

Monitoring racialised health inequalities in Scotland

Data and evidence

Publication date: 30 May 2023



Translations



Easy read



BSL



Audio




Large print



Braille

Translations and other formats are available on request at:

 p hs.otherformats@p hs.scot

 0131 314 5300

Public Health Scotland is Scotland's national agency for improving and protecting the health and wellbeing of Scotland's people.

© Public Health Scotland 2023

5/2023 1058

OGL

This publication is licensed for re-use under the [Open Government Licence v3.0](#).

For more information, visit www.publichealthscotland.scot/ogl



www.publichealthscotland.scot

Contents

Foreword	3
Overview	4
Introduction	5
Data and evidence – maternity and early years	7
Antenatal booking	9
COVID-19 infection and vaccination in pregnancy	11
Maternity care	13
Infant feeding statistics	18
Early child development	21
Other data and evidence	23
Respiratory disease vaccination and infection	23
Wider impacts of COVID-19	30
Referrals to weight management services	31
National drug and alcohol treatment waiting times	32
Social care	33
Evidence into action	33
Vaccine uptake in minority ethnic groups	33
Public health messaging project	36
Health inequalities faced by the Gypsy, Roma and Traveller community	38
Improving data collection, reporting and use of data and evidence	40
Happy to ask, happy to tell	41
Coding and recording of ethnicity	44
Vaccination	45
Referrals to weight management services	45
Next steps	46
References	48

Foreword

By Scott Heald, Public Health Scotland's Director of Digital Innovation and Head of Profession for Statistics

In Public Health Scotland we want to see a Scotland where everybody thrives. If we are to achieve this vision, we must tackle the health inequalities that exist in our society, including the racialised health inequalities experienced by people from minority ethnic groups.



The inequalities experienced by people from minority ethnic groups were brought to the fore when it became clear that they were being disproportionately impacted by the COVID-19 pandemic. The pandemic also brought into focus the need for complete and good-quality data to identify, monitor and address these inequalities quickly and effectively. Through the recommendations of the Scottish Government's Expert Reference Group on COVID-19 and Ethnicity, progress is being made on improving data and evidence in this area. However, we acknowledge that there is still more that we need to do to develop a complete understanding of racialised health inequalities in Scotland.

We must ensure that the data and evidence we produce does not further exacerbate these inequalities. Public Health Scotland will achieve this by working in partnership at the national and local levels, and by listening and learning from experts, both learned and experiential, on anti-racism in health and care data and evidence.

This report brings together the data and intelligence compiled by Public Health Scotland since our last monitoring report and summarises the actions we are taking forward to progress further. Public Health Scotland is committed to continuing to build on the work reported here to highlight and take action to reduce the health inequalities across our communities.

Overview

This is Public Health Scotland's second report on monitoring racialised health inequalities in Scotland. It provides information on ongoing improvements in ethnicity data collection and analysis to allow routine monitoring of racialised health inequalities across the health and care system. This year's report:

- Focuses on ongoing work within maternity and early years data. This reflects both the importance of public health advice and interventions during maternity and early years in improving the health of the population and the progress being made in capturing ethnicity information in these key areas.
- Updates on an evaluation of the COVID-19 vaccination programme, looking at factors affecting vaccine uptake among different ethnic groups and the lessons learned to improve uptake in future vaccination programmes.
- Updates on work to refresh the 'Happy to ask, happy to tell' toolkit which seeks to empower health and care professionals to ask data providers about their equality characteristics, including ethnicity.
- Describes work to address the significant health inequalities experienced by the Gypsy, Roma and Traveller community.
- Shows that progress is being made on improving the availability of ethnicity data for monitoring racialised health inequalities but there is still more to do.

Public Health Scotland is committed to publishing more data which meet the needs of policymakers, service providers, and the patients and communities they serve in order to monitor and reduce racialised health inequalities.

Public Health Scotland will continue to work with the Scottish Government and other partners to tackle the health inequalities that people from minority ethnic backgrounds face. This will include working in partnership to deliver the actions set out in Scotland's Equality Evidence Strategy 2023–2025 and the Data Strategy for Health and Social Care.

Introduction

This is Public Health Scotland's second ethnicity monitoring report. It provides an update on work being done by Public Health Scotland to improve ethnicity data collection and analysis, and summarises the data and evidence produced by Public Health Scotland since the **previous ethnicity monitoring report**,¹ released in March 2022. This year's report shines a spotlight on the work being done by Public Health Scotland, in partnership with others, to improve ethnicity data collection and analysis in the key areas of maternity and early years.

As discussed in last year's report, there is a body of evidence showing the effects of racism on health and on the social determinants of health. They lead to the inequalities in many health outcomes that are evident across minority ethnic groups.² Good data are critical for monitoring equity of access and outcomes, generating high-quality evidence and research on inequalities at a population level. Only by progressing equalities data collection and analysis will it be possible to measure and monitor racialised health inequalities.

This was brought into sharp focus by the COVID-19 pandemic which highlighted the need for ongoing monitoring of health data by ethnicity and to rapidly improve the availability and completeness of ethnicity data across all aspects of health and care. In response, the Scottish Government set up an Expert Reference Group on COVID-19 and Ethnicity (ERG) which published recommendations aimed at improving data and evidence on racialised health inequalities.³ Public Health Scotland has been working with the Scottish Government, the Racialised Health Inequalities in Health and Social Care Steering Group and the **Anti-Racism Interim Governance Group to Develop National Anti-Racism Infrastructure (AIGG)**⁴ to implement the recommendations of the ERG through the actions set out in the Scottish Government's **Race equality: immediate priorities plan (IPP)**.⁵

Recently, two key strategy documents have been published by the Scottish Government. They provide further momentum and focus to ongoing work to improve the availability of ethnicity data and to increase the evidence base on racialised health inequalities:

- The **Health and social care: data strategy**,⁶ published in February 2023, commits to improving the quality and consistency of protected characteristics data, including ethnicity data, to ensure the provision of equitable care for everyone who requires care in Scotland.
- **Scotland's Equality Evidence Strategy 2023–2025**,⁷ published in March 2023, aims to improve and strengthen Scotland's equality evidence base to ensure that services are inclusive and deliver for everyone in Scotland. The strategy advocates improving and expanding data already collected, exploring new and innovative ways of improving Scotland's equality evidence base with the aim of improving the lives of everyone in Scotland.

This year's report summarises the data and evidence produced by Public Health Scotland since the **previous ethnicity monitoring report**,¹ and focuses on:

- Ongoing improvements in ethnicity data collection and analysis to allow the routine monitoring of racialised health inequalities across health and care systems in Scotland, particularly within maternity and early years. This reflects both the importance of public health advice and interventions during maternity and early years in improving the health of the population and the progress being made in capturing ethnicity information in these key areas.
- An evaluation on the COVID-19 vaccination programme, looking at factors affecting vaccine uptake among different ethnic groups and how the lessons learned can be used to improve uptake in future vaccination programmes.
- An update on ongoing work to refresh the 'Happy to ask, happy to tell' toolkit which seeks to support health and care professionals to ask data providers about their equality characteristics, including ethnicity.
- Ongoing work to address the significant health inequalities experienced by the Gypsy, Roma and Traveller community, building on work Public Health Scotland has done over several years with key partners.

