9	85.1	77.3
Moderately Deprived (DQ2)	94.1	93.7	92.8	89.7	88.1	84.7	82.4	73.7	63.2	58.6	47.7	33.4	90.0	83.6
Average (DQ3)	95.8	95.7	95.1	93.4	91.1	89.3	87.2	78.0	68.3	64.2	55.9	41.4	93.1	87.7
Moderately Affluent (DQ4)	96.5	96.0	96.0	94.4	93.0	91.0	89.0	81.2	71.8	66.1	64.5	47.3	94.9	91.3
Affluent (DQ5)	97.3	97.6	96.7	95.8	94.8	93.6	92.0	88.2	81.2	79.5	73.3	53.3	96.9	93.5

Table 7. Vaccination Uptake (1st dose) by age and Indices of Multiple Deprivation (up to 23/11/21)[22]

IMD Deprivation Quintile	80+ yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID-19 At Risk
Deprived (DQ1)	87.4	89.5	87.4	83.2	79.6	75.2	72.0	61.6	48.2	38.8	7.3	0.0	81.2	71.8
Moderately Deprived (DQ2)	93.1	93.0	92.0	88.6	86.5	82.8	79.8	69.8	57.6	50.2	11.7	0.0	87.5	79.7
Average (DQ3)	95.3	95.3	94.6	92.7	90.0	87.9	85.0	74.9	63.5	57.3	13.2	0.0	91.2	84.5
Moderately Affluent (DQ4)	96.0	95.5	95.7	93.8	92.0	90.0	87.5	78.8	67.6	60.3	16.1	0.0	93.5	88.6
Affluent (DQ5)	97.0	97.2	96.4	95.3	94.4	92.9	91.1	86.5	77.7	73.1	19.2	0.0	96.2	91.7

Table 8. Vaccination Uptake (booster dose) by age and Indices of Multiple Deprivation (up to 23/11/21)[22]

IMD Deprivation Quintile	80+ yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID-19 At Risk
Deprived (DQ1)	72.9	78.8	74.9	62.6	52.2	50.3	46.0	34.5	45.5	43.3	35.2	0.0	55.7	44.3
Moderately Deprived (DQ2)	82.5	87.0	83.0	72.7	59.0	57.1	54.2	41.8	63.5	58.4	39.2	0.0	67.5	52.3
Average (DQ3)	85.3	89.5	85.8	75.0	59.8	56.7	55.0	42.3	71.3	68.1	47.1	0.0	72.5	53.6
Moderately Affluent (DQ4)	88.6	91.9	88.3	77.1	61.2	58.0	57.2	46.9	81.3	72.0	32.5	0.0	79.4	55.9
Affluent (DQ5)	91.7	94.2	90.7	74.7	60.0	54.6	56.0	47.2	80.9	69.0	35.3	0.0	83.3	54.0

Table 9. Vaccination Uptake (1st dose) by cohort and ethnic group (up to 23/11/21)[22]

IMD Deprivation Quintile	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	12-15yrs	CEV	COVID-19 At Risk
Not recorded	71.8	79.2	77.6	70.4	65.5	57.9	54.1	39.9	37.0	39.4	28.6	20.6	82.0	73.7
African	70.6	69.7	71.6	73.5	73.2	71.6	71.4	68.0	54.2	43.4	25.7	18.6	77.3	71.1
Any other Asian background	84.0	85.5	83.8	83.8	82.5	81.4	79.6	74.6	61.9	56.1	39.7	31.5	85.2	79.2
Any other Black background	78.4	72.6	69.2	70.4	66.1	63.9	63.2	55.5	39.5	35.6	20.0	11.4	69.5	60.3
Any other ethnic group	77.2	79.3	77.9	76.5	75.0	71.7	71.5	63.9	53.0	42.7	29.8	21.9	77.0	68.5
Any other mixed background	86.6	88.8	78.4	77.5	75.8	74.0	71.9	65.6	49.1	45.2	35.4	25.4	75.4	64.5
Any other White background	94.1	92.1	87.2	81.3	76.6	75.2	69.1	57.8	46.2	45.2	37.6	23.6	82.5	70.6
Arab	78.6	66.7	69.6	74.4	63.2	73.4	71.4	63.2	47.8	34.0	27.0	16.4	64.9	67.3
Bangladeshi or British Bangladeshi	82.9	86.3	86.6	89.3	89.3	90.3	89.7	84.0	71.0	62.2	46.0	36.1	90.9	86.4
British, Mixed British	97.3	97.3	96.7	95.4	94.2	92.6	90.9	85.9	75.1	71.7	59.8	43.1	94.5	88.2
Caribbean	78.0	78.3	73.8	68.4	64.3	60.2	56.9	43.7	28.8	27.2	14.6	9.4	69.2	56.4
Chinese	85.2	70.9	69.4	73.1	73.3	73.3	73.6	69.3	42.3	24.7	64.4	52.7	89.6	81.3
Indian or British Indian	91.4	90.1	90.6	90.2	89.9	88.6	87.2	82.2	71.8	71.1	61.0	43.6	93.2	89.6
Irish	95.9	95.4	92.1	91.8	90.9	86.5	84.6	73.6	59.4	60.6	60.4	37.9	94.9	83.9
Pakistani or British Pakistani	83.2	85.5	83.7	83.2	83.6	81.4	80.3	74.1	63.0	50.9	32.1	21.3	83.1	76.6
Traveller	0.0	50.0	0.0	0.0	20.0	38.5	26.7	16.3	12.7	6.8	0.0	1.0	15.4	17.6
White and Asian	76.9	83.8	89.1	78.7	87.6	87.4	81.8	71.7	60.9	59.8	43.2	34.2	80.0	77.2
White and Black African	76.2	72.0	62.0	68.4	77.3	70.4	72.5	68.3	55.9	48.9	36.0	23.2	79.4	72.2
White and Black Caribbean	75.7	76.5	76.9	76.0	71.2	68.7	66.6	54.9	39.0	37.3	24.4	16.6	69.4	57.7

Table 10. Vaccination Uptake (2nd dose) by cohort and ethnic group (up to 23/11/21)[22]

IMD Deprivation Quintile	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	CEV	COVID-19 At Risk
Not recorded	71.0	78.5	76.8	68.9	64.1	56.2	52.2	37.5	33.4	32.9	5.8	79.9	69.7
African	69.4	68.0	68.2	71.0	70.3	68.2	66.8	61.3	45.3	30.7	4.7	72.7	64.9
Any other Asian background	81.5	83.2	82.8	82.2	79.7	79.2	76.1	69.8	55.0	45.6	9.6	81.1	73.7
Any other Black background	74.2	69.5	65.8	67.5	61.8	59.3	57.8	48.6	32.4	26.3	2.9	63.9	53.9
Any other ethnic group	75.2	78.1	76.6	74.2	72.7	69.2	67.7	59.4	47.1	33.9	6.5	72.2	63.0
Any other mixed background	86.6	88.8	76.3	74.2	73.5	69.9	68.7	60.9	43.5	36.0	6.4	70.6	57.8
Any other White background	93.6	91.5	86.4	80.2	75.0	73.2	66.3	54.6	41.9	38.9	8.2	80.3	66.7
Arab	75.0	53.3	69.6	67.4	63.2	72.3	63.9	59.3	43.9	26.3	8.0	59.6	63.9
Bangladeshi or British Bangladeshi	79.9	82.5	84.4	87.2	87.0	88.3	87.1	79.6	63.4	49.9	9.1	87.3	81.4
British, Mixed British	96.7	96.6	96.1	94.5	92.8	90.8	88.6	82.0	69.2	63.6	15.1	92.5	84.5
Caribbean	75.8	76.2	71.5	65.9	61.4	56.7	52.6	38.6	23.8	20.6	3.7	65.6	52.0
Chinese	83.4	69.2	68.7	71.6	72.1	71.6	72.3	67.2	40.4	22.3	18.4	87.2	79.2
Indian or British Indian	90.2	89.6	89.3	89.0	88.5	86.8	84.8	78.7	66.0	60.4	14.6	90.6	86.2
Irish	95.1	94.8	91.3	90.3	88.4	84.1	82.5	70.3	55.5	53.1	20.7	93.3	80.8
Pakistani or British Pakistani	79.2	80.9	80.3	79.5	79.9	76.8	74.4	66.1	52.5	38.3	6.6	76.8	68.8
Traveller	0.0	50.0	0.0	0.0	20.0	38.5	26.7	13.5	10.2	3.7	0.0	15.4	13.7
White and Asian	74.4	83.8	82.8	75.3	85.7	83.1	78.7	69.0	54.2	51.4	10.1	74.2	71.1
White and Black African	76.2	72.0	58.0	66.3	71.4	68.8	68.2	62.8	48.1	38.2	5.2	75.3	66.3
White and Black Caribbean	74.5	76.5	75.4	72.6	68.1	64.2	62.3	49.5	33.5	29.3	5.8	65.7	52.0

Table 11. Vaccination Uptake (booster dose) by cohort and ethnic group (up to 23/11/21)[22]

IMD Deprivation Quintile	80+yrs	75-79yrs	70-74yrs	65-69yrs	60-64yrs	55-59yrs	50-54yrs	40-49yrs	30-39yrs	18-29yrs	16-17yrs	CEV	COVID-19 At Risk
Not recorded	85.9	89.4	83.0	68.7	56.1	55.4	53.4	41.1	71.1	68.0	27.8	70.0	50.3
African	63.6	66.3	66.2	58.9	47.3	46.3	40.5	28.5	48.5	38.8	25.0	42.3	37.8
Any other Asian background	69.3	66.0	74.7	60.7	53.3	50.9	51.0	42.0	69.7	60.5	40.0	49.1	45.0
Any other Black background	62.8	73.0	61.7	55.8	43.7	44.2	41.4	31.0	41.4	39.6	0.0	46.8	40.3
Any other ethnic group	71.0	70.0	75.8	61.7	54.4	47.3	54.2	40.7	52.9	61.5	25.0	48.1	42.7
Any other mixed background	73.6	79.4	72.7	62.7	54.2	55.6	49.3	39.5	65.7	54.6	33.3	49.7	46.2
Any other White background	82.1	86.4	82.8	69.5	56.0	55.3	54.3	40.2	60.6	52.9	33.3	66.3	49.2
Arab	35.0	0.0	70.0	35.3	23.1	21.1	46.2	29.2	44.0	20.0	0.0	29.4	28.6
Bangladeshi or British Bangladeshi	49.9	54.1	49.2	39.8	32.9	37.6	36.8	28.3	30.2	33.0	8.3	30.5	30.6
British, Mixed British	84.7	88.6	85.3	73.8	59.5	56.5	54.1	42.7	60.9	56.7	42.3	72.5	53.2
Caribbean	61.9	65.2	59.5	53.7	44.5	45.1	43.9	31.3	40.8	31.7	20.0	54.7	43.5
Chinese	84.4	81.4	81.1	69.1	51.7	51.1	53.4	50.4	84.6	100.0	0.0	67.1	49.5
Indian or British Indian	75.9	79.8	75.2	65.5	54.6	53.8	53.0	44.1	70.9	74.4	40.0	57.7	48.6
Irish	84.0	85.0	81.6	73.6	64.3	59.6	55.4	46.9	61.8	75.9	20.0	77.8	57.6
Pakistani or British Pakistani	44.1	50.1	44.5	41.0	36.7	35.3	31.7	25.0	38.2	35.4	32.5	33.5	29.9
Traveller	0.0	100.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
White and Asian	77.8	80.6	64.0	75.0	55.2	47.1	53.8	38.4	67.0	61.6	28.6	52.5	43.8
White and Black African	80.0	64.3	70.8	66.7	40.9	56.8	47.6	33.9	43.5	38.6	0.0	57.0	47.3
White and Black Caribbean	66.1	76.1	63.3	53.8	49.6	47.2	43.8	33.4	42.6	37.3	50.0	48.1	40.9

4. The Local Impact of COVID-19

Our Health

Physical Health

The direct impact of COVID-19 infection was seen in the case rates, hospital admissions and fatalities. However, behind these numbers were people experiencing a new disease that healthcare professionals and scientists knew little about.

The different experiences of some of our citizens captured through the ethnographic research demonstrated how the disease affected people differently in terms of symptoms and their overall health (Table 12). Some of the respondents reported having relatively short-term effects and quicker recovery times, but they were yet to fully gain overall fitness and stamina. For others, it was more debilitating with long-term effects of the infection still lingering on physically and psychologically.

Table 12. Profession (2020) and Concern of Exposure to COVID-19[6]

Dee	Flo	John
• Very unwell for a week • Being home alone was a challenge • Lasting post-viral fatigue for weeks after	• Poorly for a short period with no care from an ex at home • Recovered quickly • Long term effects on fitness	• Contracted COVID-19 in the COVID-19 ward • Acute illness • Fear of infecting his parents • Long term psychological anxiety

Stories from those who contracted the virus experienced both short-term and long-term effects. Initially, it was debilitating for some. Longer-term impacts included a perceived reduction in stamina and an increase in anxiety.

> **"I felt absolutely horrible, I couldn't eat properly, constant headaches, joints absolutely aching, I had to self-isolate. I really didn't want to go back into hospital. No one knew if you could get it again once you had gone into hospital once. Everyone had their eyes closed, so many unknowns. There were lots of ethnic minorities getting it which made me worried."**
>
> John, 34, individual interview (October 2020)

In addition, the imposed restrictions and deferral of health interventions had impacts on physical health. Citizens reported worsening of physical conditions, particularly among those who were more isolated due to limited mobility, including older adults and those who were shielding. People also reported issues in accessing treatment for existing issues for themselves or dependents.

The NHS faced multiple overlapping challenges during the pandemic. It protected patients already in hospital from further infection by reducing visitors whilst providing an acute response service to those who were sick and needed help. Staff were diverted from routine care to respond to the pressures of coronavirus. In addition, the NHS had to manage sickness absence and caring responsibilities as its staff were directly impacted themselves.

Many 'non-urgent' and non-COVID-19 services were closed for large parts of the year as the NHS tried to navigate an unprecedented assault from the pandemic and its impacts. Patients also changed their behaviour, and many services moved to virtual and telephone assessments whilst GPs maintained face to face appointments for those that clinically needed it. Some chose to stay at home rather than face the risk of contamination in a health setting or for fear of 'being a burden'.

The NHS is now facing a large backlog of care unrelated to COVID-19. The total BSol CCG system waiting list increased by 59% between February 2020 and April 2021 (Table 13).

Table 13. Birmingham and Solihull (BSol) Referral to Treatment Change During Pandemic[23]

February 2020 to April 2021

Referral to Treatment (patients waiting on elective care pathway)	February 2020	April 2021	Change
Total BSol system waiting list	121,309	192,819	+ 71,510
% waiting for treatment < 18 weeks	81.4%	53.6%	-27.8%
52+ week waiters	2	21,588	+ 21,586
Longest Waiter Inpatient	57 weeks	118 weeks	61-week increase
Longest Waiter Outpatient	52 weeks	113 weeks	61-week increase
Mean length of wait Diagnostics	2-3 weeks	3-4 weeks	+ 1-2 weeks

Cancer waiting times also increased compared with pre-pandemic levels. In the BSol CCG system, fewer people were seen following a referral with suspected cancer. 85% of patients were seen within two weeks in February 2020, compared to 62% in March 2021 (Table 14).

23 *NHS England. [Online]. Available: https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2020-21/ (Accessed: 29 November 2021).*

Table 14. Cancer referrals change during the pandemic[23]

February 2020 to March 2021

	February 2020 Inside timescale	February 2020 Outside timescale	February 2020 Total seen	March 2021 Inside timescale	March 2021 Outside timescale	March 2021 Total seen
Two weeks wait (patients who are referred with suspected cancer on a 2-week wait pathway)	3428	598	4026	2649	1638	4287
62 days (patients waiting for their first definitive cancer treatment and should be treated within 62 days)	73.5	91.5	165	116	175	291

Table 15. Cancer referrals change during the pandemic – 104-day breaches[23]

February 2020 to March 2021

	February 2020	March 2021
104-day breaches (patients who have waited more than 104 days for their first treatment)	34.5	78.5

Mental Health

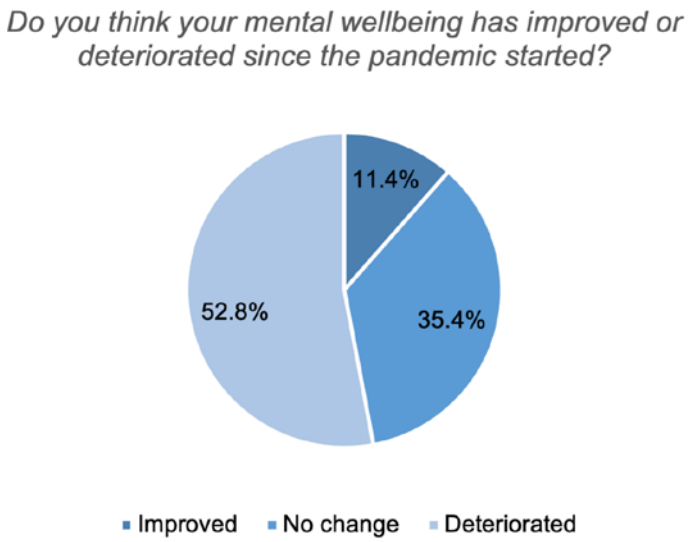
The pandemic has been a unique challenge for all of us, and there have been moments for everyone where we have felt isolated, overwhelmed, and depressed. The important restrictions that saved lives also impacted heavily on social contact, accessing support, and seeking help. Alongside this, there were pressures on people's mental wellbeing from financial insecurity and disruption to education and care provision.

"Going back to school in September, I don't deal well with change but I was impressed how I got back into it after so many months and it felt really good. But now I have to self-isolate because someone in my year tested positive, and I feel so low and sad and down, just in my room."

Kim, 17, individual interview (October 2020)6

The COVID-19 Impact Survey conducted during the first six months of the pandemic showed that citizens felt that their mental wellbeing had deteriorated (Figure 16).