Data and evidence – maternity and early years

It is widely acknowledged that investment in the health of pregnant women and during early years can have significant impacts on improving the health of the population.^{8,9,10,11} Reducing inequalities in maternal and child health, including racialised inequalities, is key to achieving improvements in population health.^{12,13,14} For example, at UK level, women from minority ethnic groups have been found to be at higher risk of death in pregnancy and childbirth.¹⁵ Pregnant women from minority ethnic groups are more likely to develop complications from COVID-19 which require hospital treatment.^{16,17} And at UK level, babies from minority ethnic groups have the highest rates of stillbirth and infant death.^{18,19,20}

Data are vital to identify and monitor health inequalities across ethnic groups, understand why they exist, and address them.

Reducing inequalities in maternal and child health is key to achieving improvements in population health.



Recognising the importance of addressing racialised inequalities in maternal and child health, Public Health Scotland contributed to a proposal that saw a pilot project, **Mums Matter**,²¹ set up in Fife. This project aims to make maternity and health visiting services more accessible to Gypsy/Traveller women. Early in the project it was identified that BadgerNet, the national recording system for maternity care, did not include an identification code for Gypsy/Traveller ethnicity. This was raised at a national level and an identification code for Gypsy/Traveller ethnicity was added to the system.

Progress has also been made in enabling the capture of ethnicity on other routine maternal and child health records in Scotland. For example, since 2021, the recording of a mother's ethnicity has been mandatory on the maternity hospital (SMR02) record completed when a mother is discharged from hospital after delivering a baby. In addition, data on a mother's ethnicity are routinely collected in

the new Antenatal Booking Collection (ABC) dataset. Data on a mother's ethnicity will also be collected in the NeoCareIn+ dataset, which is being introduced in 2023 to collect data on specialist neonatal care in Scotland.

Public Health Scotland has recently published several reports which include information on maternity and early years for mothers and babies from different ethnic groups:

- **Antenatal care:** On 28 March 2023, Public Health Scotland published the latest annual report on **Antenatal booking in Scotland**,²² covering women booking for antenatal care in the year ending 31 December 2022. This report contains a range of information on women booking for antenatal care. This includes information on the proportion of pregnancies for women from different ethnic groups; maternal smoking status at antenatal booking, by maternal ethnic group; and gestation at antenatal booking, by maternal ethnic group.
- **COVID-19 infection and vaccination in pregnancy:** Public Health Scotland reported on COVID-19 infection and vaccination in pregnancy by ethnicity, through the **COVID-19 in Pregnancy in Scotland (COPS) study**²³ (with University of Edinburgh). The final surveillance report was included in the **COVID-19 statistical report published on 28 September 2022**.²⁴
- **Pregnancy and births:** On 29 November 2022, Public Health Scotland published the most recent annual **Births in Scotland**²⁵ report, covering births in the year ending 31 March 2022. This publication includes information on various aspects of maternal care by ethnicity.
- **Infant feeding:** On 1 November 2022, Public Health Scotland published the most recent annual **Infant feeding statistics Scotland**²⁶ report, covering an update of infant feeding statistics to include data for children eligible for child health reviews in the financial year 2021/22. This publication includes information on feeding patterns among babies and infants from different ethnic groups at different stages of development.
- **Early child development:** The latest **Early child development statistics**²⁷ report, published by Public Health Scotland on 25 April 2023, updated on

children's development as assessed during the 13–15 month, 27–30 month, and 4–5 year child health reviews for children becoming eligible for review between April 2021 and March 2022. This publication includes information on the development of children of different ethnicities.

Antenatal booking

The booking appointment is the first planned and structured antenatal care appointment offered in pregnancy. Its purpose is to assess the health of pregnant women, give them information about how they can keep themselves and their baby healthy during pregnancy, and to help them plan labour and birth.²⁸ The booking appointment normally takes place between 8 and 12 weeks of pregnancy.²⁹ This helps to ensure that women have sufficient time to consider and make informed decisions regarding their care. Higher rates of late initiation of antenatal care (booking after 12 weeks of pregnancy) have been found to be associated with some minority ethnic groups.³⁰

At the start of the COVID-19 pandemic, Public Health Scotland worked with NHS Boards to set up a new national data flow (the Antenatal Booking Collection (ABC) dataset) to provide more timely and complete information on all pregnancies booked for maternity care. The ABC is based on data recorded by midwives in local clinical information systems when a woman 'books' for maternity care. Previously, Public Health Scotland only received complete booking data for the subset of women who went on to have a delivery episode of care. Since March 2021, all NHS Boards have had the capability to routinely record a pregnant woman's ethnicity in the ABC.

On 28 March 2023, Public Health Scotland published the latest annual report on **Antenatal booking in Scotland**,²² covering women booking for antenatal care in the year ending 31 December 2022, using data sourced from the ABC. This report contains a range of information on women booking for antenatal care, including information on the proportion of pregnancies for women from different ethnic groups. At UK level, pregnant women belonging to minority ethnic groups are at increased risk of adverse outcomes¹⁹ therefore this is an important marker of need for those providing maternity services. The annual report also contains information by maternal

ethnic group on both maternal smoking status at antenatal booking and gestation at antenatal booking.

Findings and discussion

In 2022, there were 50,407 pregnancies booked for maternity care in Scotland. Of these, 47,605 (94%) had an ethnicity recorded (see [Table 1.3](#)²² accompanying the 'Antenatal booking in Scotland' report for a breakdown of bookings by ethnicity).

The report released on 28 March 2023 included, for the first time, analyses by maternal ethnic group of both gestation at antenatal booking and maternal smoking status at antenatal booking.

Gestation at antenatal booking by ethnic group: The percentage of pregnancies booked by 12 weeks in 2022 was lower for all minority ethnic groups compared to those from the White ethnic group (94%), with the lowest percentage (70%) for those of African ethnicity. (See [Table 3.4](#)²² accompanying the report for a breakdown by ethnicity and further details). The report notes that deprivation is also a risk factor for booking at later gestations and it is known that pregnant African and Caribbean or Black women are more likely to live in the most deprived areas compared to pregnant White women.²⁵

Maternal smoking status at antenatal booking by ethnic group: In 2022, pregnant women from the White ethnic group had higher proportions of current smokers and lower proportions who had reportedly never smoked, when compared to minority ethnic groups (see [Table 2.4](#)²² accompanying the report for further details).

Public Health Scotland only began comprehensively collecting ethnicity data on antenatal booking from NHS Boards in March 2021. 2022 was the first full year in which complete recording of maternal ethnicity at booking was possible in all NHS Board areas in Scotland. Some NHS Boards have higher rates of incomplete ethnicity data and this is currently being worked on by the respective NHS Boards.

Providing health intelligence supports policymakers, midwifery services and other relevant partners to continually **improve the provision of culturally appropriate, accessible and inclusive antenatal services for pregnant women from these groups.**



COVID-19 infection and vaccination in pregnancy

In the UK, COVID-19 vaccines are strongly recommended during pregnancy.³¹ This is because pregnant women are at higher risk of severe COVID-19 and associated complications. These include being admitted to hospital, requiring ventilatory support, and pre-term delivery.

Pregnant women from minority ethnic groups are more likely to develop complications from COVID-19 which require hospital treatment.¹⁶ COVID-19 vaccines have been given to over 264,000 pregnant women across the US and UK and there are no safety concerns associated with the use of these vaccines during pregnancy.³² Information for patients on COVID-19 vaccination in pregnancy is available on [NHS inform](#)³³ and from the [Royal College of Obstetricians & Gynaecologists](#).³⁴

The Public Health Scotland [COVID-19 statistical report published on the 28 September 2022](#)²⁴ reported information on COVID-19 infection in pregnancy up to April 2022 and vaccination in pregnancy up to the end of July 2022, including by ethnicity. This work was carried out via the [COVID-19 in Pregnancy in Scotland \(COPS\) study](#)²³ (with University of Edinburgh).

Findings and discussion

For the majority of the pandemic, there was no clear pattern in the rate of confirmed COVID-19 infection in pregnancy in women from different ethnic groups. However, from December 2021 onwards (when the omicron variant was dominant in Scotland), the infection rate was higher in pregnant women with White ethnicity, compared to

women from South Asian; Black, Caribbean, or African; and Other or mixed ethnic groups (see the [Rate by ethnicity table](#)²⁴ in the [Infection in pregnancy tables](#)²⁴ accompanying the report for further details).

Monthly uptake of COVID-19 vaccination has generally been lower among pregnant women with Black, Caribbean, or African ethnicity compared to pregnant women with White; South Asian; or Other or mixed ethnicity (see the [Uptake by ethnicity table](#)²⁴ in the [Vaccination in pregnancy tables](#)²⁴ accompanying the report for further details).

In recognition of the need to understand the reasons for these differences in vaccine uptake across different communities, Public Health Scotland published reports looking at [factors affecting uptake of the COVID-19 vaccine](#)³⁵ and an [Evaluation of the COVID-19 vaccination programme](#).³⁶ This work recommends that:

- Concerted effort is required to build confidence in the COVID-19 vaccine following changes to initial guidance for pregnant women. This information should be delivered by respected organisations and trusted health professionals (such as midwives). It should include statistics to raise awareness of the risk of COVID-19 in pregnancy, and the safety of the vaccine for women and their unborn children.
- The availability and quality of data on vaccine uptake by ethnicity and pregnancy should be improved to support timely and targeted intervention to address any variation.

Aligned with the first recommendation, Public Health Scotland, through the COPS study, has published a series of papers^{37,38,39} examining the risk of early pregnancy loss, congenital conditions in the fetus or baby, and later pregnancy outcomes for both mother and baby following COVID-19 infection and, separately, vaccination in pregnancy. Together these papers provide further evidence on the risks of infection and the safety of vaccination.

To promote vaccination uptake, Public Health Scotland produces information in a variety of formats and languages. For example, to promote uptake of winter 2022 vaccines for COVID-19 and influenza (flu), Public Health Scotland produced

information about vaccines in pregnancy in a variety of formats and languages.⁴⁰ This information encouraged COVID-19 and flu vaccination uptake, advising that this is the best way to protect against the known risk of flu and COVID-19 in pregnancy.

To promote vaccine uptake in pregnant women, **Public Health Scotland produces information about COVID-19 and flu vaccination in pregnancy in a variety of languages and formats.**



Maternity care

The health of a pregnant woman and her baby are closely linked and influenced by several different factors during pregnancy, childbirth and the early period after birth. These include the mother's age, social and economic circumstances, her previous and current health and health-related behaviours, and the medical care provided.²⁵

Evidence suggests pregnant women can experience discrimination in health care based on their age, ethnicity, or status as a migrant or asylum seeker.⁴¹ There is also some evidence to suggest that migrant, asylum-seeking and refugee women are at greater risk of mental health problems during pregnancy, such as perinatal and post-natal depression.⁴¹

Work published in 2014 examined ethnicity and aspects of maternity experience in Scotland.⁴² This found that White Scottish women tended to be younger and were more likely to smoke during pregnancy than minority ethnic women. White Scottish women were less likely to breastfeed than other White and non-White minority ethnic groups, even when differences in mothers' age and educational level were taken into account. Non-White minority ethnic groups had the healthiest maternal behaviours and generally tended to have lower average, within normal range, birthweights than other groups. The latest **Antenatal booking in Scotland**²² data show similar findings.

On 29 November 2022, Public Health Scotland published the most recent annual **Births in Scotland**²⁵ report, covering births in the year ending 31 March 2022. This publication includes information on ethnicity on various aspects of maternal care. The information reported in this publication is sourced from the maternity hospital record (Scottish Morbidity Record 02 (SMR02)) completed when a mother is discharged from hospital after giving birth.

Findings and discussion

Ethnicity recording: Recording of ethnicity has improved in recent years and it is hoped this will continue now that ethnicity recording is mandatory on SMR02. The most recent year of data (2021/22) showed continued improvement in ethnicity recording. The proportion recorded as 'not known' had decreased for the third year in a row and is now the lowest in the reported period, down from 21% in 2018/19 to 12% in 2021/22 (see **Table 8.1**²⁵ accompanying the report for further details). Please note that the data presented below should be interpreted with some caution due to the comparatively small numbers of women in some minority ethnic groups (see **Table 8.1**²⁵ accompanying the report for further details).

There were 46,793 maternities in Scotland in 2021/22, of which 86% had a known ethnicity. Completeness of ethnicity information varied between NHS Boards with lower recording in NHS Borders, Forth Valley, Highland, Tayside and the combined Islands boards. Incomplete ethnicity information includes those recorded as either 'refused/not provided', or 'not known'. The proportion of maternities recorded as ethnicity 'refused/not provided' ranges from 0% in NHS Dumfries & Galloway to 15% in the Islands. It is likely this variation is due to a difference in recording practice rather than a difference in population responses (see **Table 8.2**²⁵ and **Chart 8.2**²⁵ accompanying the report for further details).