Figure 16. Mental wellbeing during the first six months of the crisis[4]

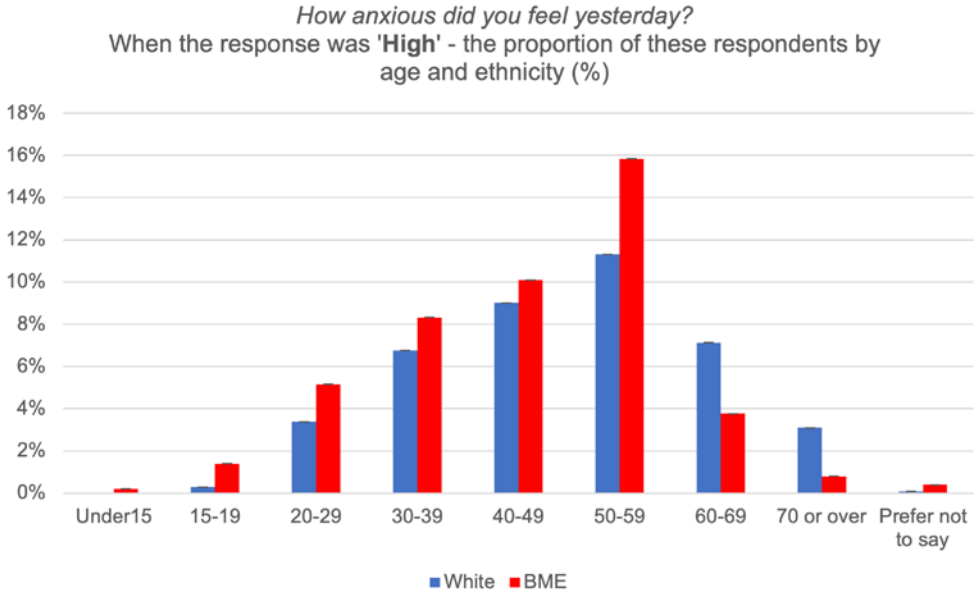


The results from the COVID-19 Impact Survey highlighted increasing levels of concern, anxiety and worry across age groups and different segments of our population. These include:

- Overall uncertainty
- Worry about health
- Separation from loved ones / relational tension
- Economic impact
- Loss of opportunity
- Disruption of routines and rhythms

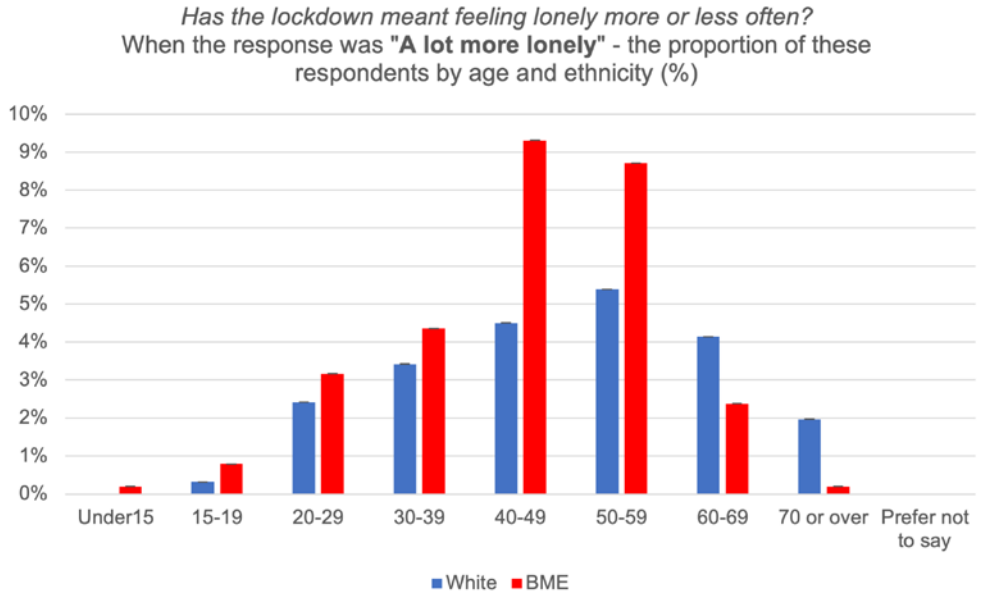
Many of us suffered from anxiety and loneliness due to the pandemic. Still, there is evidence from the local COVID-19 Impact Survey that this didn't affect everyone in the same way. Rates of self-reported anxiety were the highest for those between 50-59 years old. This difference was more significant in ethnic minority (excluding White minority) communities (Figure 17).

Figure 17. Rates of Self-Reported Anxiety by Age and Ethnicity[4]



Women were also more likely to report higher levels of anxiety. Non-white ethnic males had higher rates of reported anxiety than White males, but this was still lower than their female counterparts (See Appendix B, Figure 48). Many people experienced loneliness throughout the crisis. There were higher levels of self-reported loneliness for people aged between 40-59 years. This is more significant in non-white ethnic groups (Figure 18).

Figure 18. Rates of Self-Reported Loneliness by Age and Ethnicity[4]



Females were more likely to report feeling a lot lonelier than males. Non-white ethnic groups had higher levels of self-reported loneliness in both genders than White counterparts, but this may not be a significant difference for females (See Appendix B, Figure 49).

The mental health impact upon children and young people continued beyond the first lockdown as they suffered several disruptions to usual education patterns. This was explored by a report from the Birmingham Youth City Board in February 2021 which asked children aged 11 to 18 similar questions to the original Impact Survey. For example, when asked 'has Coronavirus/ lockdowns had an impact on how you are feeling?', 52% answered that they felt worse, with 31% feeling the same and only 17% feeling better. When asked to provide comments, 26% of respondents said they felt stressed, anxious, and worried. A further 26% said their feelings had impacted their sleep and subsequent progress with learning.[24]

24 *Birmingham City Council, "Education in the Pandemic", February 2021*

Figure 19. Factors Affecting Coping with the Mental Health Crisis[6]

The Well Equipped

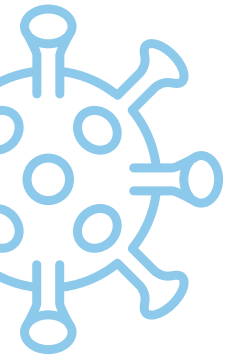
- Often younger
- Often with pre-existing mental health conditions/treatment
- Mental health literacy and fluency on issues
- Ability to prioritise own mental health
- Coping strategies developed in some that have previously suffered
- Ability to take part in activities that allow them to self-actualise and slow down (e.g. gardening, creating, spending time with their family)
- Found purpose by caring for others

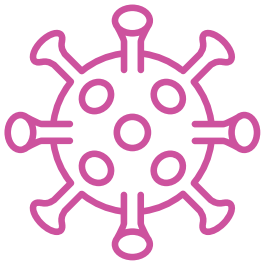
The Less Well Equipped

- Often older
- Often with limited coping strategies
- Had a limited understanding of mental health
- Did not normally prioritise mental health
- Not developed any coping strategies
- Might have struggled to meet own needs
- Did not manage to slow down, self-actualise, and reflect
- Needs were often overshadowed by caring for others

The Triggered

- Could impact either of the other two categories
- Triggered by traumatic or difficult experiences during the crisis
- Examples include
  - Contracting COVID-19
  - Working on a COVID-19 ward
  - Isolation
  - Death of a loved one
  - Economic insecurity
  - Challenges in the home
  - Impact of COVID-19 on our lives





Bereavement

Through our community partnerships and engagement sessions during the pandemic, there has been significant discussion of the impact of the restrictions on families and friends of people who were severely ill or dying. The NHS tried its best to be compassionate and use virtual calls and text updates to keep people informed and connected. However, this wasn't the same as being physically able to hold the hand of someone you love who is passing.

One specific element that came through these discussions was the issue of 'conversations unsaid', especially for lesbian, gay, bisexual and trans people. People described that the distance and limitations meant they hadn't been able to have the difficult or 'closure' conversations they needed to have with the dying individual. These couldn't be done over the phone or through a virtual call. This lack of closure to relationships was described as adding to the grief and made grieving more difficult.

With over 3,000 deaths due to COVID-19 during the pandemic, many individuals, families, and communities were touched by death in this difficult period.

Resilience

As with physical health, some factors can make individuals more or less susceptible to worse mental health and wellbeing and how well an individual can respond to the crisis. It is hard to assess how much of the population were already in the less well-equipped or triggered groups entering the pandemic. This reflects a lack of data on mental wellbeing in our population, which has to improve moving forward.

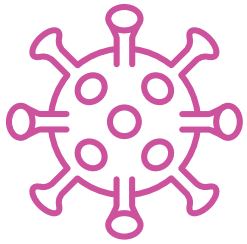
Support

In the Spring of 2020, the NHS and the Council worked together to expand bereavement counselling support and worked with community organisations to support additional capacity in mental wellbeing support services.

The Council commissioned a series of interventions to try and support the mental wellbeing of citizens including launching the Be Healthy toolkit and a suite of YouTube videos from local people focused on wellbeing and self-care.

It was also recognised that children's and young people's mental health had been acutely affected. Forward Thinking Birmingham, the local partnership of mental health service providers for 0 to 25 year-olds, moved rapidly to adapt access so that residents could still reach their services and access support, including face to face support for those who were in the most clinical need.

Many of us reflected heavily on our mental wellbeing during the pandemic. We used coping strategies to deal with this mental health crisis that included finding different ways to connect through telephone calls, letters and online quiz nights. Some of us developed new routines which brought together physical activity and mindfulness to find balance. Through this difficult year, we have perhaps grown in our understanding of our mental wellness, which we have to build on for the future.



Health Behaviours

Physical Activity

Being active every day is important to prevent disease and reduce complications in people living with long term conditions. Moderate to vigorous physical activity not only benefits our physical health but also improves lung capacity and has a positive impact on mental health and wellbeing as well. The Chief Medical Officers recommend a minimum of 150 minutes a week of moderate physical activity and muscle-strengthening exercise two days a week for adults to improve health.

According to the COVID-19 Impact Survey in Birmingham, physical inactivity was the highest for those between 50-59 years (Figure 20). However, there were inequalities in the levels of inactivity by ethnicity. There were significantly higher levels of inactivity in non-white minorities in several adult age groups (20-29 years, 30-39 years and 40-49 years). Women were more inactive than men overall, but there did not appear to be any significant difference between White and other ethnic groups combined (Figure 21).

Figure 20. Levels of physical activity by age and ethnicity[4]

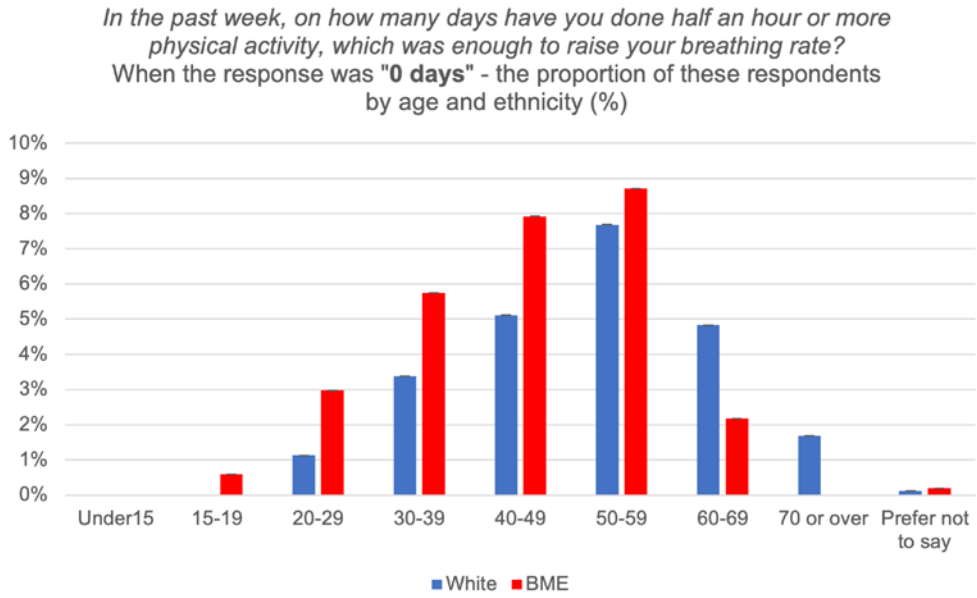
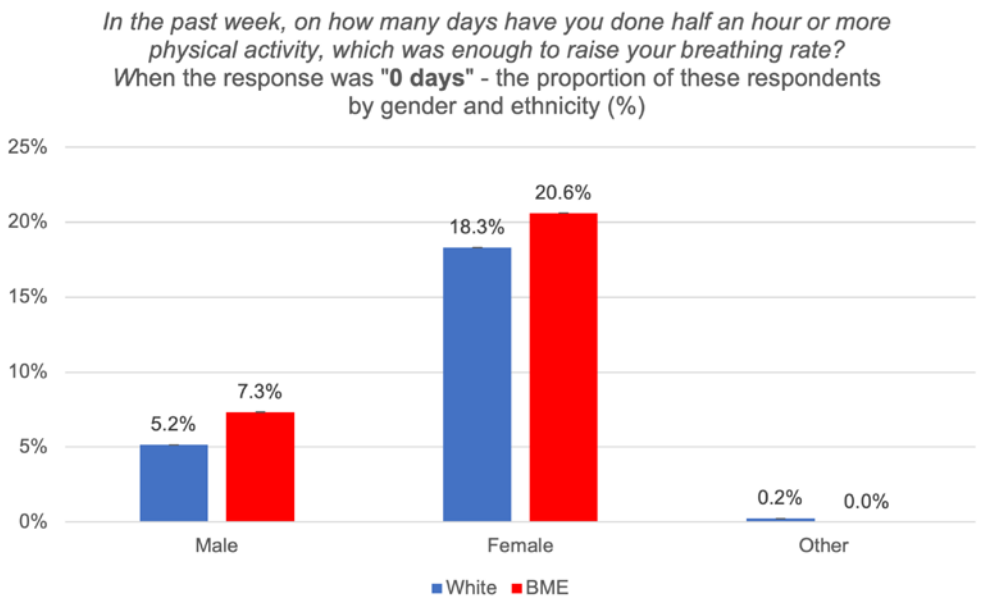


Figure 21. Levels of physical activity by gender and ethnicity[4]



People enjoy the outdoors for their physical and mental wellbeing. The use of green and open spaces increased during this time, helping them pursue some form of physical activity and offer a change of surroundings away from the confines of their homes. But a report commissioned by the National Trust in June 2020 highlighted that despite a considerable surge in utilising green spaces during the pandemic, inequalities existed in access to nature in many neighbourhoods, towns and cities. The study[25] found that Black and Asian people visit natural settings 60% less than White people. In the poorest 20% of households, 46% did not own a car and so urban parks and green spaces are their only opportunity to have contact with nature.

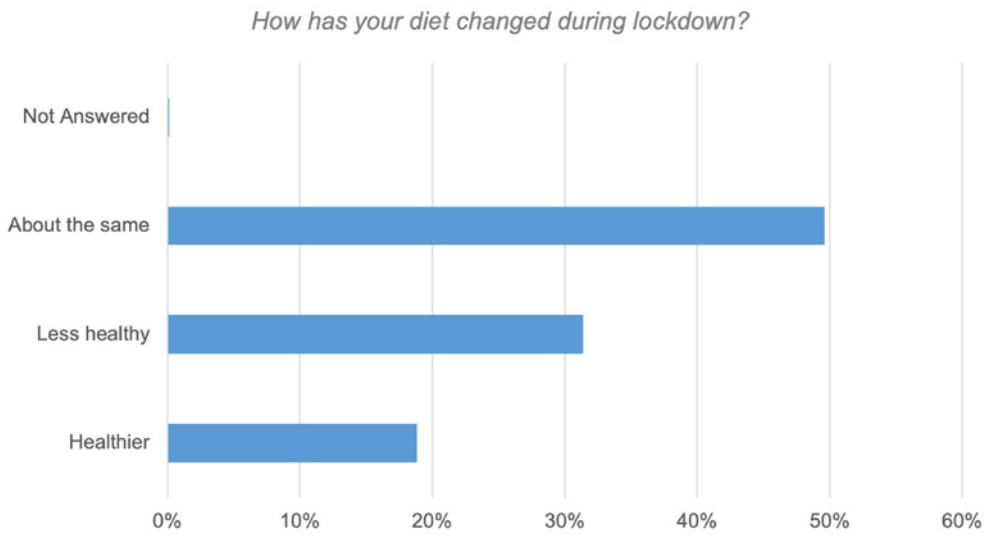
Although Birmingham has 600 blue and green spaces[26], we need to address the inequity of access and increase the number of publicly accessible green spaces, supporting the recovery from the pandemic.

Diet and Nutrition

The COVID-19 Impact Survey findings uncovered diet and nutrition were affected during the lockdown. Over 31% of participants felt their diet was less healthy since lockdown started. (Figure 22). More findings revealed the proportion of adults reporting meeting the recommended 5 portions of fruit/veg a day was only 24.4% compared to 48% in 2018/19. Also, 4.9% reported using a food bank for the first time and a total of 6.8% reported using food banks during lockdown (212 people). Additionally, just under 16% of participants reported ordering hot food deliveries at least once a week during the lockdown. In contrast, 52% reported doing so less than once a month. During the pandemic, the Council has supported a range of initiatives to support food security for citizens, including working with the Active Wellbeing Society to develop emergency food packages. This involved incorporating fresh produce and culturally appropriate contents, supporting additional food supplies to the food banks, enabling coordination between them to ensure that they remained stocked, and supporting citizens with new learning resources on home cooking on a budget and creating interesting, healthy meals.

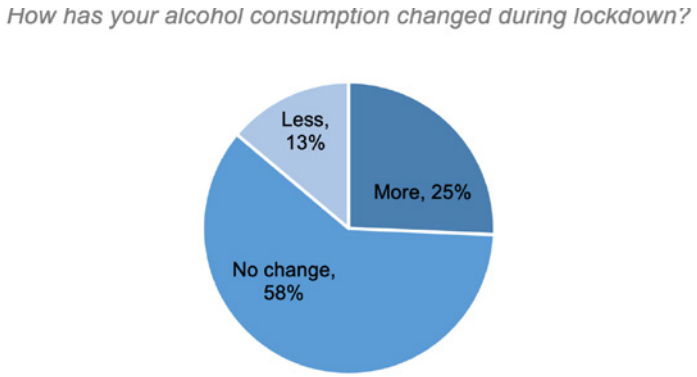
25 *National Trust. [Online]. Available: https://www.nationaltrust.org.uk/features/new-research-shows-the-need-for-urban-green-space (Accessed: 3rd December 2021).*
26 *Birmingham City Council," City of Nature", Executive Summary. [Online]. Available: https://naturallybirmingham.files.wordpress.com/2021/11/birmingham-city-of-nature-development-framework-summary.pdf (Accessed: 3rd December 2021).*

Figure 22: How diet has changed during lockdown[4]



Further insight from citizen responses showed just over 25% of participants reported increased alcohol consumption during the lockdown (Figure 23). In the matter of water intake, there was an increase in water consumption, with more than 21% of participants stating they drink more water now than before lockdown. Around 15% reported drinking less water, and 13% reported drinking no water in the previous day.