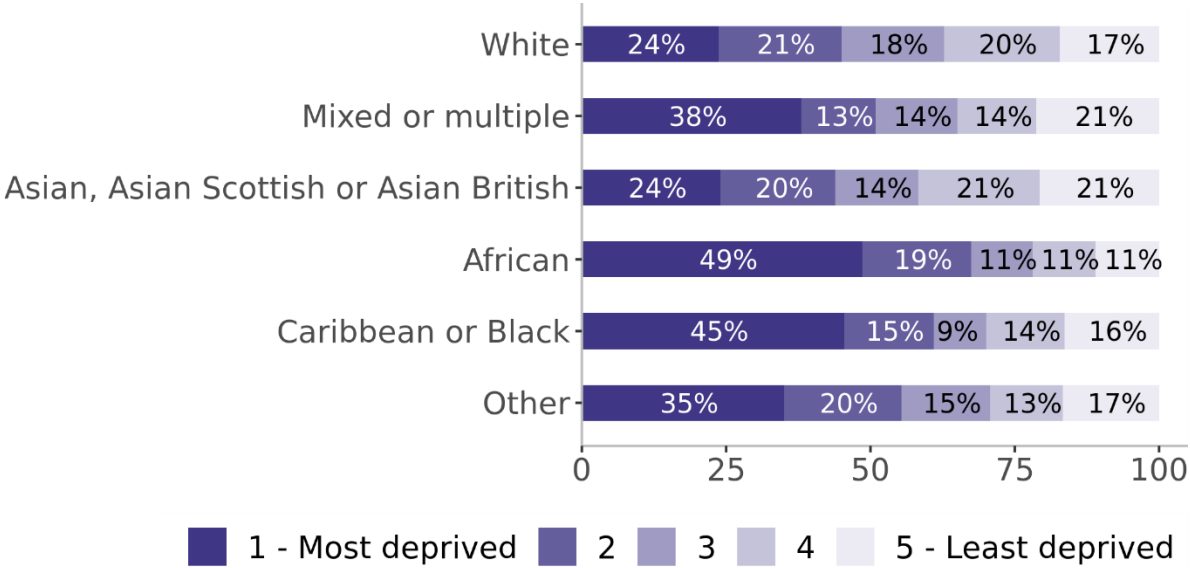
Maternal age: The age at which women have their first baby and any subsequent births has been gradually increasing over time. This is important because having a baby at an older maternal age is associated with a number of adverse outcomes for both mother and baby, including a greater risk of premature birth, stillbirth, caesarean section and higher neonatal mortality.⁴³ When comparing maternal age by ethnicity in

2021/22, the proportion of maternities aged 30 and over was lowest for the White ethnic group. The proportion of maternities aged 30 and over was higher than 64% for all other ethnic groups, with the highest proportion (80%) seen in the Caribbean or Black group (see [Table 8.3](#)²⁵ accompanying the report for further details). As older mothers are at greater risk of complications and surgical interventions during pregnancy and childbirth, this information is important for planning maternity services. This information can also be used to engage with members of communities to raise awareness of the risks associated with later pregnancies and the support available, and to support informed decisions when planning for pregnancy.

Deprivation: The [Births in Scotland](#)²⁵ report shows that deprivation can influence the health of pregnant women and babies. It shows that, when compared to women from less deprived areas, women from deprived areas are generally more likely to have a first birth at a younger age, be overweight or obese, give birth to their babies early and have a low birthweight baby.

Figure 1 below shows that, for maternities in the year ending 31 March 2022, a higher proportion of African and Caribbean or Black women were living in the most deprived areas (49% and 45.5% respectively). By comparison, for Scotland overall, 23.5% of maternities are from the most deprived areas (see [Table 8.4](#)²⁵ accompanying the report for further details).

Figure 1: Maternities by maternal ethnicity and deprivation, year ending 31 March 2022

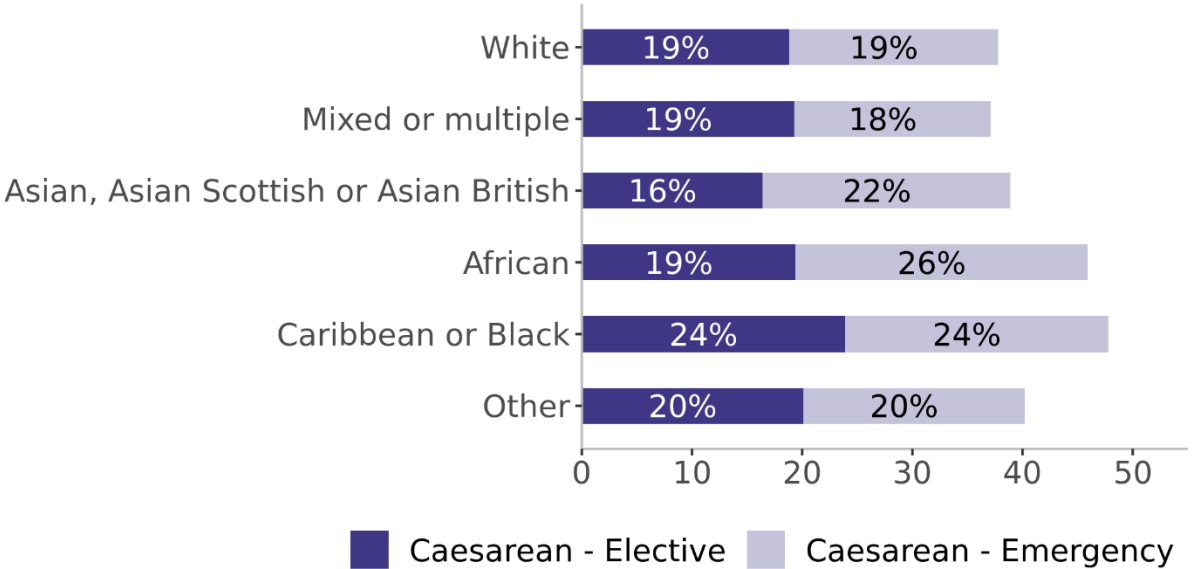


Body mass index (BMI): Monitoring the body mass index (BMI) of pregnant women is important because obesity in pregnancy is associated with an increased risk of serious adverse outcomes.²⁵ Increasing maternal age and deprivation are both known to be risk factors for a higher maternal BMI.^{44,45} Over recent years there have been national and international trends of increasing maternal BMI.⁴⁶ A high level of maternal obesity has implications for maternity and neonatal service provision. Overall, in Scotland in 2021/22, of those women giving birth who had a known BMI, 57% were overweight or obese at booking. A greater than average proportion of African (67%) and Caribbean or Black (70%) women giving birth were overweight or obese at booking (see [Table 8.5](#)²⁵ accompanying the report for further details). However, as highlighted above, there is a link between deprivation and higher BMI, and women giving birth from these minority ethnic groups were also more likely to be living in the most deprived areas (49% and 45.5% respectively).

Type of birth: Women may give birth vaginally without surgical intervention, vaginally but with obstetric instruments to help deliver the baby (forceps or suction/ventouse) or the baby may be born operatively via a caesarean section. Known risk factors for instrumental and caesarean births are older maternal age, heavier infant birthweight, long labour⁴⁷ and increased maternal BMI.⁴⁸ When looking at type of birth, it is important to note the small numbers represented in some

minority ethnic groups (see [Table 8.6](#)²⁵ accompanying the report for further details). As shown in Figure 2 below, the proportion of caesarean births in women in African (46%) and Caribbean or Black (48%) ethnic groups are higher when compared with the overall Scotland proportion of 38%. The proportions of assisted births in African (6%) and Caribbean or Black (5.5%) ethnic groups are lower when compared with the overall Scotland proportion of 12%. The higher proportion of caesarean births and lower proportion of assisted births in these minority ethnic groups may potentially be associated with a higher proportion of older women with higher BMI.

Figure 2: Percentage of live single caesarean births, by maternal ethnicity, year ending 31 March 2022



Gestation at birth: Gestation at birth strongly influences babies' health.⁴⁹ Babies born preterm can have multiple difficulties in the days and weeks following their birth⁵⁰ and the consequences of being born too early can continue to affect health and development throughout childhood and adult life.⁵¹ A baby's weight at birth reflects both their gestation and how well they have grown while in the womb. Babies who are both preterm and small for their gestational age are at particular risk of short and long-term health problems.⁵² There was little obvious difference between the various ethnic groups when comparing gestation of pregnancy at birth (see [Table 8.7](#)²⁵ accompanying the report for further details). However, birthweight of baby by

maternal ethnic group showed that those in the White ethnic group had the lowest proportion of normal-weight babies (81%) and the highest proportion (13.5%) of high-weight babies (over 3999 g) (see **Table 8.8**²⁵ accompanying the report for further details).

Having data and evidence of disparities in maternity care between different ethnic groups in Scotland is important to tackle the inequalities that exist. This information should be used to improve the planning and delivery of maternity services, ensuring that the needs of all groups are met. An example of this is the **Mums Matter**²¹ project in Fife. This project shows how engagement with specific communities to deliver services in a way that meets their needs is of vital importance to improving the experiences of service users.

Infant feeding statistics

It is well accepted that breastfeeding provides the best nutrition for babies and young children and has benefits both for their health and for the health of their mothers.²⁶ In recognition of the important health benefits of breastfeeding, the Scottish Government¹¹ recommends children are exclusively breastfed for the first six months of life and then, after the introduction of complementary solid foods, children should continue to be breastfed up to their second birthday, or for as long as the mother and baby wish. This advice is in line with advice from organisations elsewhere in the UK and beyond.^{53,54,55} Evidence shows strong associations between mothers' age, deprivation level, ethnicity, and breastfeeding rates.^{56,57}

Data to monitor infant feeding practices are important to support increased breastfeeding,^{58,59} understand the effectiveness of policies and interventions, and guide the provision of local services to support breastfeeding.

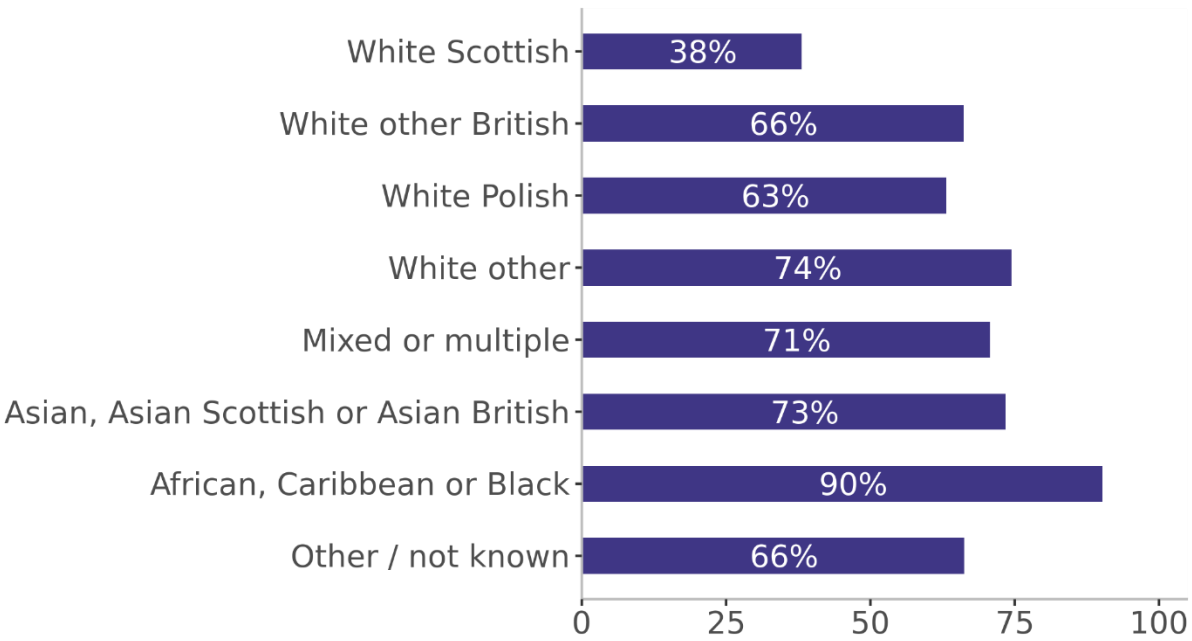
Public Health Scotland's infant feeding statistics publication reports on infant feeding practices in Scotland. The **latest infant feeding statistics**²⁶ from 1 November 2022 include information for babies becoming eligible for the relevant child health reviews within the **Universal Health Visiting Pathway in Scotland**⁶⁰ up to the year April 2021 to March 2022. The information reported is collected at health visitor reviews of children at around 10–14 days (first visit), 6–8 weeks, and 13–15 months of age. The

Infant feeding statistics Scotland report, accompanying tables and interactive dashboard²⁶ include information on feeding patterns among babies and infants from different ethnic groups at different stages of development.

Findings and discussion

Babies from minority ethnic groups are more likely to be breastfed than White Scottish babies. Among babies eligible for review in 2021/22, 90% of babies of African, Caribbean or Black ethnicity were breastfed (exclusive or mixed) by the time of their 6–8 week review, compared to 38% of White Scottish babies (see Figure 3 below).

Figure 3: Breastfeeding (exclusive or mixed) at 6–8 week review by baby's ethnicity, 2021/22



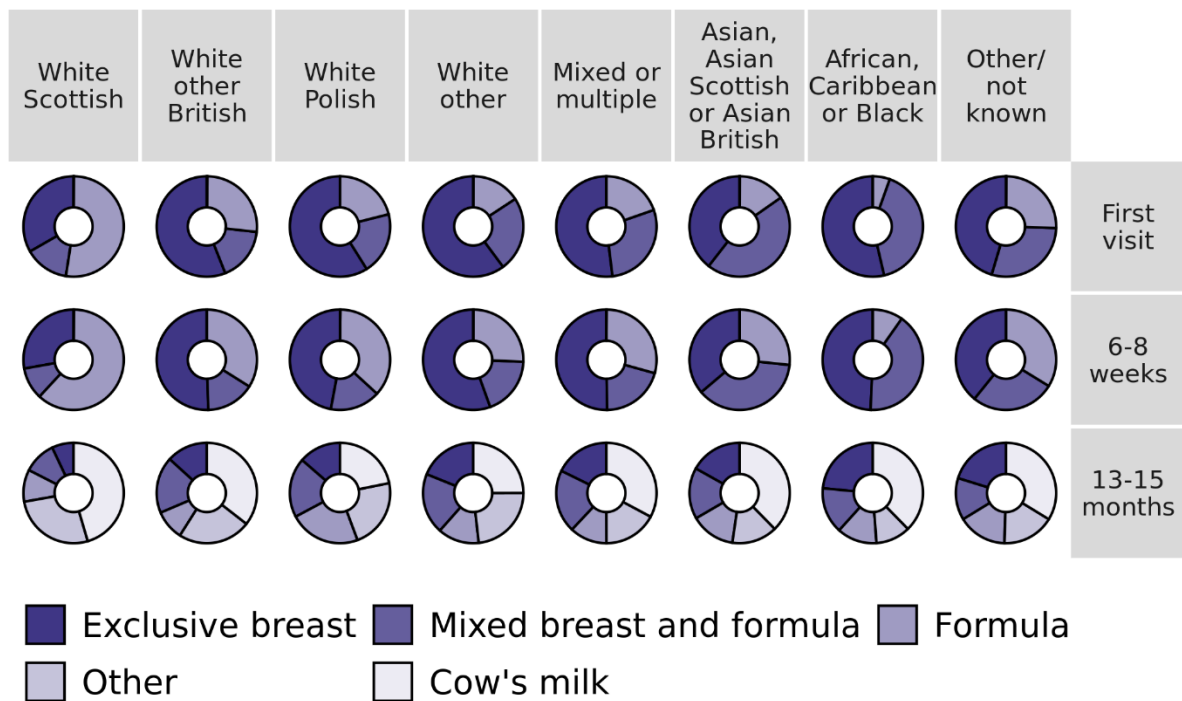
Exclusive breastfeeding at 6-to-8-week review was most frequent among babies of White other (56%) and White other British (51%) ethnicities, compared with 28% of White Scottish babies.