Figure 23: Alcohol consumption change during lockdown[4]



Addiction

Respondents from the COVID-19 Impact Survey were also asked if the lockdown had affected any addictive behaviours they might have had. Starting with smoking, just under 82% of respondents were non-smokers and just under 16% reported smoking, vaping or using shisha, approximately 495 of the respondents. Within this, only 24 participants reported quitting smoking during lockdown and 16 reported switching from cigarettes to vaping. Unfortunately, 18 reported starting smoking and 1 reported starting using Shisha. Of those using tobacco products, just over 6.9% reported using more frequently compared to only 1.4% using less.[4]

The Impact Survey also asked if respondents used recreational drugs and whether the lockdown had affected this use. The survey did not ask about the type of drug being used. Only 128 participants disclosed using recreational drugs. Of these 29 reported using more drugs during the lockdown, 11 reported using less and 10 reported stopping completely. 67 people did not answer this question which was the largest 'no response' in the questionnaire.[4]

Substance misuse services rapidly adapted during the first wave of the pandemic to ensure that people in need of crisis support and access to treatment continued to receive the help they needed. We also brought online new app-based support for smoking cessation as an innovation pilot to provide additional support for people wanting to quit.[4]

Case Study: Joy, a story of shielding[4]

"In February I had a chest infection and went to my GP. He was worried because I have chronic lymphatic leukaemia, but he gave me antibiotics and it cleared up. I didn't think I had corona at the time, but when it all came to light afterwards, I have to think that maybe I had some kind of mild form of it. Then sometime in March I got my shielding letter from my GP and thought ok I won't be able to go out as much as normal. My daughter was still going to work, and my husband started doing all the shopping. I was shocked seeing the pictures in the news of shelves in shops with nothing on them. Luckily my husband didn't have to queue because he works for the NHS. Every time he or my daughter came back to the house, they would get undressed and put everything straight in the washing machine to make sure it was safe."

"It wasn't until they started to give out the figures of how many people were in the hospital that I realised how bad it was; I thought they might have something like vaccination or a better way to deal with it. I found it very unbelievable to be honest, who would have predicted 2020 would have been such a horrible year? It was hard being in lockdown. Even though I've been ill I still try and get out a bit, but I haven't been able to see my friends as I normally would, and I miss that kind of contact. We do keep up on WhatsApp and over the phone. If I think about someone, I just drop them a text and ask how they are; those bits of interaction make people know you are there."

"Visiting my Mum over the summer was strange as well… she stood by her car and I stood by the front gate. I kept thinking if something happened to them, would this by my last memory. The worst thing though is not sleeping in the bed with my husband which has been right since the start, when we were advised not to because he works for the NHS and I'm in the shielding category. It makes me feel alone and I worry imagining if something happens to one of us. I don't know when we'll share a bed again, I guess once they have a vaccine. I don't know anyone directly who has got corona, but I'm on a Facebook group called Shine a Light and you do see how much different people are struggling with it. Especially when people haven't been able to be with their families in hospital. I was in hospital a lot last year because of my condition and I just feel so lucky that I am not going through that now. I was always waiting for my husband to come and visit me. I can't imagine not having those visits."

"When I was having my main treatment in 2018, I was going into hospital twice a week getting blood transfusions. I'm thankful that now I don't need to go in as much. I actually had a call from the hospital in May when they said there was no need for me to come for a test. I know they've said some cancer care has been delayed, but luckily mine at the moment is just monitoring. The next time I went in was in August and the hospital was totally dead, and everything went so smoothly. I actually felt really comfortable there, it just felt well managed and like they had it under control. And my GP has been brilliant. He was the one who suggested I take some time off work when the virus was first starting to spread, because I would be in contact with a lot of people. He also gave me a number for mental health support. I really felt looked after. He always discusses things with me, like if my prescriptions need reviewing, it never feels like he is rushing me."

Our Relationships

Many people experienced strain on their relationships during the crisis. One of the reasons for this was the nature of their home and its impact on their everyday life. The research identified two contrasting experiences of the home which took on disproportionate importance. Some were happy and saw their home as a 'sanctuary', and some were unhappy and saw it as a 'prison'. A sanctuary was a comforting space where relationships could be nurtured at home. It was a place where activities could take place (gardening, creating or family time). Those who saw their home as a sanctuary had coping strategies and lifelines in the home, including routines, activities, and people. It was also somewhere that was perceived to be safe from the virus. A prison was usually a limited space and sometimes included challenging relationships. When problematic relationships were present, it was difficult to escape, and there was limited access to lifelines outside the home in the same way that was in someone's sanctuary. Many people in this situation felt trapped and afraid.

"At times it got horrible and awkward, living with my ex during lockdown. I had to go and stay with a friend for a few days. I found out I could do that in lockdown – mentally I was going round the twist. Looking back, it was quite difficult, but I had to think about my daughter as well, protecting her. She stayed with her boyfriend for a few days, to get out of the toxic background we had. It's been very difficult."

Flo, 45, individual interview (October 2020)[6]

Some have experienced significant strain on relationships. Lockdown caused people to spend more time at home, and for some, this was too much. Differences in views on the crisis and the restrictions imposed also led to a strain on relationships. For most, the crisis has emphasized the importance of interpersonal relationships and face to face contact.

The pandemic has had an extraordinary impact on interacting, supporting, and connecting. The effects of the virus and the necessary restrictions came at a cost of our relationships with one another. Our needs have been to continue to ensure our contact with each other goes beyond the functional. Our contact with each other has to actively nurture the relationships we build and maintain. We have coped with this relational crisis by 'creative interpretation' of bubbles, connecting digitally, and making the most of meeting physically when allowed to do so. Our assets have been those strong existing relationships we have relied upon, living close to loved ones, and meeting people in outdoor spaces. The ability to utilise digital communications and the presence of community has been vital for our relationships. Support has come from family, friends and community. It includes both online and offline contact, but it must be meaningful. Those with unmet needs had fewer or geographically more distant relationships. Sometimes this meant people lacked 'someone to turn to'. Occasionally, further communicating the importance of social connection was required, and some went without secure spaces for social interactions. Volunteers and professionals could help build positive relationships that may be lacking, which can help build community and minimise relational costs.

"Family are the people who should help us in a crisis. But all my family are in America and my wife's family is in Hungary. No one in the community here really knows each other or helps each other. I speak to my family a bit on WhatsApp, but here there is no one we can turn to for help."

Sami, 49, individual interview (October 2020)[6]

People have varying levels of responsibility and vulnerable people that depend on them, which has impacted people's experience of the crisis. Those with more vulnerable dependents have experienced greater anxiety and complexity. Their actions and the decisions they make also have greater consequences. However, the act of caring for the people that depend on them gives them purpose and distracts them from the uncertainty caused by the crisis and, at times, boosts their mental health. Those with fewer or less vulnerable dependent people have greater freedom and can make those personal decisions without worrying about the consequences of involving vulnerable loved ones. Some, however, have experienced the feeling of separation from their loved ones.

Figure 24. Relational needs and support during the crisis[4]

Needs

- Contact with others that actively nurtures relationships
- Copying strategies
- Interpretative Creation of Bubbles
- Digital Connection
- Making the most of physical meeting
- Making quality time count

Assets

- Strong existing relationships
- Living near loved ones
- Outside space to meet people
- Less vulnerability in bubble
- Being part of community
- Ability to use digital communications

Support

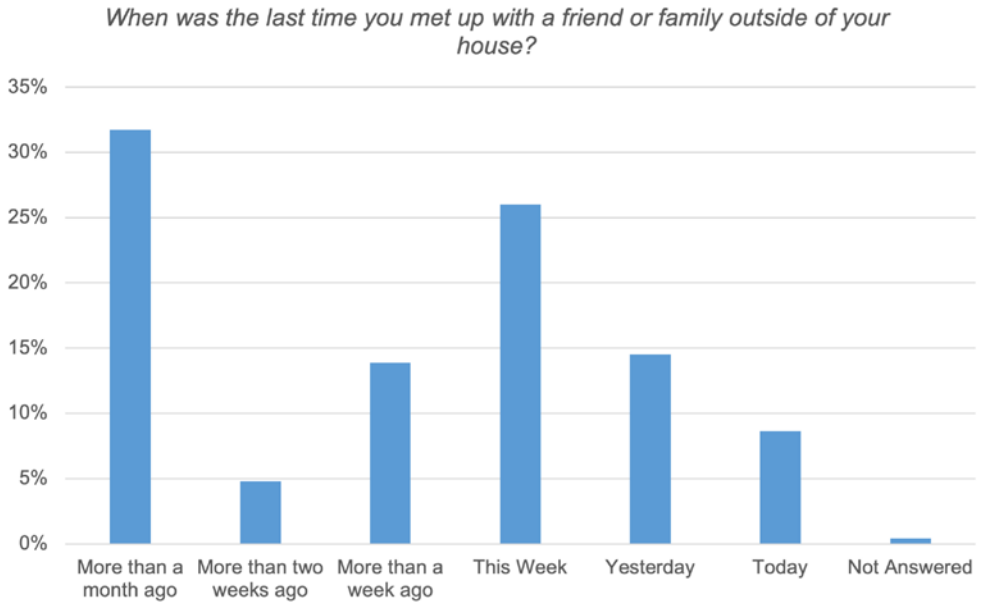
- Meaningful online and offline contact
- Friends
- Family
- Community

Unmet Needs

- Lacking 'someone to turn to'
- Communicate importance of social connection
- COVID-19 secure spaces for interactions
- Volunteers and professionals to befriend those lacking positive relationships
- Community-building

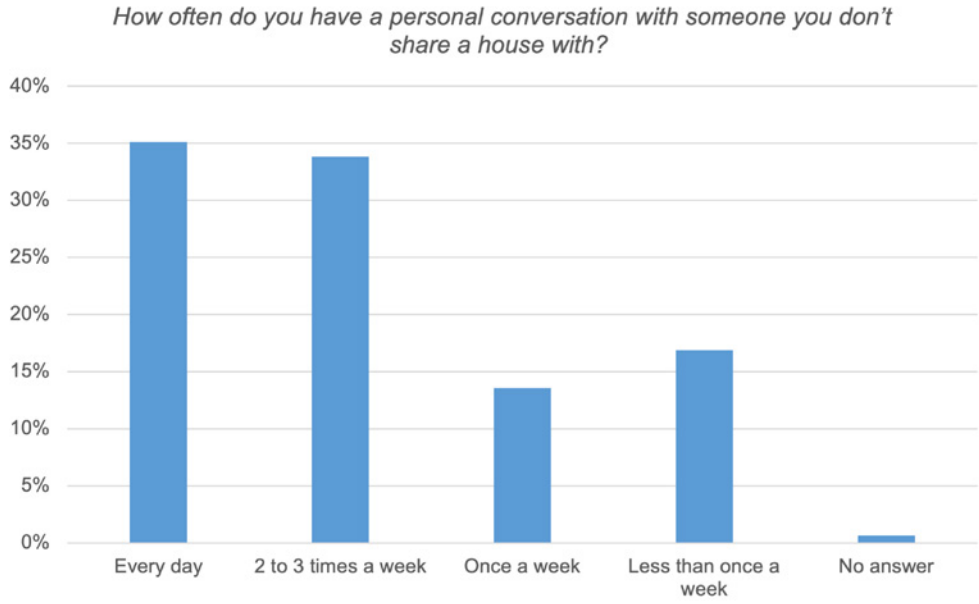
The impact of the pandemic on relationships was also seen in survey responses relating to the frequency that people were able to meet with family and friends outside of their house. During the first set of restrictions, at the time of their response, almost one-third of people (32%) had only done so more than a month previously (Figure 25).

Figure 25. Meeting with family and friends outside the home[4]



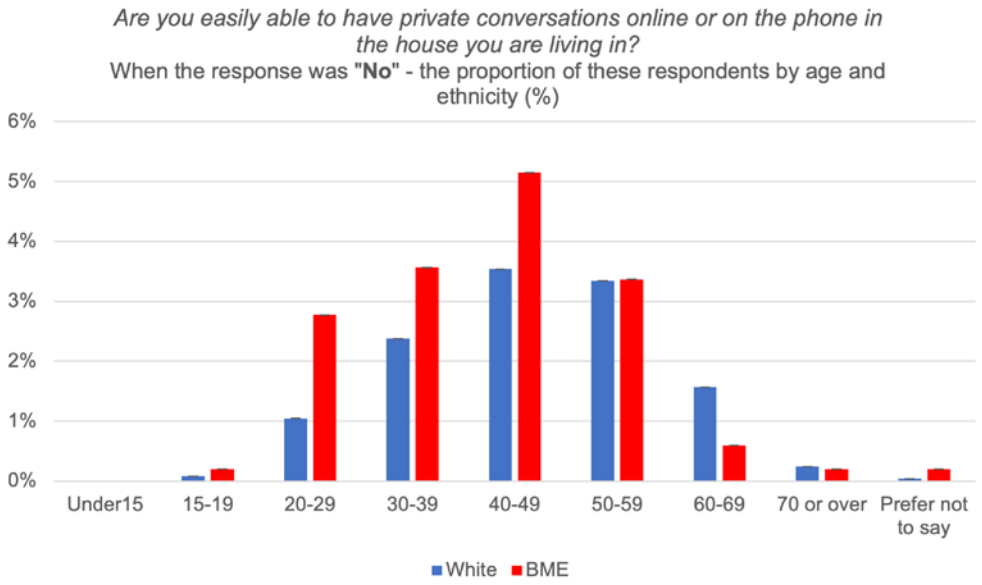
Despite the impact of restrictions on the pandemic, according to the COVID-19 Impact Survey, most people were still able to have personal conversations with someone they did not share a house with (Figure 26). Over one-third of respondents (35%) said they did so every day, and a similar figure (34%) did so two to three times per week. However, 1 in 6 people (17%) said that they were having personal conversations with someone they didn't share a house with less than once a week.

Figure 26. Personal conversations with those outside the home[4]



However, maintaining relationships and maintaining privacy became an issue for many people when restricted to their homes. Many people struggled to have private conversations when at home. Figure 27 demonstrates that a slightly higher proportion of non-white respondents around the working age were affected by this compared to white respondents. However, the confidence intervals suggest the most significant difference between ethnic groups is those between 20-29 years.

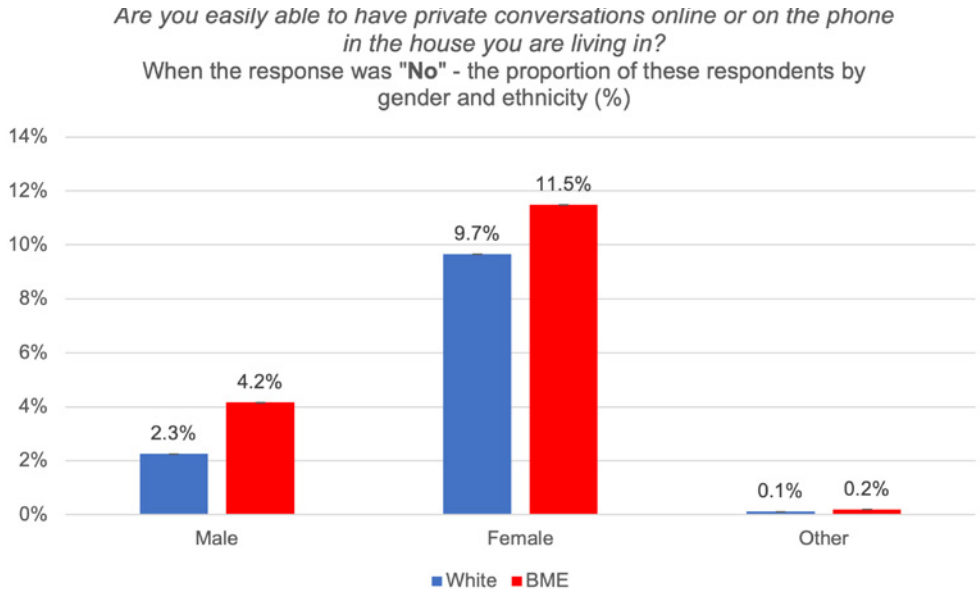
Figure 27. Private conversations within the house, by age and ethnicity[4]



Women were a lot less likely to report having privacy at home. Still, the data suggests that there did not appear to be a significant difference between ethnic groups (see Appendix B, Figure 42).

The survey also suggested that family relationships have deteriorated more in age groups 40-49 years and 50-59 years for those with a White ethnicity group. However, this difference is not as clear in non-white ethnic groups because of overlapping confidence intervals (Figure 28). Again, women were more likely to report family deterioration than men, but there did not appear to be significant differences between ethnic groups (see Appendix B, Figure 43). Personal relationships (with partners) were also impacted differently. According to the COVID-19 Impact Survey, they appeared to deteriorate more with increasing age up to 59 years. This was significantly higher in non-white ethnic groups aged between 40-49 years and 50-59 years (see Appendix B, Figure 44).

Figure 28. Relationship changes with children/family since lockdown by gender and ethnicity[4]



Females were more likely to report that their relationships with their partners had changed than males. And while there did not appear to be significant differences between White and non-white ethnic groups for females, it was significantly higher for men among non-white ethnic groups compared to White groups (see Appendix B, Figure 44).

Case Study: Leanne, a story of isolation[6]

At first, things didn't feel that different for me. I work as a project manager in clinical investigations and often worked from home anyway. The biggest change was not being able to go into hospitals. My fiancé works for his family business and they went back to the office quite quickly, so it didn't feel too cramped working from home for too long!"

"I'd say I've been pretty lucky when it's come to lockdown and Covid. My fiancé and I are both in secure and stable jobs, and to be honest I've really appreciated the opportunity to spend more quality time together: going out for lots of walks and runs; having more time to cook together at home; spending time in the garden. We had to cancel our wedding which was planned for June, but that feels a small sacrifice compared to what I know other people have experienced over the last year. And all our families have been healthy, which I'm very grateful for."

"Perhaps because I work in the world of healthcare, I've always taken quite a scientific view of restrictions. I was happy when they made face coverings mandatory because I do believe they significantly slow transmission of the virus. And I agreed with pubs closing at 10pm, because alcohol definitely limits inhibitions! But I've often wondered if there could have possibly been a more nuanced response to the pandemic – shielding vulnerable groups and letting others live their lives safely. I thought it was good that schools weren't totally closed like they were in Spain: the children of key workers and kids who need extra support could still go."

"And I've been unimpressed with testing: you go online to find out about local capacity, and hear there's nothing available, but then when you go to a testing site it's empty. My fiancé had that experience in Wolverhampton. It feels so disorganised and the government should be doing better. But I know this situation is unprecedented and they have a tough job."

"By far the hardest thing for me has been not seeing my family who live in the south of Spain. We're very close and I typically see them every 5 or 6 weeks. Maybe it's a Spanish thing, but family are really important, having them all close to you. I really missed them at the beginning of all this when I couldn't see them at all. Now we can travel, but quarantine makes it more complicated. Digital contact helped, but it's not the same. We drove to Spain in July and it was so so lovely to see them after all that time. I gave them all hugs – I'm not sure if that was allowed but it was just so wonderful to finally be together again! And we're only human. I enjoyed seeing my fiancé's family (who live locally) during summer when that was allowed – of course it's not the same as seeing your own family but it was always lovely to see them, and I was sad when Birmingham went into local lockdown in September and that wasn't allowed anymore. It's all definitely affected my mood – not to the extent that I need to seek help, I guess just as much as you'd expect during a time like this."

"Overall, I haven't interacted with many people over this time. I didn't have a huge social life here to begin with, and now it's even harder to meet people. In Spain I was always a very sociable person, so this has felt like a big change for me. So, I guess it would be good if there was a service that provided opportunities to meet likeminded people in a safe environment. Like organised sport – but safely! I'd definitely really appreciate that."

Our Society

The pandemic has had a profound impact on our society. Trust in the public authorities has fluctuated through the pandemic and some have noted a lack of deference to authorities. Many have turned to alternative sources of support and information.