Breastfeeding is encouraged as it provides the best nutrition for babies and young children and benefits both their health and their mother's health. **Babies from minority ethnic groups are more likely to be breastfed.**



Figure 4 below is taken from the [interactive dashboard](#)²⁶ which provides more in-depth information on feeding patterns among babies and infants from different ethnic groups at different stages of development.

Figure 4: Infant feeding by ethnicity, 2021/22



Although breastfeeding rates are higher in some minority ethnic groups than others, there are still opportunities to increase breastfeeding across all ethnic groups. However, this can only be achieved by providing culturally inclusive interventions and support for breastfeeding. Public Health Scotland produces [Off to a Good Start: all you need to know about breastfeeding](#)⁶¹ which provides information and practical advice to help pregnant women, new mothers and their families make decisions

about how they will feed their baby. This information is available in several formats, including in a variety of languages.

Early child development

Experiences in the early years of life can affect an individual's future health and wellbeing.^{62,63} Developmental problems in early childhood are important as they are strongly associated with long-term health, educational, and wider social difficulties.⁶⁴ Therefore, prevention, early identification and appropriate interventions are important during this critical period of development to support children and families to improve health and wellbeing. There are known to be ethnic group inequalities in child development, with children from Asian and Black ethnic groups achieving lower scores on tests of cognitive development at age 3 than children of White ethnicity.⁶⁵

To promote the best start in life and strong foundations for a healthy future, all children in Scotland are offered the opportunity to participate in the **Scottish child health programme**.⁶⁰ This programme provides screening for specific medical problems, provision of routine childhood immunisations, and a series of child health reviews. Reviews are offered at three stages of development: 13–15 months of age, **27–30 months of age**⁶⁶ and 4–5 years of age. These reviews involve assessment of children's growth and development, and provision of advice and support for children and their families.

The 'Early child development' statistics publication reports on these assessments, the proportion of children that received their review and the quality of the data returned on children's development. It provides an update on children's development as assessed during the 13–15-month, 27–30-month, and 4–5-year child health reviews. The **latest early child development statistics publication** from 25 April 2023²⁷ presents information from reviews provided to children becoming eligible for review between April 2021 and March 2022. It includes information on the development of children in different ethnic groups.

Findings and discussion

In 2021/22 there were 42,501 13–15-month reviews; 45,343 27–30-month reviews and 41,997 4–5-year reviews. The majority (at least 97%) of records for each review group had the child's ethnicity recorded. There were differences between ethnic groups in the proportion of records with meaningful information recorded for all domains. This was most marked for the 27–30-month review, where information was complete for 82% of children of Asian ethnicity, and 83% of those of African, Caribbean or Black ethnicity compared to 90% for children of White Scottish ethnicity. These differences were smaller for the 13–15-month review, although the pattern by ethnic group was similar.

The proportion of children with a developmental concern recorded varied by ethnicity. In 2021/22 at the 27–30-month review, children of White other British ethnicity had the lowest proportion with a concern noted about their development (13%), while a higher proportion of children of Asian (22%) and African, Caribbean or Black ethnicity (26%) had a concern recorded for at least one domain. In comparison, 18% of children of White Scottish ethnicity had a developmental concern noted about their development.

In 2021/22 at the 13–15-month review, children of White Scottish ethnicity had the highest proportion with a concern noted about their development (12%). The difference in recorded outcome between children of different ethnicities was smaller at this review than at 27–30 months. Children of African, Caribbean or Black ethnicity had the lowest proportion with a concern noted (8%).

In 2021/22, the proportion of children with a concern recorded for at least one developmental domain at the 27–30-month review was slightly higher for children living in a household where English was not the first language spoken (19%) compared to those in which it was the main language spoken (18%). Children living in households where English is not the main language spoken are likely to come from a wide range of ethnic groups, with some groups being at relatively high risk of developmental concerns, and some at relatively low risk, as shown above. In 2021/22, the proportion of children with a concern recorded for at least one

developmental domain was similar for children in a bi- or multi-lingual household (18%) compared to a mono-lingual (18%) household.

Inequalities in early child development are likely to reflect the wider disadvantages experienced by some ethnic minority groups, and possibly also variation in how reliable developmental assessments are for children from different cultural and language backgrounds. It should be noted that there are substantial differences in the population of children by ethnicity between different areas, which mean that there is an interaction with the variation in level of concerns that are noted by NHS Board.

It is important that culturally appropriate support is provided for children and their families to address these inequalities. Public Health Scotland provides information for parents on early child development and promoting good development, including **Ready Steady Baby**²⁹ and **Ready Steady Toddler**.⁶⁷ This information is available in several formats, including in a variety of languages.