For some, the restrictions imposed were not enough whereas others felt they were too much and impacted on personal choice. For others, there has been a lack of logic in what the guidance means. Many have viewed the restrictions with suspicion, particularly those who will pay a higher price. Misinformation has featured during the pandemic and at times, conspiracy theories have entered the mainstream. Whilst this has been present throughout the pandemic, it has featured heavily in the rollout of the vaccination programme. There is a pressing need to restore trust and togetherness in our society as we emerge from this crisis.

The cost of the COVID-19 pandemic has been felt individually and as a society. As we entered the crisis, we needed clarity on messaging and a sense of connection and solidarity with local leaders. People also wanted to feel heard and understood, as well as understand the restrictions that were imposed on society. To cope, we often looked for alternative messengers and narratives, which in some cases led to more conspiratorial theories and disobeying the rules. We used a wider engagement with news sources as an asset and received support from news providers who simplified messaging. Initially, the press conferences provided support alongside the countries' leading experts in the Scientific Advisory Group for Emergencies (SAGE). In entering this societal crisis, people have felt there is a gap in a local representative that is vocal and makes the people of Birmingham feel their needs are heard and represented.

Figure 29. Societal needs and support during the crisis[6]

Needs

- Clarity of messaging
- Sense of connection and solidarity with (local) leaders
- Feeling heard, feeling understood, and understanding of restrictions

Coping Strategies

- Looking for alternative messengers/narrative
- Resorting to conspiracy theories
- Disobeying the rules

Assets

- Wider engagement with news sources

Support

- News providers who clarify and simply messaging
- Press conferences (initially) and SAGE

Unmet Needs

- More vocal local representative/voice that makes people of Birmingham feel their needs are heard and represented

Authorities and Restrictions

The pandemic has impacted our lives in different ways and our journeys are unique. However, there were some patterns identified in the ethnographic research.6 As time progressed throughout 2020, there was a growing sense of anxiety, depletion and confusion. There was also a growth in autonomy too. As the pandemic went on, people became anxious about their health, money and opportunities. They became anxious about daily rhythms arising from the "everyday crisis". People's reserves became depleted, including financial resources and their emotional resilience. This reduced people's ability to cope and occurred after 6 months after the onset of the crisis in March 2020. There was also growing confusion with new restrictions, rules and guidelines. In some cases, there was a perceived lack of communication on a local level, with authority and leadership becoming increasingly unclear. For some, this led to a growing mistrust in authority. Despite the diminishing of resilience, we found new ways to adapt to changing circumstances and became more autonomous. Many people suffered during the crisis and felt it was better to take control of their own decisions, doing what they feel is the right thing, rather than what they have been told to do.

Many believed that following the rules meant that they had a price to pay. Many used this cognitive dissonance to develop their philosophy of adhering to the rules imposed. There were situations where the price was high when choosing whether to follow the rules:

> **"Whilst I had Covid, a friend alerted me that my daughter was writing worrying things on her Facebook wall. My mother's instinct told me I had to drive to pick her up immediately, even though I had Covid and was meant to be staying at home and isolating."**
>
> Flo, 45, individual interview, October 2020[6]

People's internal commitment to following guidelines started to falter as time progressed. There were situations where the perceived pain if they were to adhere to the rules changed, and therefore so did their behaviour:

Different Rules for Different Relationships[6]

> **"When I went to Spain [after lockdown], I was living in the same house as my family [and hugged them], you are a human being as well, but for example my [my fiancé's] family I haven't hugged them since lockdown."**

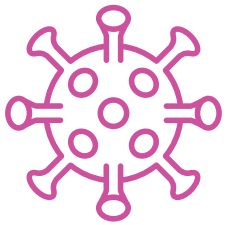
Drawing Tighter Boundaries around Certain Dependents[6]

> **"It's tough as my mum isn't very well and I would like to see my parents […] I know I wouldn't be at much risk myself but I don't want to put my family at risk so I would get tested before I go."**

Bending the rules for special moments[6]

> **"There would be 11 of us here for Christmas, so I'm not sure what we will do this year […] I'll be very sad if I can't do Christmas […] I'm not sure I'll stick to the rules that rigidly."**

People's personal philosophies contributed to how they perceived the handling of restrictions. Those who did not adhere to the rules were more likely to say the rules were confusing, illogical or impossible to understand. They were also more likely to feel that the price to pay was too high and not sustainable. Their growing mistrust and scepticism of government became a justification for themselves to make those decisions. Those who have a philosophy of adhering to the rules to a greater extent are more likely to feel like they are not in control. They felt like they had to go beyond the guidance to protect themselves further and became uneasy and worried about others not following restrictions. Some were even relieved when restrictions were tightened for this reason and were critical of the Government for not enforcing restrictions to the pace or the extent that they felt they were required. These opposing views created huge challenges for authorities to manage expectations and maintain credibility, trust and support.



"I don't even know what exactly the rules are anymore. I always would have done the things I am doing anyway. People want to meet people, it is a human need. That is why solitary confinement is a punishment. I don't know anyone my age who is sticking to the rules. In the beginning, everyone was. But now everyone thinks it's over now and that was long enough…"

Guy, 18, individual interview (October 2020)[6]

Messaging

Regarding the ethnographic research6, many agree that communication from authority at a national level has been confusing. Despite the sympathy offered due to the circumstances, many were critical of the lack of clarity and U-turns (e.g. face masks policy). Public trust has also been impacted by the perceived notion that the elites are not following the rules that they were involved in creating and enforcing. For example, when the Prime Minister's advisor Dominic Cummings did not comply with restrictions. As the pandemic went on, the frequency of national communication declined. People were appreciative of the press conferences that started in March 2020 and the updates from SAGE and its technical and scientific experts. These updates and more regular communication made people feel more informed and in control. The lack of messaging in this context increased the feeling of uncertainty. More communication from national politicians and civil servants can help build trust in the government's response to the virus and enable people following the restrictions to better understand the rationale behind them.

"It would have been good for local councils to send out leaflets to people, saying what is available to people, whether a phone number to call, for families struggling financially and food-wise. There could be pamphlets or booklets with information on websites."

Joy, 56, individual interview (October 2020)[6]

Research suggests that people have a low awareness of the role of local government during the pandemic.[6] There was an appreciation of "marking" in public spaces and reminders to wear a face mask, keep a distance from one another and use hand sanitiser. However, this was not attributed to local authorities. Within the research conducted, there was little awareness of communications from Birmingham City Council, apart from initial contact for those who were shielding. Overall, people felt increasingly isolated and without direction during the year.

The focus on COVID-19, the restrictions, and our response to it meant the news was fixated on a single topic. This can expose it to disinformation and conspiracy theories which became a bigger part of the mainstream discourse. Disinformation was able to spread when there is a vacuum in understanding or when people became frustrated with the restrictions and looked for alternatives. Examples of ideas that have gone beyond fringe thinking are around the origins of the virus, the Government using restrictions as a method of social control and the anti-vaccine messages.

Figure 30. Perceptions on authorities and messaging[6]

National Government

- Initially trusted and appreciated for efforts
- Now increasing mistrust as people find:
  - the strategy less clear
  - the restrictions less effective
  - that the price paid for pandemic feels increasingly heavy

SAGE

- Appreciated as medical authority
- Initially trusted more than the Government
- Now feels more in the background

Local Government

- Notably absent
- Opportunity for local government to speak out more frequently and clearly
- To make people of Birmingham feel their needs are being addressed on a more local level

Alternative Messengers

- Particularly younger people are turning to alternative messengers e.g. meme accounts for their news
- Opportunity to use a wider range of messengers to make messages more resonant across target groups

There are similarities in the perceptions of authorities from the stories from citizens and the research which asked survey respondents which sources of information they trusted to a low, medium or high extent. Despite initially trusting the national government, survey respondents trusted them the least of any of the institutions that were asked (Figure 31). NHS organisations and Public Health England (PHE) were the most trusted, which was followed by Birmingham City Council (BCC). According to the survey, social media platforms were the least likely to be trusted, with word of mouth seen as a slightly more trustworthy source. However, the research did suggest that more people, particularly young people, were turning to alternative messengers for information.

Figure 31. Trust in the information people received from various sources[4]

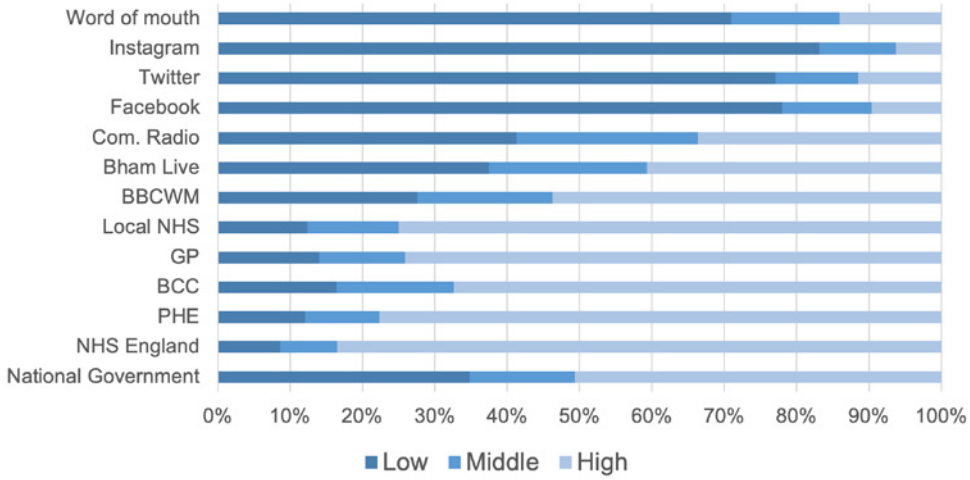
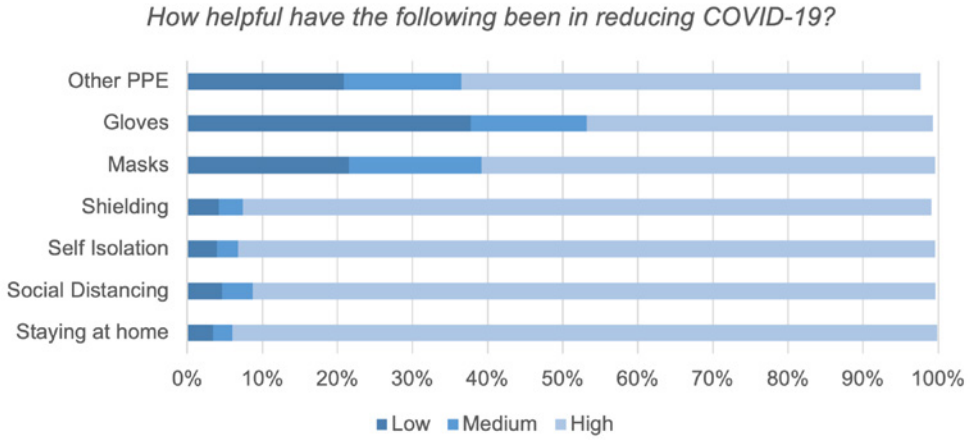


Figure 32. Perceptions of the success of protective measures against COVID-19[4]

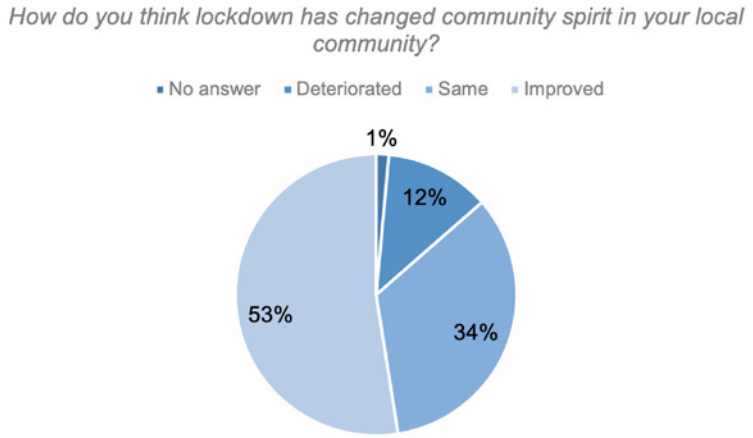


Communities

Linked to messaging and communication, was the impact that lockdown/s had on community spirit. The connection people have with their community played a role in their response to mitigate the impacts of the crisis. Some experienced their support network through their community, with neighbours helping with activities such as shopping, plumbing and check-ins. Others did not experience this and did not have a community around them and therefore did not have this local safety net.

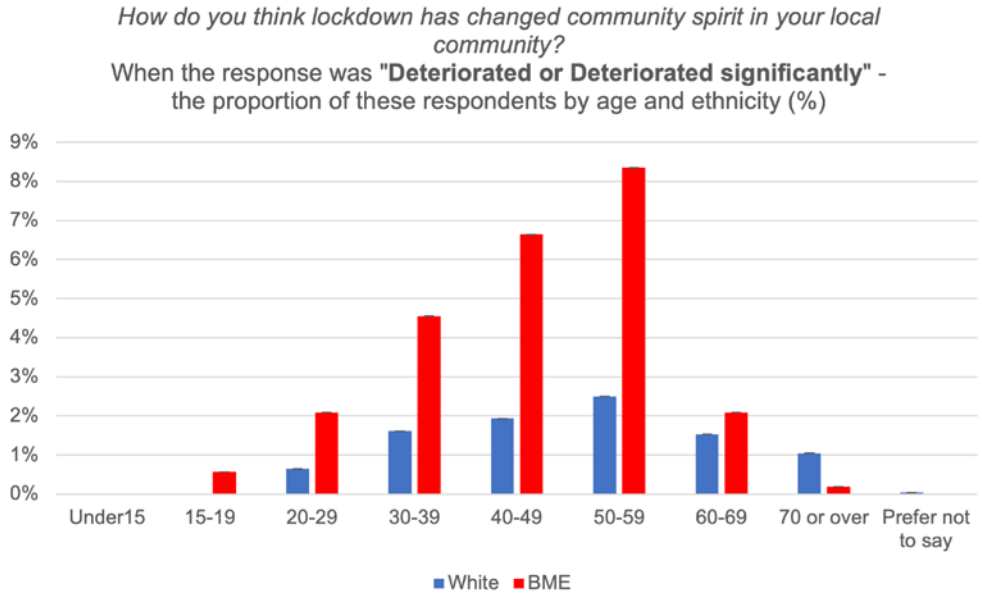
The survey responses illustrate that a majority of respondents believed that lockdown/s had improved community spirit in their local area (Figure 33).

Figure 33. The impact of lockdown on community spirit in the local community[4]



However, there were inequalities present in people's perception of community spirit. In general, non-white ethnic communities were more likely to report that they felt that community spirit in their local community has deteriorated during the crisis. This figure was also higher in the working-age groups (Figure 34). A similar pattern was seen for perceptions of community spirit in local communities and across the city as a whole (see Appendix B, Figure 45).

Figure 34. The negative impact of lockdown on community spirit in the local community, by age and ethnicity[4]

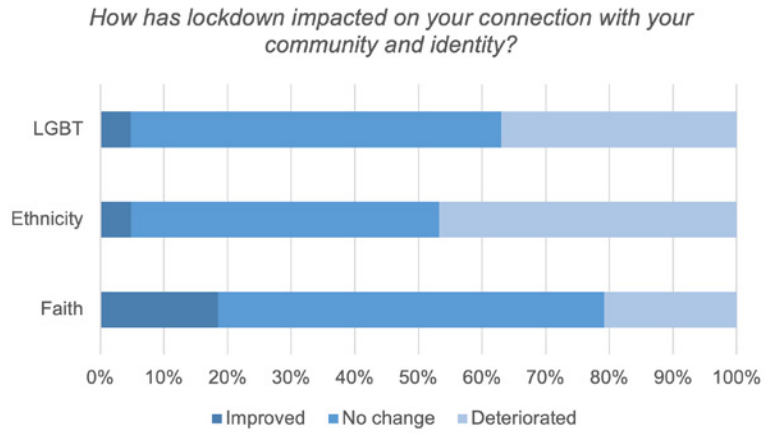


This pattern continues with people's relationships with their local geographical

community, where non-white ethnic groups were more likely to report that this had deteriorated during the lockdown/s. Again, this increased across the working-age groups (see Appendix B, Figure 46). Equally, females were more likely to report that their relationship with their local community had deteriorated compared to males. This was true in both White and non-white ethnic groups and more significant for non-white ethnic groups in both genders (see Appendix B, Figure 47).

In general, communities of identity have also felt their relationship with these communities has deteriorated during lockdown (Figure 35). This is except for faith, where almost as many thought it had improved as deteriorated. Ethnic minority communities were the most negative about how their relationship with their community had changed during the pandemic.

Figure 35. The impact of lockdown on connection to community and identity[4]



Finally, a significant community; children and young people in education also reported the mixed impacts that lockdowns had on their learning. For example, when asked how well they thought they had adjusted to home learning, just over 61% answered that they had adjusted well while 39% said they hadn't. The difference is even slimmer when asked if they clearly understood what was happening with their school or college work. For this question, just over half (53%) said that they did understand what was happening.[24]

The impact of the first lockdown, in particular, provokes a negative response from the survey respondents. When asked if they were given a good standard of education in the first lockdown, 57% answered 'no'. When a similar question was asked about concerns they had about the delivery of their education at the time of the survey (February 2021), a significant majority (45%) still reported that they were concerned, with reasons for this concern ranging from a lower standard of teaching and less 1:1 interaction with teachers.[24]

The knock-on effect of disruptions to children's and young people's education has been a loss of confidence in their preparedness for the next steps of education. When asked how prepared they felt, only 7% felt 'very prepared' with a further 30% answering that they felt 'prepared'. However, 33% said they only felt 'a little prepared' and another 30% said they didn't feel 'prepared at all'.24 The concern that these results illustrate is that it is difficult to find any answer where the respondents gave overwhelmingly positive responses. While on aggregate, just over half do seem to have adjusted and feel prepared enough to continue, a significant minority have only felt the negative impacts of the disruptions. They have lost confidence in their education as a result.

Case Study: Guy, a story of frustration[6]

"They started announcing they were closing schools around March. I thought it might be a month and a half that schools would be closed, but then they said exams were cancelled and our work basically just stopped. We never went back to school and people just didn't bother to do the stuff online because we knew we wouldn't have exams. It did feel really weird. We just got an email at 7am on results day, and that was it. They could have done that better. I then went through clearing as I messed up my UCAS choices, and it was all a bit stressful, but the school didn't really help at all with that."

"My last exam would have been June, and me and my mates were planning to go to Magaluf a few days after that to celebrate, but it all got cancelled. At the start of lockdown, me and my friends did loads of group calls on that House Party app, just messing around, but we got bored of that. Then April and May were pretty quiet months. I would wake up, do a workout, do nothing until the evening, then go for a walk to get outside. It just felt like a long and boring summer holiday. I missed sitting around with friends and messing around, and those random conversations that you just don't get on Zoom or texting. And the gym!"

"Towards the end of lockdown, I started meeting up with friends a bit in the park. We just felt bored and knew there was such a low chance of having the virus. Then by mid-June I went to the first house party, with maybe 20 people. It felt so great. We were mainly outside, but it just felt good to be back. In the summer I had some friends over and we would go to the pub a bit, which my parents were fine with because they knew everyone I was meeting up with."

"It was really nice to get to uni and meet people. I think being inside for so long during lockdown made me feel like I had to make the most of it, it's made me more sociable. I've been going out every single night since I got here. There are a lot of flat parties because the clubs and bars are all closed. It's a bit annoying because there is security everywhere, but they can't be everywhere all the time. You get messages from friends around 9 or 10pm saying come here or there, and if security comes you just have to dodge them. We still go to the pub and things, they have no way to check who is in your household, as long as you go in a group smaller than 6. I think we're in Tier 2, but I don't really know what that means. I didn't watch Boris Johnson's announcement, I just follow a lot of Instagram pages and it will say Boris has said x, y, z about the restrictions, or there will be a meme about couples in tier 2 not being able to meet inside. That filters out most of what I don't need to hear."

"There are 12 people in my flat and those who want to go out just go out, it wasn't like we had a group discussion or anything about it. Everyone just does what they want. There are three people who are never in the shared space, they just grab a pot noodle and then are back to their room. You have to wear a mask in all of the lectures, and you have to shout through the mask to be able to say anything, but actually most stuff has been online. I don't mind that too much, I can play the lectures at double speed as they are all pre-recorded. What they haven't done at uni is anything to deal with people's desire to socialise, so people have just met anyway. People want to meet people; it's a human need. That's why solitary confinement is a punishment. I don't know anyone my age who is sticking to the rules, whereas at the beginning everyone was. But now everyone thinks it's over and that it was long enough."

"I think at the start people sacrificed their need to socialise, but now not anymore. It comes down to common sense for me, you can be sensible. Like I've seen people who have been in mosh pits in a tiny kitchen rammed full of people, and that kind of thing obviously isn't sensible. But me sitting around a living room with 10 other people doesn't feel that risky. I'm not a big worrier, but I sometimes think about how things might change long term, like festivals and things. I don't think they will ever really go back to normal, there will always be a remnant of this. There will always be people wearing masks. You are always going to be reminded of how that all started."

Our Economy

The economic and financial impact has been felt differently across the city, and it has not been an economic crisis for all. Some have experienced short-term impacts, whilst others feared their financial future.

The Impact on our City

The city has experienced its highest levels of unemployment since the 1980s. In 2021, the total number of unemployed people claiming job seekers allowance or other unemployment-related benefits was higher than before the first lockdown, which has also affected young people (18-24 years old) (Table 16).

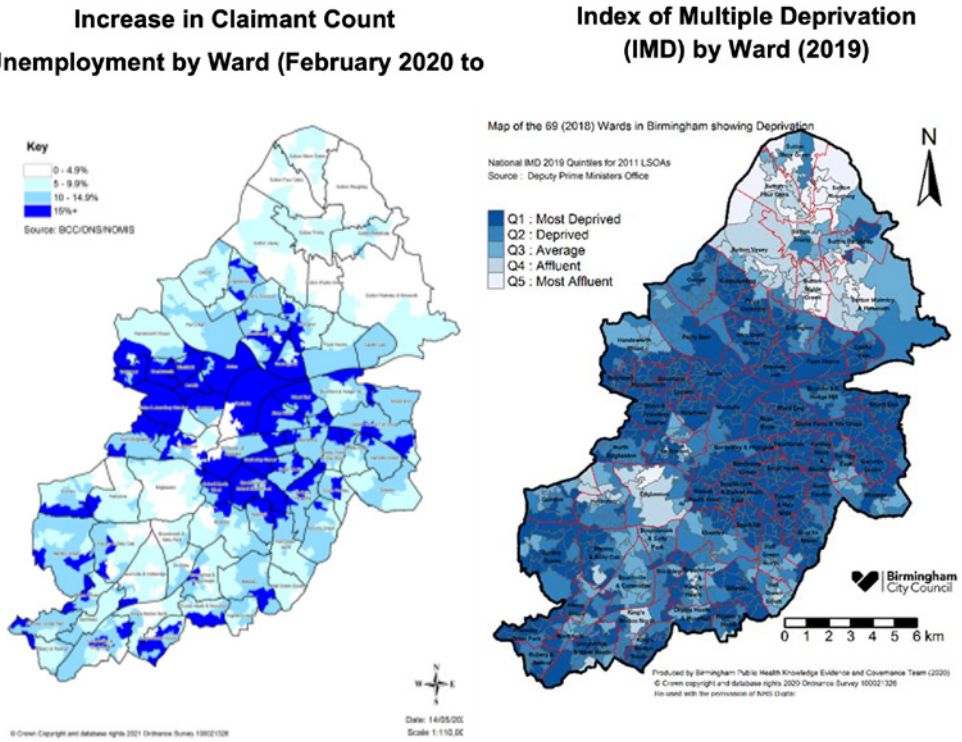
Table 16. Increase in Claimant Count Unemployment[27]

February 2020 to March 2021

Month	Total Claimants (Count)	Total Claimants (% of total)	Youth Claimants (Count)	Youth Claimants (% of total)
February 2020	48,560	36.7%	8,840	35.2%
March 2021	83,920	63.3%	16,305	64.8%
Increase	+35,360	+26.6%	+7,456	+29.6%

Wards in Birmingham that have high levels of deprivation were associated with high levels of unemployment (Figure 36). Individuals who can do remotely and work from home were less likely to experience job loss. Those in jobs that require physical presence were more likely to be furloughed, have a reduction in working hours, or be laid off.

Figure 36. Claimant Count Unemployment (2020/21) and Deprivation (2019)[27]

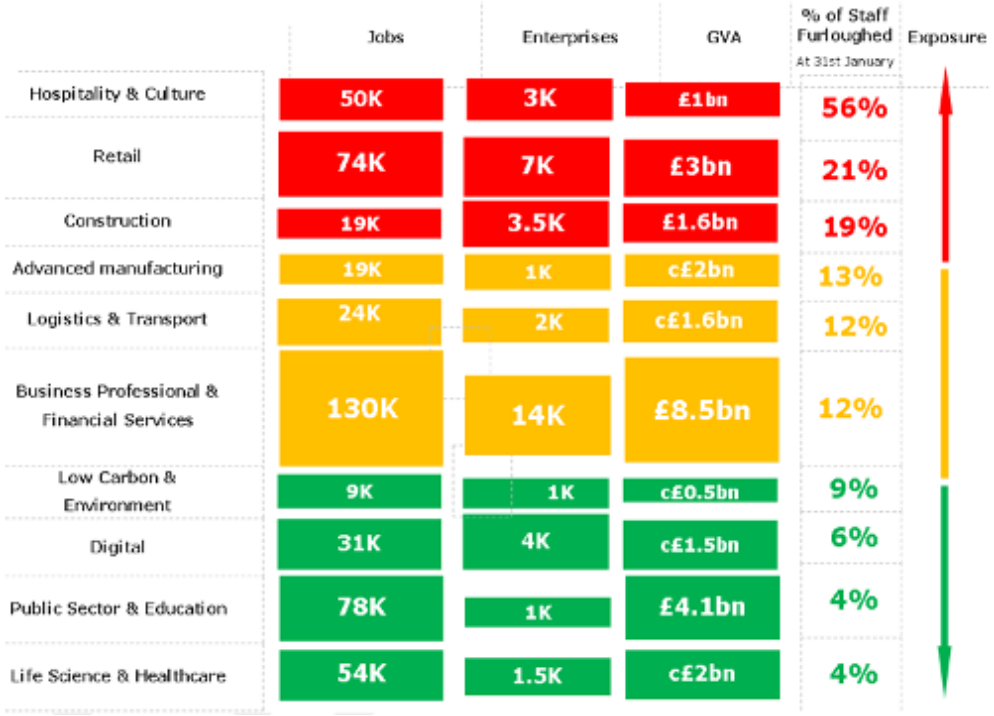


27 *Birmingham City Council. Economic information and statistics. [Online]. Available https://www.birmingham.gov.uk/info/20164/economic_information/521/economic_information_and_statistics/4 (Accessed 2021 November 15).*

The acute impacts were experienced by those who were unable to find work, working fewer hours and because of the period between becoming unemployed and receiving their first Universal Credit payment. Whilst people did experience short term impacts, it is important to recognise that many had a limited ability to address their basic needs, including food and housing costs. There was a sense in some of our citizens that, in addition to the losses now, the worst was not experienced during the pandemic but that it is still to come. Many feared losing their job in the future, and others were concerned about their career prospects, particularly our young people. The economic crisis created a need for job stability, support in finding new jobs, and even for changing careers.

The 'Hospitality and Culture' sector became exposed as a result of the necessary restrictions. As of 31st January 2021, 56% of its estimated 50,000 staff were furloughed. As expected, the least exposed sectors as a result of the restrictions were 'Public Sector and Education' and 'Life Science and Healthcare' (Figure 37).

Figure 37. Sector Exposure and Resilience in Birmingham[27]



The Impact of Economic Shock on Health and Wellbeing

The closing of businesses and the introduction of living with restrictions affecting social interactions led to an immediate shock to Birmingham's Economy. Employment, income, and financial insecurity can result in negative impacts on the health and wellbeing of a population. Unemployment is associated with poor health and an increased risk of mental and physical illness. Job loss can result in losing regular income, work relationships, daily structure and a sense of self-purpose. On average, individuals are twice as likely to develop symptoms of anxiety and depression. Associated feelings and stress can be like any other major loss.

In England, those aged between 25–34 experienced a 57% increase in high anxiety in 2019/20. Among the 65–74-year-olds, there was an 89% increase. In Birmingham, this would represent more than 23,800 younger aged citizens and more than 11,500 older-aged citizens. The effects of the pandemic on the mental health of young generations are greater than on older generations, and Birmingham has a much younger population than the rest of the West Midlands and England.

Negative behaviours can be associated with those experiencing financial insecurity, including increased use of alcohol, cannabis, and other drugs. Heavy drinking is estimated to be a 50% higher risk when unemployed and is associated with excess alcohol-related deaths in those under 65. The impact of losing a job for current smokers who do not obtain new employment is that they are more likely to smoke more cigarettes on average. Domestic abuse (DA) support providers reported an increase in visits to DA websites and calls to helpline during the lockdown. Unemployment increases the likelihood of violent behaviour compared to those who remain in employment. Evidence suggests that an increase in the male unemployment rate causes a decline in the incidence of physical abuse against women; conversely, an increase in the female unemployment rate has the opposite effect. There is also an increased likelihood of children being hospitalised for abuse and neglect. Also, unemployment or low employment may be associated with increased rates of low birth weight or very low birth weight. Increasing infant mortality rates are associated with increasing unemployment rates.

Loss of income from a job loss can also lead to a decline in the standard of living which can influence both the physical and mental health of the unemployed. The severity of the decline in the standard of living depends on factors such as the unemployed person's assets, unemployment benefits available, income and assets of other household members, and the duration of unemployment.

Unemployment significantly impacts an individual's diet which is influenced by the duration of unemployment. In the short term, the increased use of discount stores, food spending, and food consumption of animal-based foods, saturated fat, total fat and protein are higher. In comparison, a medium length of unemployment can decrease food expenditure and the consumption of fresh animal-based foods, saturated fat, total fat and protein. During long-term unemployment, nutrients are substituted by carbohydrates and added sugar. The worst impact on diets is seen in households that include children, pensioners, and single-parent households who experience greater decline than other households.

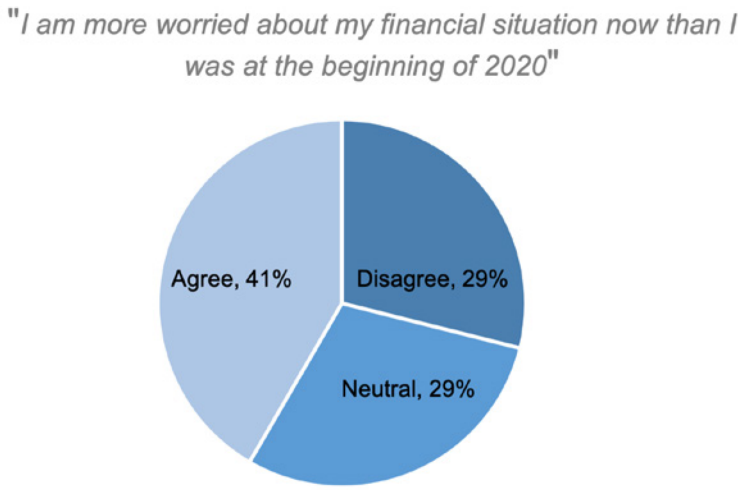
Income and employment are key social determinants of population health and health inequalities. Being out of work can lead to poor health while being in good employment is protective of health.

Experience and perceptions of financial impact

The impact on the economy was felt individually across the city. Acute crises, related to gaps between losing jobs and delays in the first Universal Credit payment, led to worry and limits on basic needs (foods and rent). For many, there was a further worry that losing opportunities in the future would limit career prospects (especially for younger age groups). For example, when 11 to 18-year olds were surveyed about missing out on opportunities because of the pandemic, 45% responded that they had missed out.[24] Within this, when asked to specify, 40% mentioned missing out on work experience or placements that would help them with future employment.[24]

When surveying people about their financial situation, 41% agreed that they were more worried during the early stages of the pandemic than they were at the beginning of 2020. Almost 30% reported that their household income had fallen since the start of lockdown (Figure 38).

Figure 38. Perceptions of financial situation[4]



The economic shock of the pandemic meant many people required financial support, support for basic needs and a supportive landlord or mortgage provider. Support for basic needs was often accessed discreetly to reduce feelings of shame. Research identified a key unmet need regarding emergency support to bridge the gap for those who experienced sudden unemployment and their first Universal Credit payment. There is also a need for the city to provide longer-term employment support for insecure industries badly affected by or because of the pandemic.

"You have to wait 5 weeks to get the first Universal Credit payment. If you lose your job, the income would just stop like that. UC is not enough on its own. We saw so many food banks, rows in food banks, charities, just to help. Especially businesses should do more, supermarkets, they should get all the remaining unsold things, near expiry, they should give to charity."

Sami, 49 individual interview, October 2020[6]

Figure 39. Financial needs and support during the crisis[6]

Needs

- Job stability
- Supporting and shaping careers
- Finding new jobs
- Access to financial support
- Access to discreet support for basic needs
- Supportive landlord or mortgage providers

Coping Strategies

- Entrepreneurialism
- Taking on additional jobs
- Reducing outgoings
- Living more simply

Assets

- Savings
- Pensions
- Partner or another family member in a stable job
- Space, time, and ideas to create business

Support

- Universal Credit
- Government support schemes
- Jobcentres Plus
- Flexible employers

Unmet Needs

- Emergency support to bridge the gap between sudden unemployment and support
- Longer-term job support for insecure industries

Financial Inequalities

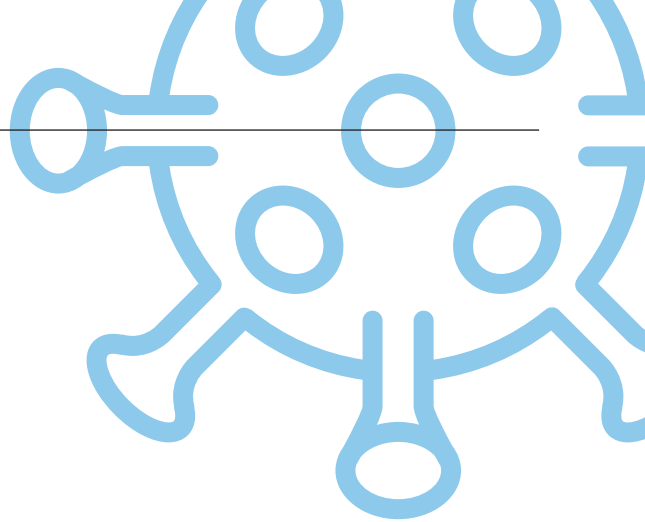
Many were vulnerable to the physical effects of the virus due to pre-existing health inequality. However, some people were more exposed to the physical impact of COVID-19 because of their profession and responsibilities. This is predominantly, but not always, linked to socio-economic status.

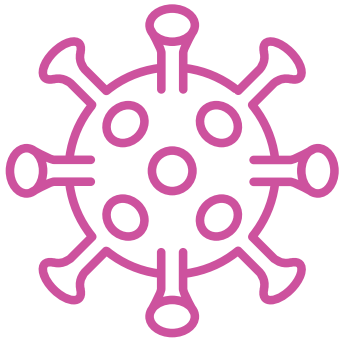
This is reflected in the stories of those who were suggested to be at risk. Many were in roles with exposure to the virus, including key worker roles such as working on a COVID-19 ward, being a delivery driver and working at a supermarket. These people were anxious about catching the virus and aware of the risk they were taking daily. Some also felt insufficiently supported and appreciated by their managers. The stories of those with low exposure were different; they felt safer and more removed and usually were on the furlough scheme, working from home or retired.

Financial inequality is linked to the stability of people's income during the pandemic. Many people struggled (and continue to do so) because their outgoings were greater than their income. This includes those who were struggling financially before the pandemic, those who lost their job or were at risk of doing so, and those who were not sufficiently supported by Universal Credit or the furlough scheme.

This is in contrast with those who were able to save during the pandemic. Usually, they lived comfortably before the pandemic began. It is likely their job continued, or the furlough scheme sufficiently supported them. This group were also likely to see their expenditure reduce during the lockdown. The pandemic has had an unequal and lasting impact on different sectors, which will contribute to inequality in the future.

Public support to mitigate the impact of inequality has also been impacted by inequalities in people's skills to navigate that support and guidance. Those who are less skilled in navigating that support may be less fluent in English or less informed of what is on offer to them. They may also be less connected to their community of friends and family who are local and may have shown them where to go and how to access help. Many of those who were less skilled were less able to navigate financial support and support for basic needs, much of which was online. Those who were more skilled were usually more fluent in English and more informed about what was on offer. They relied on a network of relationships that could signpost them to support what was available and had a greater ability to navigate the financial support (e.g. using JobCentre Plus).





A BOLDER HEALTHIER BIRMINGHAM

Case Study: Claire, a story of struggling[6]

"The hardest moment in all this was the day my dad found my grandad dead. Our immediate thought was that it could be from Covid. My mum had just gone back to work and then quit her job there and then, as she was worried, she would be exposed and was still caring for my gran. We all got tests done because we had been in contact with him, and the results came back unclear which just didn't help the situation at all. It wasn't until we got the coroner's report that we knew it wasn't Covid. We were all just really relieved he hadn't died of Covid, to be honest. But the funeral was hard; we all had to wear masks and we weren't allowed to touch the coffin. It just felt very unnatural."