Other data and evidence

Respiratory disease vaccination and infection

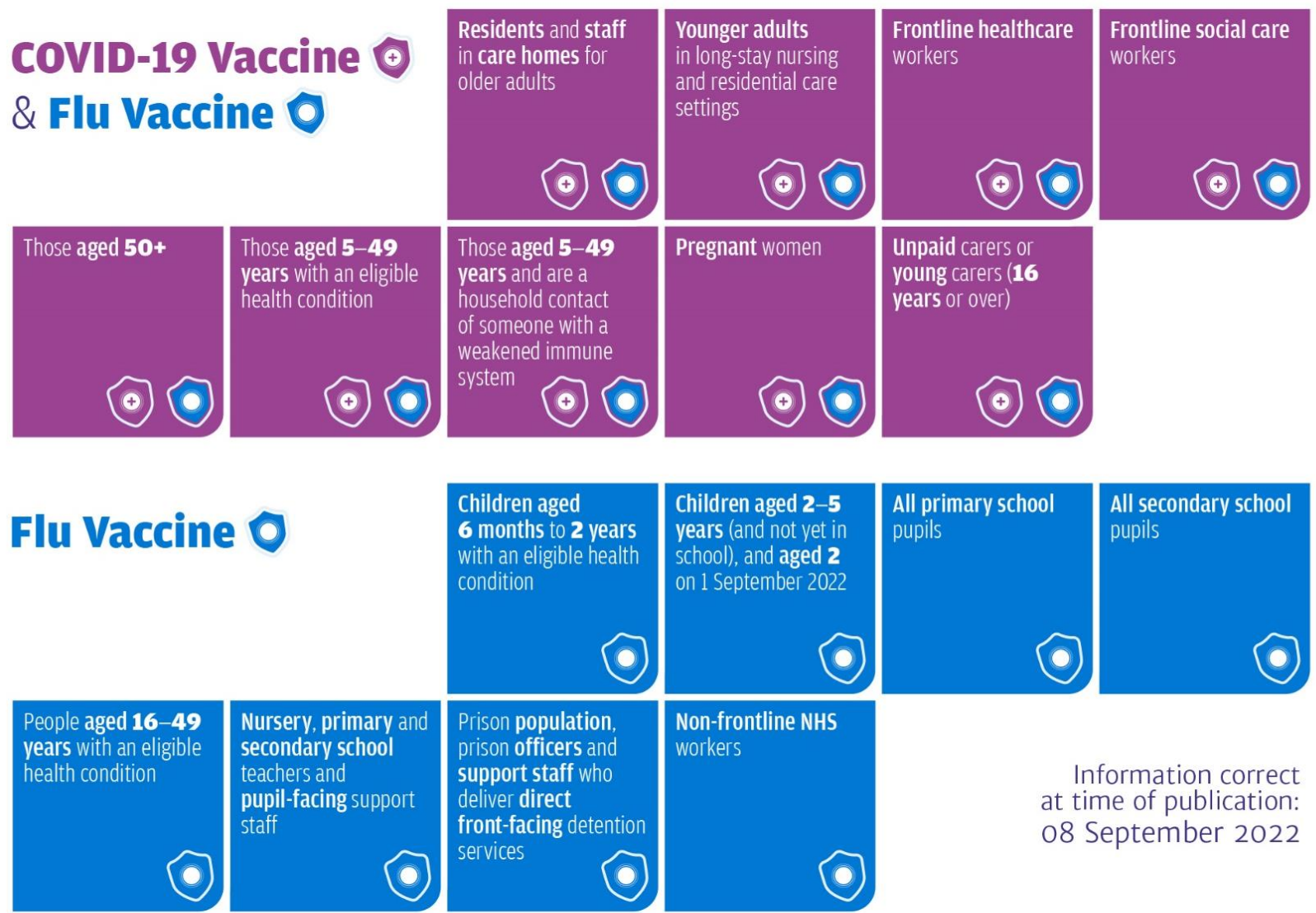
Respiratory infection and illness can be caused by a number of pathogens including influenza (flu) and COVID-19. Some minority ethnic groups are known to be at a proportionately greater risk from the COVID-19 virus.¹

Vaccination is seen as the best way people, particularly the most vulnerable, can protect themselves from respiratory infections and diseases. For example, the annual influenza (flu) vaccination programme is seen as an effective way to protect the most vulnerable against this disease.⁶⁸ In December 2020, the first public COVID-19 vaccination programme began in the UK.⁶⁹ Subsequently, further COVID-19 vaccines were rolled out across eligible groups. Public Health Scotland has reported on uptake of COVID-19 vaccinations offered via the COVID-19 vaccination programme, including by ethnicity, at various points during the pandemic.^{1,70,71}

The COVID-19 vaccination programme has been hugely successful. By September 2022, more than 12 million doses of the COVID-19 vaccine had been administered in Scotland, and Scotland has had some of the highest rates of COVID-19 vaccine uptake in the UK.⁷² COVID-19 vaccines have saved lives, reduced admissions to hospital and allowed the rules and restrictions put in place during the pandemic to be lifted.^{73,74} However, COVID-19 vaccination uptake was found to be persistently lower in some minority ethnic groups.^{1,70,71}

In September 2022, the Scottish Government announced the winter 2022 seasonal vaccine programme covering both flu and COVID-19 vaccination. The programme ran from 5 September 2022 to 31 March 2023^{72,75} and represented the next stage in Scotland's broader COVID-19 vaccination programme. It offered COVID-19 and seasonal flu vaccinations to those identified as being at most risk of severe illness from these infections. See Figure 5 below for the groups eligible for the winter 2022 vaccination programme.

Figure 5: Eligible groups for winter vaccinations 2022



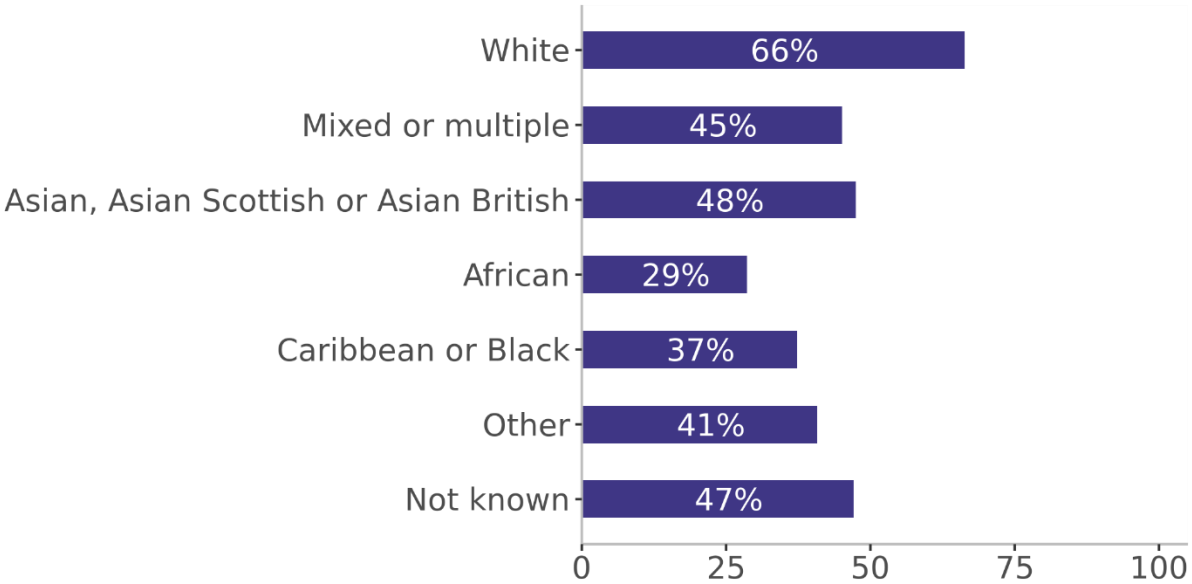
Information correct at time of publication: 08 September 2022

Public Health Scotland reported on the winter 2022 seasonal vaccine uptake in the [Weekly national respiratory infection and COVID-19 statistical report](#)^{70,71} (previously known as the COVID-19 statistical report), including by ethnicity. The most recent data on winter 2022 vaccine uptake by ethnic group were published on **9 February 2023**.⁷⁶ These data are also included within the equality analysis section of the [Flu and COVID-19 vaccination uptake in Scotland dashboard](#).⁷⁶