"And then not having work has been hard. I left my job in retail last December; I worked at a clothing retailer and I hated it. I thought I would spend two months getting my graphic design portfolio together and then get a graphic design job, which is what I really want to do. And then Covid came. It went from 14 pages of graphic designer jobs on LinkedIn to 2. So I haven't been able to get a job since, which made me wish I had never left my old job. I'm hoping next year it will all come around. I can't live like this forever you know… it feels like I have put everything on hold. I know I'm sounding very dramatic but it's just things like buying a flat with my boyfriend we had talked about doing, as we both still live with our parents, but I can't get a mortgage without a job so I just feel like I'm holding us back. I've been feeling more and more alone in a sense because all my other friends have been in work and have stuff going on and I'm just at home. Luckily, I get on really well with my parents and do love it at home."

"I was using the Universal Credit Journal… the dreaded journal and the Jobcentre were good in the fact that they were sending me jobs, like working on the HS2 line or construction jobs, but I would have liked them to send something more specific to me, more like a recruitment agency. I also sent them my CV for feedback a few weeks ago, which they asked me to do, but I still haven't heard anything back so that's been a bit de-motivating."

"I went back to my old employer last week and asked for my old job back. That was a low point really. They gave it to me, and I am grateful for that, but I didn't want it to come to this. I feel like I am taking a step backwards. I didn't realise Covid was going to make things this hard. But it's good that I'll make some money and the Christmas hours are normally really good. Thank god for over time though because if I just got the basic pay it would be a pound less than I was getting on Universal Credit! I nearly thought I'm better off doing nothing, but the overtime is making up the hours. And it does make me feel better that at least I have a job now."

"And I have got some other work which is exciting. My boyfriend put me in touch with someone who is paying me to do a small graphic design job. I also started doing lino printing over the summer just as something to do, and then my friends and family where like you should sell your stuff, so I made an account on Etsy and have been selling through Instagram too. It's been amazing seeing people actually buy it and making money from it! So, in a way Covid has made me try these new things which I wouldn't have got round to before."

Our 'Everyday'

This chapter explores the experiences and behaviours of Birmingham residents during the first year of coronavirus. It brings together ethnographic research and self-reported survey data to understand its impact.

Research suggested citizens felt a new phenomenon of tension in doing ordinary or everyday activities. Many have appreciated the focus on hygiene, but others have felt tension when it comes to public space. There was a suggestion that public spaces that were normally vibrant became 'dead zones' during the pandemic. Many referred to the inter-personal suspicion and policing between strangers. Routines have altered quickly, and many have been subject to multiple changes (e.g. the opening of schools followed by a period of self-isolation). It has been an unprecedented period that has universally but disproportionately impacted the infrastructure of people's lives.

The uncertainty surrounding the pandemic brought a desire for a sense of stability and structure. Some of us yearned for routine, while others wanted confidence and comfort in public spaces and a sense of normality. Many coped with the pandemic by sticking to routines, and in some cases, re-imagining routines that existed previously. We coped by adhering to the rules and some were understanding of the approach that others took. Our assets, alongside those existing routines and structures, were a supportive community and loved ones that lived close by. Similarly, to our relational and societal crises, our family, friends and neighbourhoods helped us with those everyday activities where we needed them. This included helping us with groceries and pill prescriptions. Supportive workplaces helped us and some were supported by specific services such as the Age UK Transport Service. Despite this support, our structures and systems could have made people and the fabric of every day feel more stable. In some cases, we also lacked support in making workplaces safe and viable—for example, more personal protective equipment and childcare support.

"We went into Birmingham shopping after the funeral to cheer ourselves up and it was horrible – all the restrictions and how people behave. Some people don't care, others are too extreme. I think all of this brings out the worst in people. It's not pleasant, I don't like it, I try to keep away. I don't like the vibe anymore, how people behave. Some people bump into you – others are afraid to go near you in gloves and mask."

Claire, 25, individual interview (October 2020)[6]

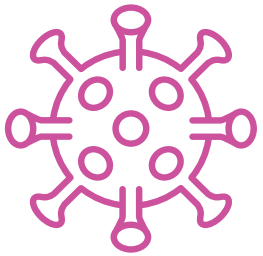


Figure 40. Everyday needs and support[6]

Needs

- Routine
- Structure
- Sense of stability
- Confidence and comfort in public spaces
- Coping Strategies Sticking to or reimagining pre-existing routines
- Adhering to guidance on e.g. mask-wearing and hand washing
- Being understanding of other people's approaches

Assets

- Strong existing routines
- Discipline and structure
- Supportive community
- Loved ones who live close by

Support

- Family/neighbours/friends providing support (e.g. groceries and pill prescriptions)
- Supportive workplace
- Age UK transport service

Unmet Needs Greater solidarity

- Structures and systems to make people and the fabric of every day feel more stable
- More support to make workplaces safe and viable e.g. PPE and childcare
- More comfortable public spaces despite the restrictions

It was evident that there was a need to reinforce measures that would transform how we went about with our everyday life despite the pandemic. Our city rose to meet these challenges and are detailed in the next chapter.

Case Study: Nadiya, a story of worry[6]

"When I first heard about Coronavirus, I thought it wouldn't affect us so much, like Ebola or Swine Flu. I thought it might just be a couple of months and then disappear. But this has gone wild! When we went into national lockdown it was a big shock. We had never done anything like this before, never gone into isolation. I was very afraid. You heard of all these people picking up Covid and dying. My youngest son has always had a bad immune system, skin condition, allergies. He has been in and out of the doctor's his whole life and picks stuff up really easily. This whole time my biggest worry is that one of us catches it and gives it to him"

"I didn't like the panic buying, but to tell you the truth I was panic buying too. Because my son can't eat certain things because he is gluten free and dairy free, and I knew it would be hard to get out of the house. The first couple of weeks were ok. It was nice to spend time with the kids. I got a trampoline and a paddling pool. And for about a month they were quite happy in the garden. It was good to spend time with my two eldest children, as normally they are out the house all the time. But then they started to get a bit bored, and I only have one TV between the four. It was a struggle keeping them entertained without being able to go and meet up with people. It became quite boring and depressing for the kids so they became quite difficult. And so it all just got too much for me. Normally I have my mum and my family and friends to see and to help me out. I think I just really missed them."

"Then some of the rules started easing which was good in some ways but also made me worried that people were too relaxed. I think the eating out scheme was a mistake. People were going mad – not obeying the regulations, crowding outside restaurants. A lot of gathering, nobody was bothered. It wasn't the old people but the youngsters. They don't really understand how bad it could get."

"School started again but then my kids had to isolate for two weeks because someone at school had the virus. Those weeks were hard work. I had a leak and no plumber would come because we were isolating. Luckily, I was able to call a neighbour who is a plumber, and overall my community have been very helpful."

"When my children were finally able to go back to school, I got a bit of a break for myself, which was nice. But my youngest son is still at home. His health has been so much better at home. As soon as he gets out the house, he just picks things up immediately. But I'm worried he is getting behind on his school work. The teachers don't have time to really support his learning at home. My priority is his health, but I still worry about his long-term development and not being able to socialise. He's always asking after his friends and teachers."

"The GP has been great. He hadn't heard from us for a while, so he called especially to see if my son is doing ok, and ask us if we need help with anything. That's so much better than having to go into hospital and mixing with people."

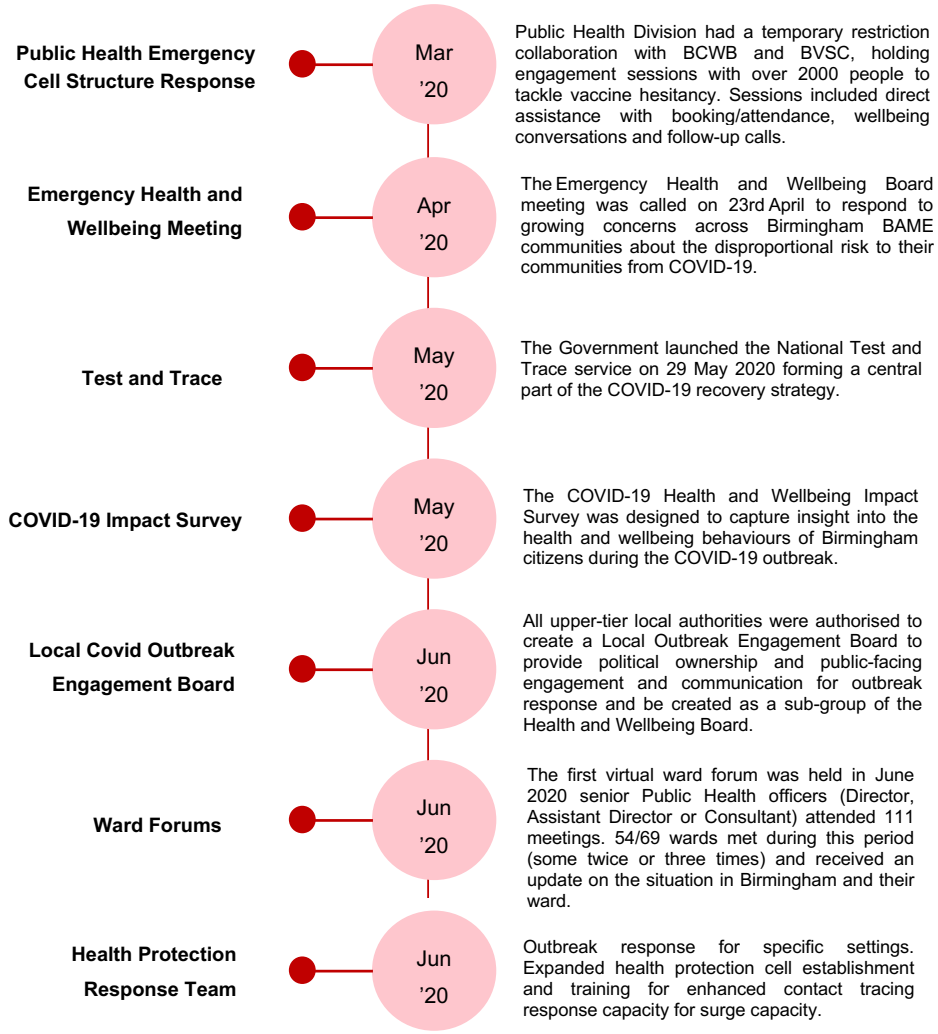
"I am worried about the economic situation in the UK, with both my eldest children entering the job market. My daughter found a job as teacher, but my son hasn't found a job as a barber. I helped him apply for Universal Credit to help with the mortgage, and that worked well."

"The recent rules have been confusing. The virus is out of hand and increasing – they should stop letting people out to restaurants and things for now. It's nice meeting your friends but you don't know who has Covid and who doesn't. You could pick it up and pass it on to family. When we had the full lockdown things were clearer, and for now they need to keep the rules simple and straightforward so we can get the virus under control."

5. COVID-19: Our Response

Birmingham City Council's Public Health Division's response to the COVID-19 pandemic started in March 2020 and continues to be focused on supporting future work to support Birmingham citizens (Figure 41). Communications and social media have been active throughout the pandemic (see Appendix C).

Figure 41. Birmingham City Council's Public Health Response Timeline



Testing in Birmingham — Jul '20

Birmingham had seven operational walk-through sites and two operational drive-through sites.

BHealthy Campaign — Jul '20

Birmingham had seven operational walk-through sites and two operational drive-through sites. We also requested two further sites focused on areas of high student resident populations and a further two drive-through mobile testing units.

COVID-19 Community Champions — Sept '20

A COVID-19 Community Champion network was established in Birmingham, modelled on a network previously established in Newham, London. It is made up of volunteers across the city, who are helping residents stay up to date with how to protect themselves and others against the virus.

Community Providers — Oct '20

Further community engagement included art and culture focus. An appointed culture officer to enable public health to engage via this medium. This will help to engage those who prefer this method as opposed to more formal approaches.

Community Faith Meetings — Dec '20

- 36+ interfaith meetings
- 18+ COVID-19 virtual briefing sessions for Birmingham Masjids
- 18+ Covid-19 - Meeting with Ministers and Pastors from Black Churches
- 108+ Ward meetings (including emergency ward meetings)

Variant — Feb '21

Birmingham City Council's public health team partnered with 16 organisations to effectively reach communities and understand how they have been affected by COVID-19.

Tweetathon — Apr '21

Took place on 12th April 2021 to encourage take up of the universal home rapid lateral flow testing and to coincide with the launch of Step 2 of the Roadmap out of lockdown #testandtweet

Surge Testing — May '21

Test kit delivery & collection numbers, by surge testing operation for residents, organisations and communications.

Enhanced support — Jun '21

Birmingham became an area of enhanced support. The response focuses on increasing rates of testing, closing the gaps in vaccination and promoting compliance with guidelines.

Enhance Support Closure — Jul '21

Birmingham which was placed as an area of enhanced support has now been stood down in line with Step 4 as the case rate is now in line with the wider region and the enhanced testing has been completed.

West Birmingham Vaccination Engagement Project July 2021 — Jul '21

In collaboration with BCWB and BVSC, holding engagement sessions with over 2000 people to tackle vaccine hesitancy. Sessions included direct assistance with booking/attendance, wellbeing conversations and follow-up calls.

Asset Mapping of 69 wards — Sept '21

Demographic information, COVID cases, vaccine uptake by ward, commissioned provider summary, main community needs/PH concerns, important contact information to highlight gaps in our current engagement work, scope and commission further partners if required to reach underrepresented communities.

'Covid-19 is not over' campaign — Oct '21

Targeting areas with higher case rates as well as younger age groups (12-15, 16-17) to encourage vaccination uptake. Also, support for education settings reopening after the October half-term.

Birmingham City of Nature Delivery Framework — Nov '21

The City of Nature Delivery Framework presents more priority on Green Spaces through Birmingham City for sustainable provision, maintenance and use of green and blue spaces.

6. What Next: Living with COVID-19 and Creating a Bolder, Healthier City

Conclusions

This report, the ethnographic research, and the results of the COVID-19 Impact Survey have highlighted many significant issues that need to be addressed as part of our recovery from the pandemic. Firstly, and possibly the most widely recognised, pre-pandemic health inequalities have been exposed and exacerbated across the city, with a significantly uneven impact. Wards with high levels of deprivation have consistently reported higher case numbers than those more affluent wards, as seen in Figure 7, mirroring the trend across England. Equally, residents from Black, Asian and Minority Ethnic backgrounds have been impacted harder than residents from a white background despite being a smaller part of the population. This is exemplified through the statistic that at one time the case rate in the Pakistani population was 591 times higher than that of the White British population.

More widely, beyond the direct health impacts of the pandemic, there has been a series of crises that have affected every aspect of residents' lives, from daily mood to financial security to community spirit. Lockdowns and social isolation have caused a spike in mental health issues. Once again though, the impact was uneven as women, older working-aged residents, and Black and Minority Ethnic residents reported higher levels of anxiety and loneliness. The restrictions on businesses have led to the highest level of unemployment in Birmingham for decades and a significant increase in youth unemployment, as the retail and hospitality sector was one of the largest employers of 18-24-year olds in the city.

Finally, there have been significant societal impacts since these events have been unprecedented in many residents' lives. Lockdowns, coronavirus restrictions and emergency powers meant that residents had to trust central and local governments with their safety and rely on them for information. There have been varying levels of trust in information sources regarding the pandemic, and as it has progressed, there has been a growing discontentment with sources of authority. Central to this has been messaging around the pandemic. Responses from the ethnographic research and the impact survey illustrate that message at a national level was appreciated in the early stages because it was frequent and consistent. However, towards the end of the year, attempts to make restrictions more localised resulted in confusion and frustration. Messaging and representation at a local level were positive overall, with higher levels of trust being recorded in local authority compared to the central government. However, this could have been stronger and made up for the confusion felt at the later stages.

Closing the Gap

Why were there inequalities in the impact of Covid?

When planning our recovery from the pandemic, we must consider why it was the case that the impact was so uneven and how to 'close the gaps' that the pandemic has exposed. As the report identifies, the most significant gap was the pre-existing health inequality in our population. For example, the higher than national average health risk factors, such as obesity and diabetes, lead to a high number of direct deaths from COVID-19, as seen in Table 1. Therefore, one of the first gaps to address will be significantly reducing the rates of these risk factors through Public Health and NHS interventions to prevent these conditions from occurring and improve the management and support for people living with them.

The gaps that illustrate inequality are not isolated to physical health resilience. The proportion of residents that were 'well-equipped to deal with the mental health impacts of the pandemic was much smaller than either the 'less well equipped or the 'triggered'. This is clear in Figure 16, where over half of respondents reported a deterioration in their mental health in the first six months of the pandemic. Significantly related to this is the increase in financial insecurity. This has been particularly acute among younger residents as they were more likely to be employed in a sector that closed during the lockdowns. This insecurity was aggravated for many residents as they found themselves accessing Universal Credit or welfare support for the first time and lacked the understanding about how to access the service properly and understand the process (e.g. the 5-week wait for the first Universal Credit payment).

Equally, by almost every metric measured on the Impact Survey, ethnic communities were disproportionately affected by the crises that the pandemic precipitated. For example, a higher proportion of ethnic citizens reported relationship breakdowns, be that with partners or family, as well as a deterioration in community spirit, than among White citizens. A further breakdown of the results shows that these wider unequal impacts were most likely to centre around working-age adults and almost entirely on females.

Who has a responsibility to close the gap?

Birmingham City Council, as the local authority and one of the largest organisations across the city, should take a driving role in addressing the gaps identified by the report and the research. Similarly, the NHS, and incoming Integrated Care System, have the responsibility to consider how they can address the health inequalities that the pandemic has exacerbated. This is true for the legacy physical health effects, such as 'Long Covid' or reduction in healthy activity, but even more so for the continuing mental health crisis that cuts across all parts of the city's population.

The Health and Wellbeing Board, and the organisations that sit on it, must coordinate to deliver outcomes that "close the gap" on inequalities by considering the wider determinants that affect health. This can be spearheaded through programmes that reduce food poverty, encourage regular physical activity and alleviate social isolation. Alongside large organisations, the voluntary and community sector is best placed to lead or support these programmes because its groups can focus on the prevention of issues rather than intervention by local services. They also cover a wide range of activities, from food parcels to outdoor excursions to mental health support groups and career advice.

Finally, businesses have a role to play in supporting the economic recovery from the pandemic, which is where some of the gaps are most acute. Levels of unemployment, especially youth unemployment, have increased. When the furlough scheme ends, there will need to be coordination on how to prevent even further job losses. Specific businesses, such as supermarkets could also take on a more proactive role in tackling food insecurity by providing greater levels of surplus stock to food banks. It is essential that as we rebuild our economy, we do so by creating good jobs and healthy workplaces.

A BOLDER HEALTHIER BIRMINGHAM

How will it be achieved?

To address the gaps that the pandemic has exposed, the responsible organisations will need to use a range of approaches unified around one goal. That is why the Health and Wellbeing Board's emerging strategy will be underpinned by 'closing the gap' over the length of the strategy. It will ensure a specific plan for mitigating the legacy of COVID-19 in the next few years. This will be focused on addressing gaps in three areas exposed by the pandemic:

1. Mitigating the impact of Covid on Mental Wellbeing

By July 2020, more than half of respondents (53%) said their mental health had deteriorated since the pandemic had started.[4] The impacts on mental wellbeing include bereavement, loneliness and common mental health conditions such as anxiety and depression. Some are a legacy of the direct impact of disease and illness, and others are due to the effects of risk reduction restrictions and isolation. The Creating a Mentally Healthy City Forum will lead on this work and has an explicit focus on the mental well-being of Birmingham citizens, emphasising upstream prevention and promotion of better mental health. This includes the Better Mental Health Fund (~£800,000 allocated) to support and improve the mental health of Birmingham citizens.

2. Addressing the long-term impacts of Covid on health

One in 6 middle-aged people and one in 13 younger adults with COVID-19 report long Covid symptoms.[28] The impacts of 'Long Covid' are still emerging. It will require new pathways of care and support across the health and social care and community and voluntary sector. It will also require a positive and supportive response from the education and employment sector to support individuals affected.

3. Reducing the drivers of inequality in Covid case rates and mortality

COVID-19 mortality rates for people younger than 65 were 3.7 times higher in England's most deprived areas than the least deprived areas between March 2020 and March 2021.[29] The background to these inequalities is complex, layering employment, deprivation, ethnicity and baseline health. We need to explore how this drove the inequalities in infection and death during the pandemic to prevent it from happening again. A complete understanding of the impact on our citizens affecting aspects of identity and geography is yet to be wholly understood due to the limitation in inequalities data on different communities. The Public Health Division is developing a series of evidence-based community health profiles to understand, improve and reduce health inequalities in Birmingham.[30] They will enable us to better understand and be aware of communities and their needs.

28 *Steves, Claire. 2021. Up to one in six people with COVID-19 report long COVID symptoms. 24 June. [Online]. Available. https://www.kcl.ac.uk/news/up-to-one-in-six-people-covid-19-long-covid-symptoms. (Accessed 23 July 2021).*
29 *Tinson, Adam. What geographic inequalities in COVID-19 mortality rates and health can tell us about levelling up. [Online]. Available: https://www.health.org.uk/news-and-comment/charts-andinfographics/what-geographic-inequalities-in-covid-19-mortality-rates-can-tell-us-about-levelling-up (Accessed 22 July 2021).*
30 *Birmingham Public Health, "Community health profiles Overview," 2021. [Online]. Available: https://www.birmingham.gov.uk/info/50265/supporting_healthier_communities/2463/community_health_profiles. (Accessed 15 November 2021)*

7. Review of Annual Report 2019/20 - Complex Lives, Fulfilling Futures

Background

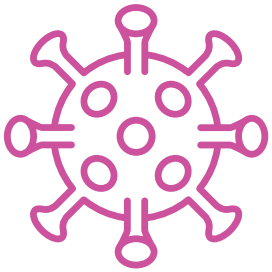
The Director of Public Health (DPH) Annual Report 2019-20: Complex Lives Fulfilling Futures was produced and completed (March 2020) to explore and understand the health and wellbeing needs of local people experiencing multiple complex needs (MCN), such as homelessness, substance misuse, mental health issues and offending. The report explored a range of evidence-based interventions and services for people with MCN, identifying what matters to them, what is on offer locally, and what gaps and barriers exist. Supported by ethnographic research, the report concluded by presenting a case for change and made several recommendations for a city-wide partnership work going forward.

The final stage of the development of the report coincided with the start of the coronavirus pandemic, whereby Public Health priority went into coronavirus response. The extensive evidence produced and consolidated within the report highlighted the risks and further reinforced the need to protect those with MCN from COVID-19 and the longer-term health and social impacts of the virus.

Progress to date

Covid-19 Response

- A city-wide partnership enabled a coordinated and coherent approach to prevent and contain COVID-19 infections amongst homeless people in the city.
- As part of the 'Everyone-in' initiative, the city council mobilised additional accommodation for the homeless that extended beyond the criteria of the national project and with an offer of wider multi-agency support. Access to accommodation and subsistence was secured for over 165 street homeless individuals and enabled progress towards a sustainable future.
- HealthNow Alliance (an alliance between the public sector and the community and voluntary organisations led by Groundswell and Crisis), through their initiative involving peer advocates with lived experience, developed the Birmingham Homeless Vaccination Model and have led on engagement and communication with individuals with MCN.
- The Public Health Division in Birmingham City Council developed a Symptomatic Homeless Pathway as guidance for professionals and volunteers. The pathway provides:
  - clarity on access to diagnosis, treatment and support for the infected statutorily homeless individuals (often with other complex needs)
  - protection of longer-term health and wellbeing of the statutorily homeless citizens
  - prevention of further transmission of the virus amongst the homeless population in all types of settings.
- The pathway was shared widely across agencies and settings and contributed to preventing high infection rates and complications from COVID-19, minimising the risk of being admitted to hospital and of mortality amongst the statutorily homeless population, and has been used as an example of good practice and guidance by Public Health England.
- The Public Health Division commissioned a range of local 'grassroots' organisations to deliver a series of engagement activities with the most vulnerable groups in the city throughout the pandemic to ensure ongoing person-centred support that is trauma-informed.



HealthNow Alliance

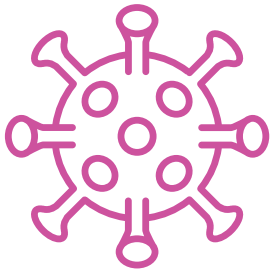
HealthNow Alliance is a partnership led by Groundswell, partnered with national charities Crisis and Shelter working towards:

- Tackling barriers to registration and difficulty in accessing primary care services by the homeless. This includes but is not limited to the provision of training to practice staff and healthcare workers, reinforcement of the duty to provide free primary care services and incentivisation for practices to register patients with MCN:
- Raising awareness and providing training around Mental Health and Substance Misuse through the development of multiagency hubs.
- Establishing links between hospital discharges and peer advocates.
- Creating housing and navigator roles building into a specialist integrated homeless team.
- Providing training for clinical and non-clinical staff on interpreting needs and in lived experiences of homelessness.

Changing Futures Together

Birmingham Changing Futures Together is a project funded by the National Lottery Community Fund to provide better support to those with MCN. The project has been pioneering new ways of working, with services led by those with lived experience, using innovative technology and close partnerships with specialist agencies across the city to provide a faster, better informed and more unified approach to support. Achievements so far include:

- Development of a suite of resources aimed at encouraging organisations to embed the approach within their services.
- Working closely with the West Midlands Police, coaching on how to better engage with people with MCNs and assisting them with the right support whilst in custody.
- Development of a training package on how services with clients facing MCN can bring the 'No Wrong Door' approach into their support.
- Worked with over 350 clients to ensure they didn't fall through the gaps between services, with over a quarter of the clients having all four MCN.
- The team are now working with services in the region to pass on their learning around multi-agency meetings and the skills required to keep clients facing multiple disadvantages engaged in their support.
- Worked with BCC to create and roll out the Supported Exempt Accommodation Quality Standards and with WMCA to create and roll out the Commitment to Collaborate Toolkit.



Commissioned services

A new strategy to recommission Vulnerable Adults Housing and Wellbeing Support Services has been approved for implementation. It includes a clear pathway built around four key elements: Universal Prevention, Early Targeted Help, Crisis Support and Transition Services.

These services are vital in delivering against several recommendations in the DPH Annual Report 2019-20. They include improvements in the corporate parenting system, creating sustainable housing options for the most vulnerable and addressing some of the drivers of homelessness, such as domestic abuse:

- The Housing Options Service has formally launched its new operating model – and, since 2 August 2021, has been called the Housing Solutions and Support Service. The new model supports the council's investing in our future agenda by shifting the service focus from crisis to homeless prevention work. This will result in better supporting households at the early stages of a housing crisis before it manifests into a statutory need. This significant investment will enable the new service to:
  - Deliver increased prevention work that enables people at-risk of homelessness households to remain in their existing home, or secure alternative accommodation, before they are homeless.
  - Implement temporary accommodation move-on plans to ensure households in temporary accommodation get the required level of support to sustain a new tenancy and ensure that their stay in temporary accommodation is as short as possible.
  - Improve accessibility and availability of alternative housing solutions – such as the private rented sector.
- Online housing and wellbeing support service has been put in place for individuals to self-navigate, also for use by professionals, practitioners and carers;
- Client-specific housing and wellbeing prevention hubs are available providing face to face support and access to services and transitional support through Health & Wellbeing Centres is also available;
- Multi-agency outreach street intervention team for substance misuse, mental and physical health is in operation;
- Domestic abuse refuge supported accommodation and 24/7 emergency supported accommodation for singles aged 25+ are available.

Recently, a city-wide rough sleeper substance misuse model has been established. As part of the model, services will proactively seek to identify, assess and support rough sleepers wherever they may be in the city (the current model is city centre-based) to include:

- Frontline capacity increased through funding programmes (Rough Sleeper Initiative, Protect Programme).
- Accommodation and support offer increased through Housing First (over 160 rough sleepers accommodated over a pilot period), Rough Sleeper Accommodation Programme (further 40 flats in 2021-22) and Transition Centre (11 units for most complex requirements).
- Additional programmes of help and support – Hospital Discharge Programme; Domestic Abuse Respite Programme; PHE Substance Misuse Programme; Mental Health Transformation Programme
- Delivery coordinated through daily outreach tasking, weekly rough sleeper partnership review meeting, bi-weekly liaison meeting with West Midlands Police and Community Safety, monthly Rough Sleeper Action Group oversight and reporting into Homeless Partnership Board and working in conjunction with the WMCA Homeless Taskforce.

The Council's Health and Homelessness Partnership (a working group reporting to the Birmingham Homelessness Partnership Board) have led the development of the Homeless Out of Hospital Care Model. The pilot paid for through funding awarded by the DHSC, will test out the sensitivities of the hospital discharge to assess a model for citizens who are rough sleeping / homeless so that no one is discharged to the streets. It will establish a homeless nursing team working across primary/secondary care (acute and mental health services) to discharge the homeless into appropriate step down medical respite, with substance misuse support that will wrap floating support around citizens whilst their housing needs are being assessed by dedicated housing officers. The service will support the citizens whilst in accommodation to establish goals and plans, pulling in relevant support. The support will continue as the individuals are moved on into stable accommodation and until there is satisfactory handover to the vulnerable adults and other support services. This model builds on the DHSC High Impact Change Model, a supporting tool & research by King's College London. The project will be evaluated to generate evidence of the effectiveness of the model.

Creating a Mentally Healthy City Partnership

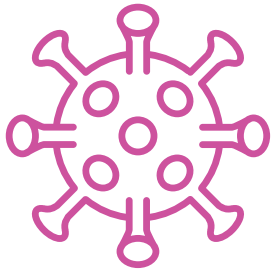
- Covid-19 and the restrictions have significantly impacted people's mental and emotional health and wellbeing. The Creating a Mentally Healthy City Forum partners are currently working to:
  - Understand local needs and assets ensuring commissioning is robust and directed to areas of greatest need when tackling mental health and inequality.
  - Measure outcomes to define success on any actions taken on prevention and promotion of better mental health across the life-course.
  - Develop a bespoke model of mental wellbeing support for women with MCN, working with Anawim, Birmingham's Centre for Women.
  - Develop training initiatives on how to support young people with MCN.
  - Promote Psychologically Informed Environment (PIE) training and practice across all relevant sectors and services.

Also, work to implement the Prevention Concordat for Better Mental Health and Public Mental Health Delivery Plan continues.

Creating a City without Inequality Forum

This Health and Wellbeing Board's sub-group is now developing strategic action underpinned by Sir Marmot's recommendations published in his reviews into health inequalities. The Forum uses the life-course approach to ensure a focus on prevention and early intervention at every stage of life and that health inequalities are being addressed before the gaps widen and needs become more complex.

By focusing on each of the priority objectives identified by Marmot, the CCwI Forum can link projects and programmes to each area, reporting on the outcomes and identifying gaps and developing associated actions. This will give the forum a sharper focus and encourage real joined-up working across organisations and systems.



Appendices

Appendix A: List of Figures and Tables

Figures

Tables

Appendix B: Supplementary Tables and Figures

Table 17. Confirmed Cases of COVID-19 by Ward (Pillar 1 and Pillar 2 Tests)[3]

1st March 2020 – 30th September 2021

Ward Name	Cases	Population	Rate per 100,000	Rank
Lozells	1756	9,809	17,901.93	1
Yardley East	1785	10,362	17,226.40	2
Bromford & Hodge Hill	3584	21,679	16,532.13	3
Shard End	2024	12,311	16,440.58	4
Handsworth Wood	3286	20,610	15,943.72	5
Hall Green North	3632	22,832	15,907.50	6
Garretts Green	1694	10,701	15,830.30	7
Heartlands	2111	13,392	15,763.14	8
Ward End	2119	13,617	15,561.43	9
Sparkhill	3330	21,722	15,330.08	10
Oscott	3074	20,139	15,263.92	11
Glebe Farm & Tile Cross	3664	24,031	15,246.97	12
Castle Vale	1492	9,812	15,205.87	13
Sparkbrook & Balsall Heath East	3937	26,089	15,090.65	14
Frankley Great Park	1781	11,836	15,047.31	15
Sheldon	2979	19,895	14,973.61	16
Pype Hayes	1611	10,816	14,894.60	17
Perry Barr	3063	20,620	14,854.51	18
Kingstanding	3115	21,052	14,796.69	19
Small Heath	3115	21,114	14,753.24	20
Yardley West & Stechford	1867	12,701	14,699.63	21
Acocks Green	3564	24,279	14,679.35	22
Birchfield	1839	12,556	14,646.38	23
Aston	3535	24,142	14,642.53	24
Alum Rock	3992	27,311	14,616.82	25
Soho & Jewellery Quarter	3951	27,132	14,562.14	26
Balsall Heath West	1768	12,233	14,452.71	27
Quinton	2924	20,407	14,328.42	28
Perry Common	1665	11,645	14,297.98	29
Hall Green South	1490	10,467	14,235.22	30
Bordesley Green	1808	12,701	14,235.10	31
Gravelly Hill	1508	10,821	13,935.87	32
Longbridge & West Heath	2815	20,362	13,824.77	33

Ward Name	Cases	Population	Rate per 100,000	Rank
Sutton Trinity	1278	9,257	13,805.77	34
Billesley	2745	19,889	13,801.60	35
South Yardley	1471	10,725	13,715.62	36
Newtown	1991	14,621	13,617.40	37
King's Norton South	1540	11,311	13,615.06	38
Handsworth	1722	12,703	13,555.85	39
North Edgbaston	3334	24,600	13,552.85	40
Bartley Green	3095	22,858	13,540.12	41
Bournbrook & Selly Park	3311	24,598	13,460.44	42
Erdington	2757	20,715	13,309.20	43
Northfield	1383	10,412	13,282.75	44
Moseley	2887	21,774	13,258.93	45
Weoley & Selly Oak	3153	24,008	13,133.12	46
Sutton Reddicap	1311	10,004	13,104.76	47
Tyseley & Hay Mills	1615	12,352	13,074.81	48
Sutton Vesey	2568	19,656	13,064.71	49
Highter's Heath	1463	11,267	12,984.82	50
Brandwood & King's Heath	2464	18,991	12,974.57	51
Bournville & Cotteridge	2313	17,863	12,948.55	52

Ward Name	Cases	Population	Rate per 100,000	Rank
Sutton Wylde Green	1151	8,900	12,932.58	53
Stockland Green	3106	24,168	12,851.70	54
Druids Heath & Monyhull	1487	11,753	12,652.09	55
Allens Cross	1360	10,778	12,618.30	56
Stirchley	1272	10,103	12,590.32	57
Sutton Walmley & Minworth	2004	15,975	12,544.60	58
Edgbaston	2765	22,092	12,515.84	59
Sutton Mere Green	1232	9,856	12,500.00	60
Holyhead	1553	12,454	12,469.89	61
Ladywood	3480	28,415	12,247.05	62
King's Norton North	1438	11,803	12,183.34	63
Rubery & Rednal	1318	10,841	12,157.55	64
Sutton Roughley	1394	11,591	12,026.57	65
Sutton Four Oaks	1085	9,156	11,850.15	66
Bordesley & Highgate	1830	15,763	11,609.47	67
Nechells	1948	16,813	11,586.27	68
Harborne	2571	24,113	10,662.30	69
Birmingham	**159,273**	**1,141,374**	**13,954.50**	

Figure 42. Private conversations within the house, by gender and ethnicity[4]

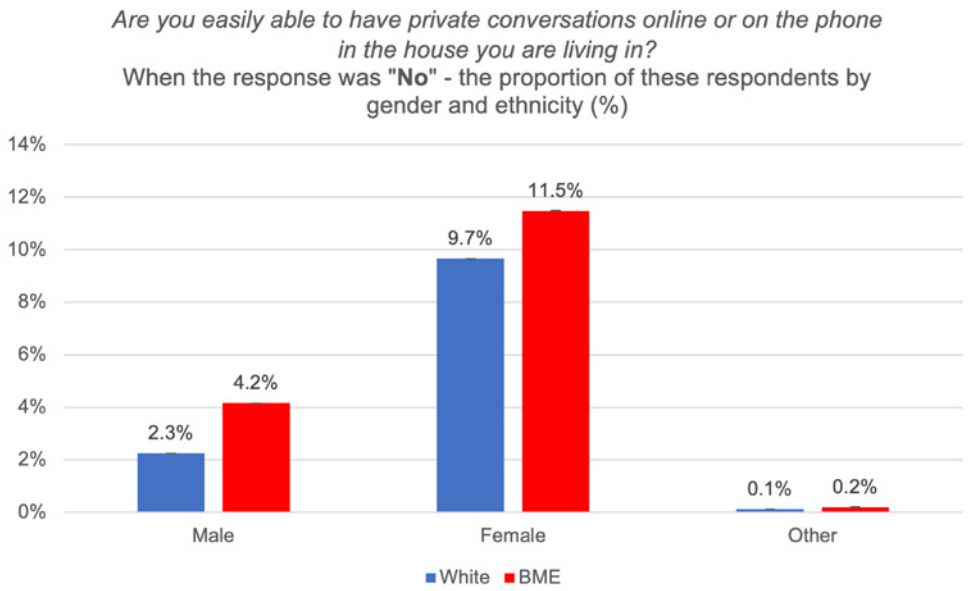


Figure 43. Relationship changes with children/family since lockdown, by gender and ethnicity[4]

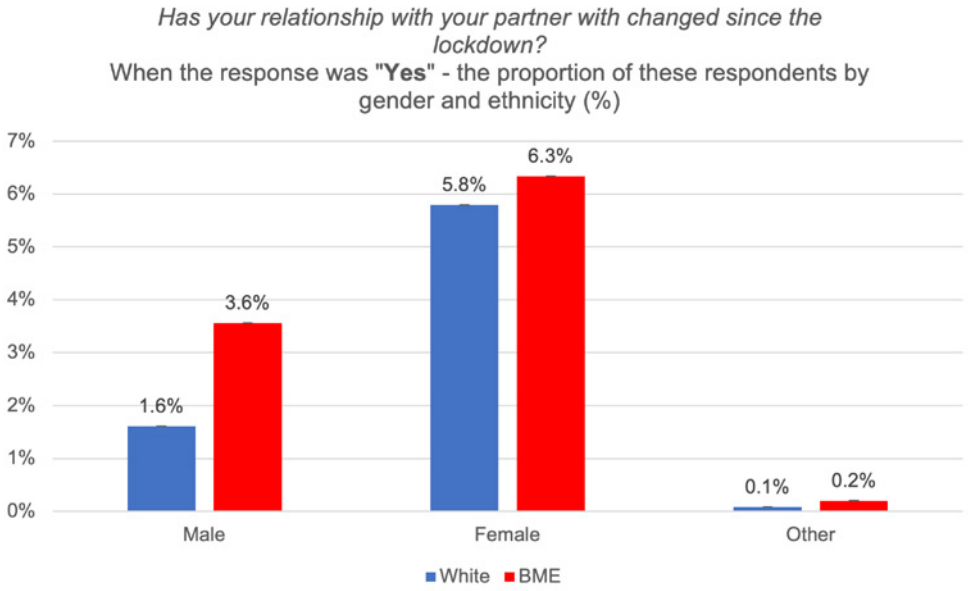


Figure 44. Relationship changes with partner since lockdown, by age and ethnicity[4]

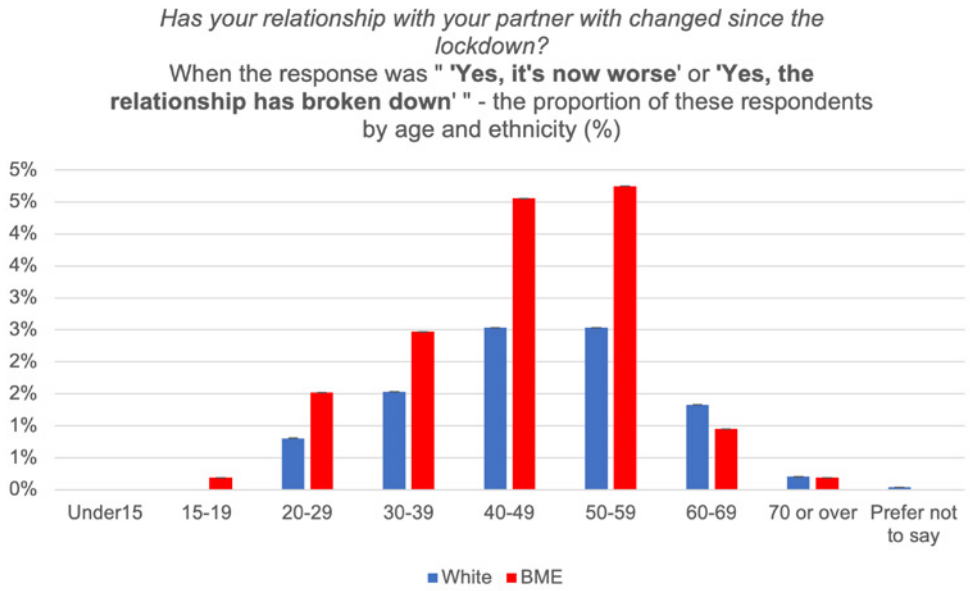


Figure 45. The negative impact of lockdown on community spirit across Birmingham, by age and ethnicity[4]

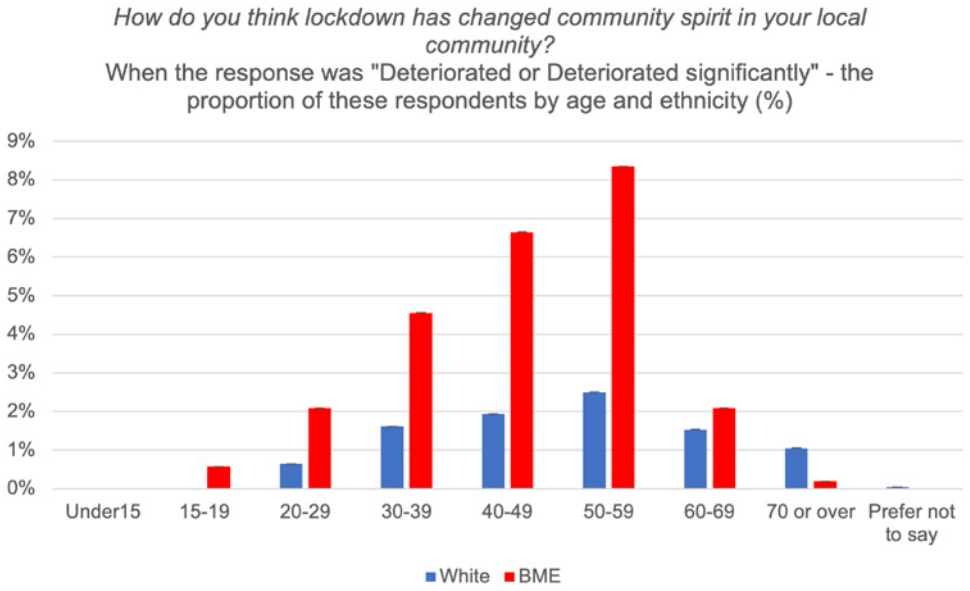


Figure 46. The impact of lockdown on links to local geographic communities, by age and ethnicity[4]

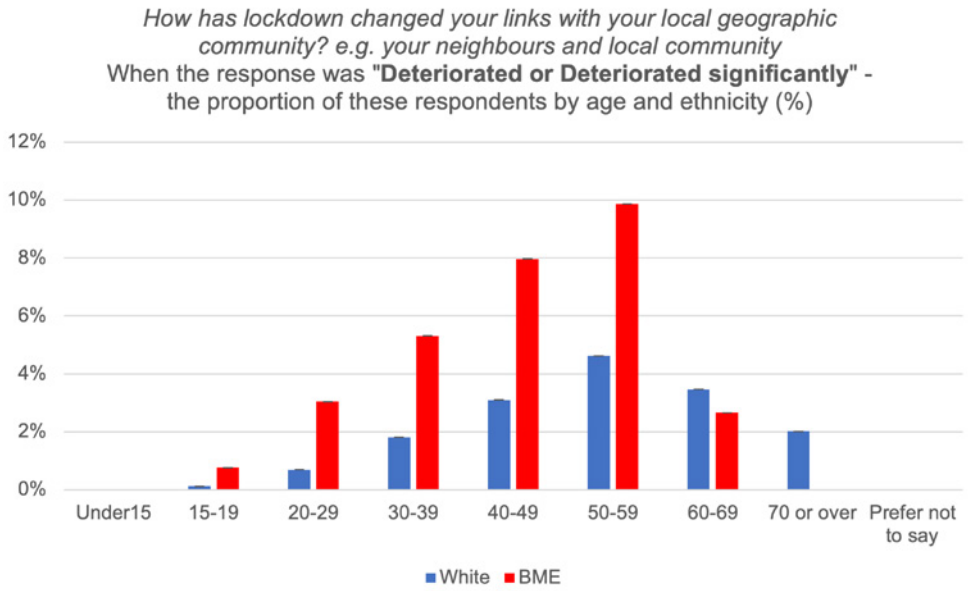


Figure 47. The impact of lockdown on links to local geographic communities, by gender and ethnicity[4]

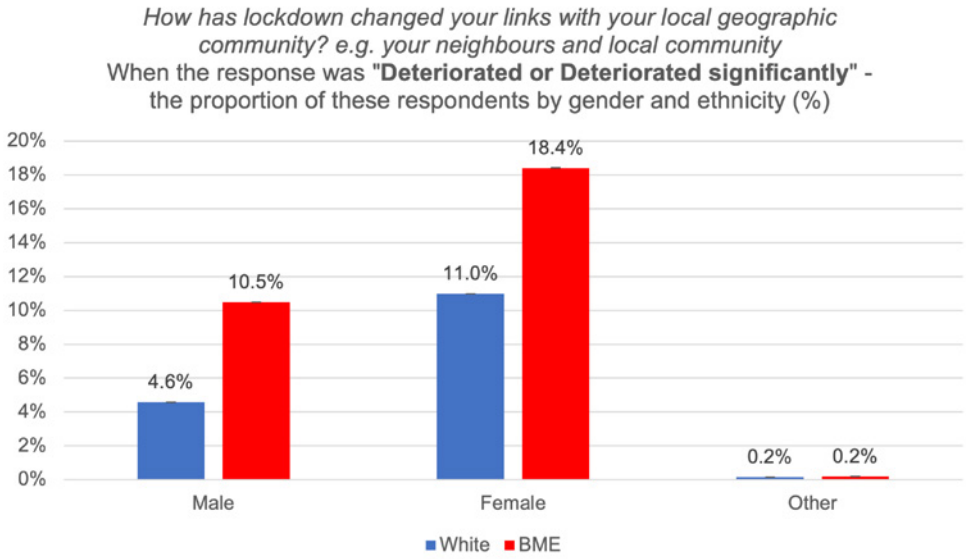


Figure 48. The impact of lockdown on anxiety, by gender and ethnicity[4]

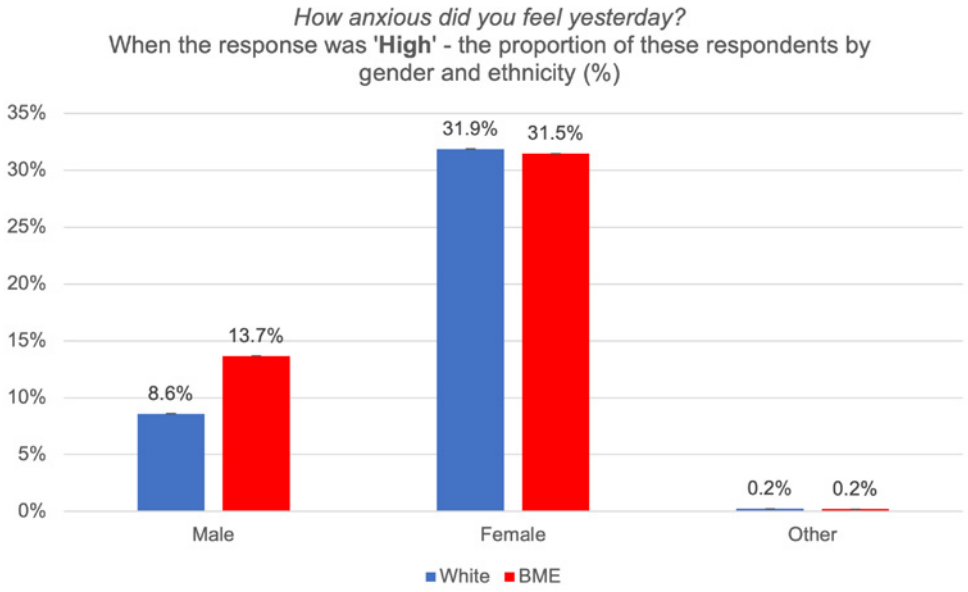


Figure 49. The impact of lockdown on loneliness, by gender and ethnicity[4]

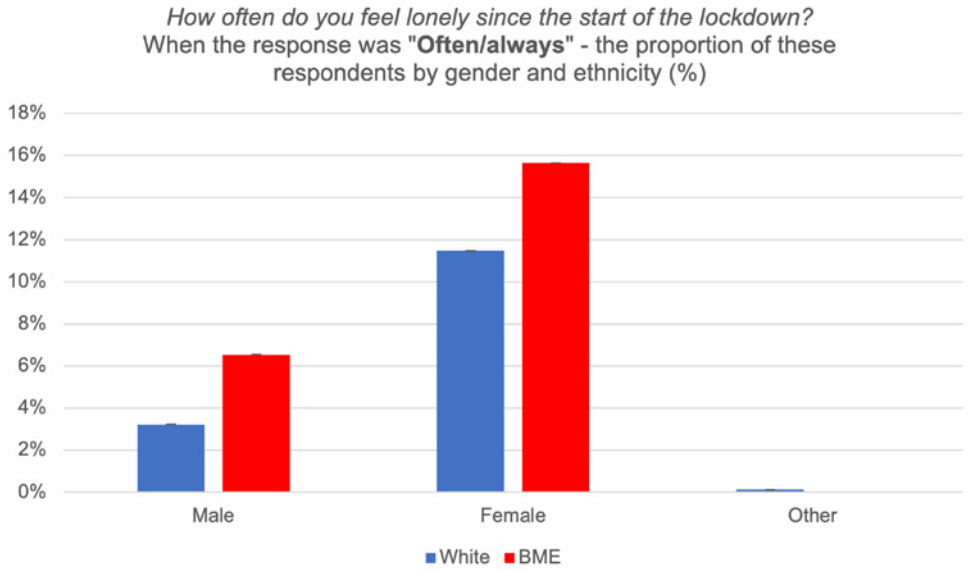


Table 18. COVID-19 Impact Survey: Participant's Gender[4]

Gender	Total
Female	71.5%
Male	26.1%
Other	0.5%
Prefer not to say	1.2%
Not Stated	0.8%
Grand Total	**100.0%**

Table 19. COVID-19 Impact Survey: Participant's Age Group[4]

Age Group	Total
< 15	0.1%
15-19	0.7%
20-29	6.8%
30-39	14.3%
40-49	22.1%
50-59	29.6%
60-69	17.6%
> 70	8.0%
Prefer not to say	0.6%
Not Stated	0.2%
Grand Total	**100.0%**

Table 20. COVID-19 Impact Survey: Participant's Ethnicity[4]

Ethnicity	Total
African	0.7%
Any other Asian background	0.4%
Any other Black / African / Caribbean background	1.1%
Any other ethnic group	0.4%
Any other Mixed / Multiple ethnic background	0.9%
Any other White background	3.7%
Arab	0.3%
Bangladeshi	0.7%
Caribbean	2.9%
Chinese	0.4%
English / Welsh / Scottish / Northern Irish / British	74.5%
Gypsy or Irish Traveller	0.2%
Indian	3.4%
Irish	1.9%
Pakistani	3.9%
Prefer not to say	2.3%
White and Asian	0.6%
White and Black African	0.1%
White and Black Caribbean	1.2%
Not Stated	0.4%
Grand Total	**100.0%**

Appendix C: Communications and Social Media Engagement

This section contains a summary of social media, communications and engagement and website updates from December 2020 to September 2021.

Social media engagement through @HealthyBrum and Birmingham City Council Twitter, Facebook, Instagram, and YouTube accounts.

Key Messages

- **Safety measures**
  - Increased focus on face-coverings, test & trace and handwashing to keep members of the public updated on staying safe for their daily commutes and whilst at work.
  - Returning to school settings.
  - Continued caution with relaxing of lockdown restrictions.
  - Community videos on COVID-19 risks
  - Safety measures - continued caution with relaxing of lockdown restrictions, Ventilation when indoors (Euro 2021).
  - Enhanced support plans.
  - Ventilation when indoors (Euro 2021).
  - Roadmap out of lockdown.
- **Vaccinations**
  - Vaccines access for 18yrs+ and continued caution with relaxing of lockdown restrictions.
  - Vaccination (safety, pregnancy, 16-17 years, 18+ and survey about reasons for not getting vaccinated).
  - Mobile Vaccination Units.
  - Home and door-to-door LFD testing.
  - Testing (LFD, PCR).
  - Encourage take up of the universal home rapid lateral flow testing.
- **Wider Topics**
  - NHS App.
  - Mental health awareness – all ages.
  - Creating a Bolder, Healthier City Strategy.
  - BeHealthy Campaign.

Media, Press and Advertising

- **Cross cutting communications**
  - Weekly hour-long Q&A with BCC Staff by Director of Public Health, similar targeted Q&A and awareness sessions have been held through the BHealthy Seminars.
  - Update COVID-19 items at Cabinet and Health and Wellbeing Board and to each of the Health and Wellbeing Forums.
  - NHS Test and Trace App launched on 24th September 2020 – messaging has been pushed out through all communication channels.
  - Community Update meetings.
  - Staff weekly updates.
- **Online and Community Q&As, Radio, Podcasts & TV: COVID-19**
  - BBC WM Q&A on the latest COVID news.
  - BBC WM interview on the drive time show about COVID-19 rates and return to education.
  - Weekly Q&A with Jane Haynes from Birmingham Live about return to education and COVID-19 updates.
- **Online and Community Q&As, Radio, Podcasts & TV: Vaccinations**
  - Q&A with Bahu Trust about vaccines within the Muslim community.
  - Vaccine Q&A with Trident staff about upcoming care staff vaccine deadline and misinformation.
  - Vaccine Q&A with St Basil's charity and Tamzin Reynolds-Rosser about young peoples' vaccines.
  - Vaccine Q&A on Facebook Live with Birmingham Live.
  - Vaccine Q&A with First Class Legacy.
- **Emails & Newsletters**
  - Vaccines offer to various age groups
  - Locations/sites for vaccine access
  - Birmingham vaccine survey
  - Vaccine toolkit
  - Testing
  - New guidance and isolation rules
  - Long COVID-19 and any health priorities for communities
  - Step 4 RoadMap rules.
  - Mobile vaccination vans.
  - Enhanced support including links to materials such as Isolation pack.
  - Vaccination toolkit.
  - Travel rules.
- **Verbal** – (word of mouth communication via communities)
  - 'COVID-19 is not over': Personal responsibility.
  - 16-17 and 18+ vaccination.
  - Testing.
  - New isolation rules and support for education settings reopening in September 2021.
  - Enhanced support testing.

Birmingham City Council Public Health website

- **Website content updates (over 500,000 visits to COVID-19 pages)**
  - Translated Vaccine toolkit and slides.
  - Accessible BSL resources.
  - Champions COVID-19 dashboard.
  - Latest COVID-19 guidance and updates.
  - New Education guidance for reopening in September.
  - Roadmap guidance and other related COVID-19 updates.
  - Vaccine slide deck in multiple languages.
  - New LFT sites.
  - New LFT map.
  - New guidance (roadmap).

Targeted Media Adverts

- **Radio advertising in the multi-languages to publicise NHS App, COVID champion recruitment:**
  - Ambur Radio: 200,000 listeners.
  - Switch Radio: 22,000 – 28,000 listeners.
  - Raaj FM: 40,000 listeners.
  - New Style Radio: no listener figures available.
  - Big City Radio: no listener figures available.
  - Unity Radio: 90,000 listeners.
  - Vaccine resources in multiple languages.
  - Over 70s vaccine resources.
  - Mayor vaccine video.
- **General Public (Birmingham)**
  - BBC WM Radio.
  - Birmingham Live – Facebook.
  - BBC Midlands Today.
  - Capital FM.
  - Free Radio.
  - ITV Central.
- **General public National**
  - BBC Radio 4.
  - Sky News.
  - Daily Record.
  - BBC Radio 5 Live.
  - Channel 4.
  - The MJ.
  - Smooth Radio.
  - BBC News Online.
- **General Public Trade**
  - Health Service Journal.
  - The Doctor.
- **Community Groups**
  - First Class Legacy Radio.
  - Brit Asia TV.
  - Mosque Leaders Forum/Interfaith Forum/Black Churches Forum.
  - Live Ape Podcast.
  - Sikh Channel TV.
  - China Daily, Young Chinese People Forum, Chinese Carers Support project.
  - BeatFreaks.
  - Birmingham Institute for the Deaf.