Findings and discussion

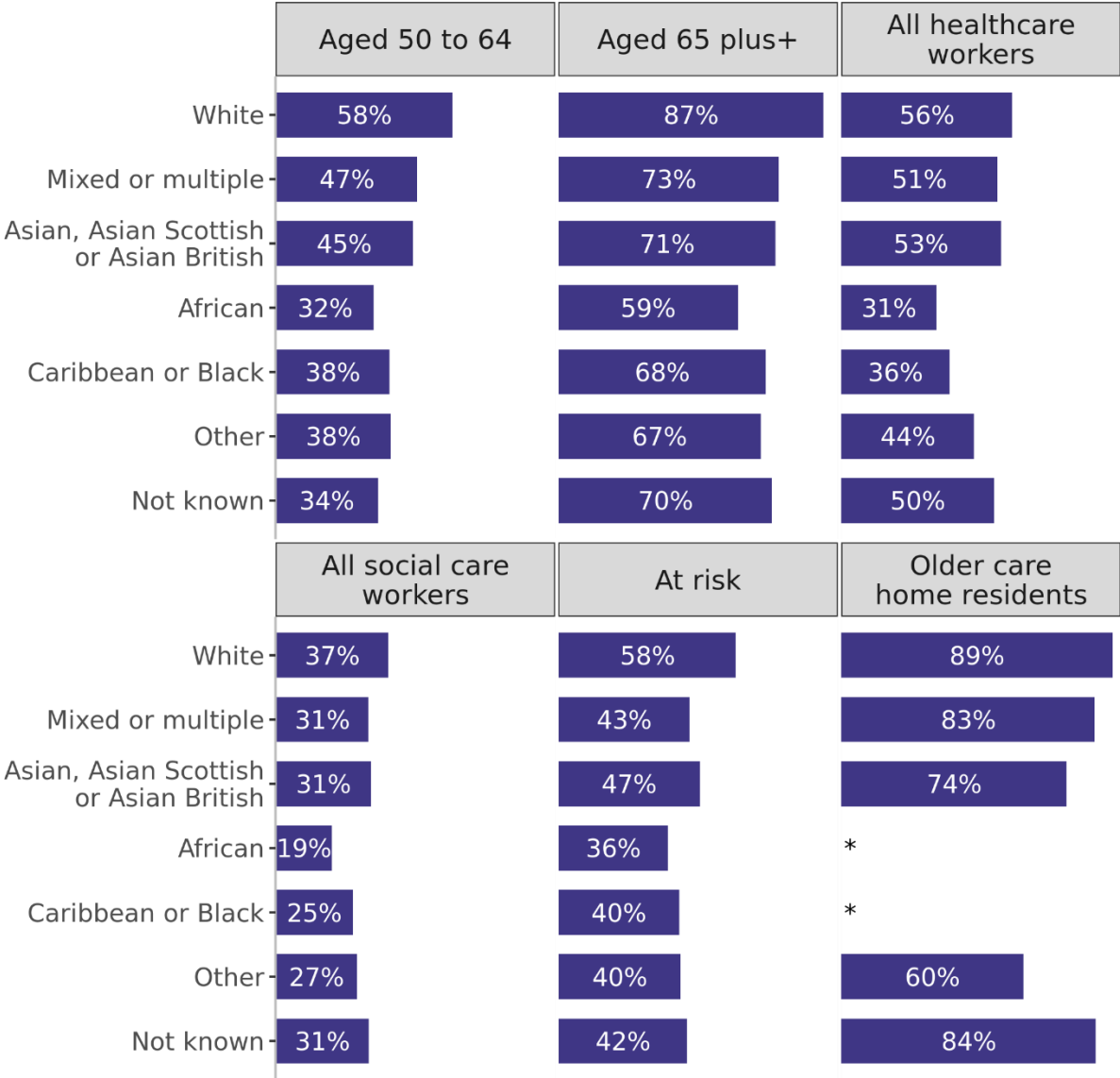
Flu vaccination: As at 29 January 2023,⁷⁶ 1,847,207 adult flu vaccinations had been administered to eligible individuals in Scotland (63.5% of the eligible population). Overall, flu vaccine uptake was highest in White ethnic groups (66%) and lowest in African ethnic groups (29%). See Figure 6 below for further information.

Figure 6: Percentage uptake of winter 2022 flu vaccination by ethnic group, 29 January 2023



Differences in uptake by ethnicity are also seen within most of the eligible populations (see Figure 7 below for further information). The gap between ethnic groups is most apparent in the 65+ general population where flu vaccine uptake is 87% for the White ethnic group and 59% for the African ethnic group.

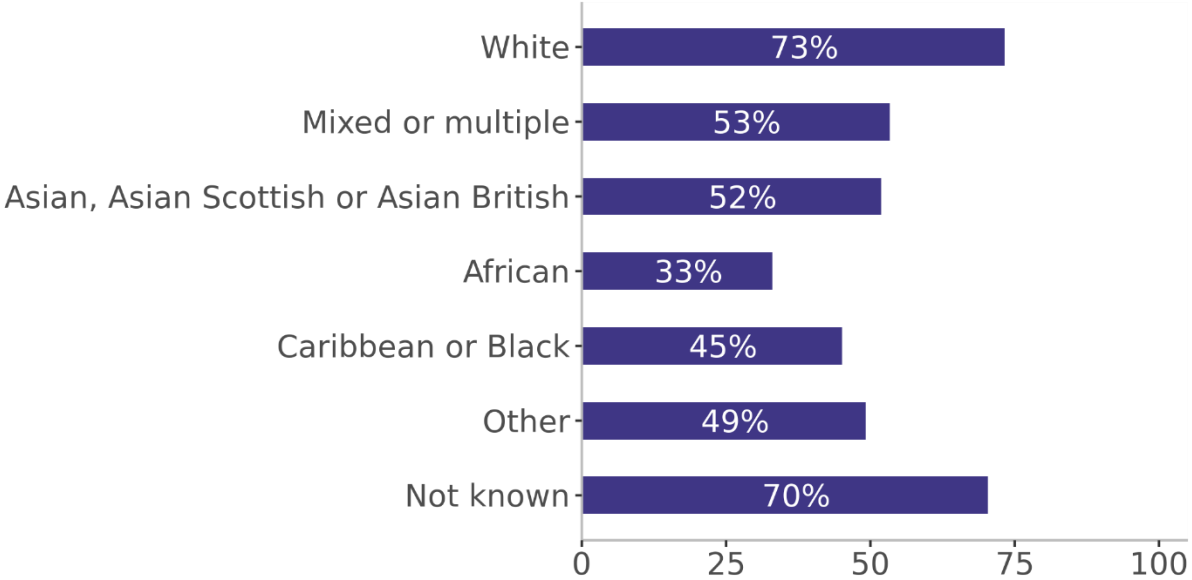
Figure 7: Percentage uptake of winter 2022 flu vaccination by eligible population and ethnic group, 29 January 2023



* Data are suppressed for populations of less than 10 due to risk of disclosure

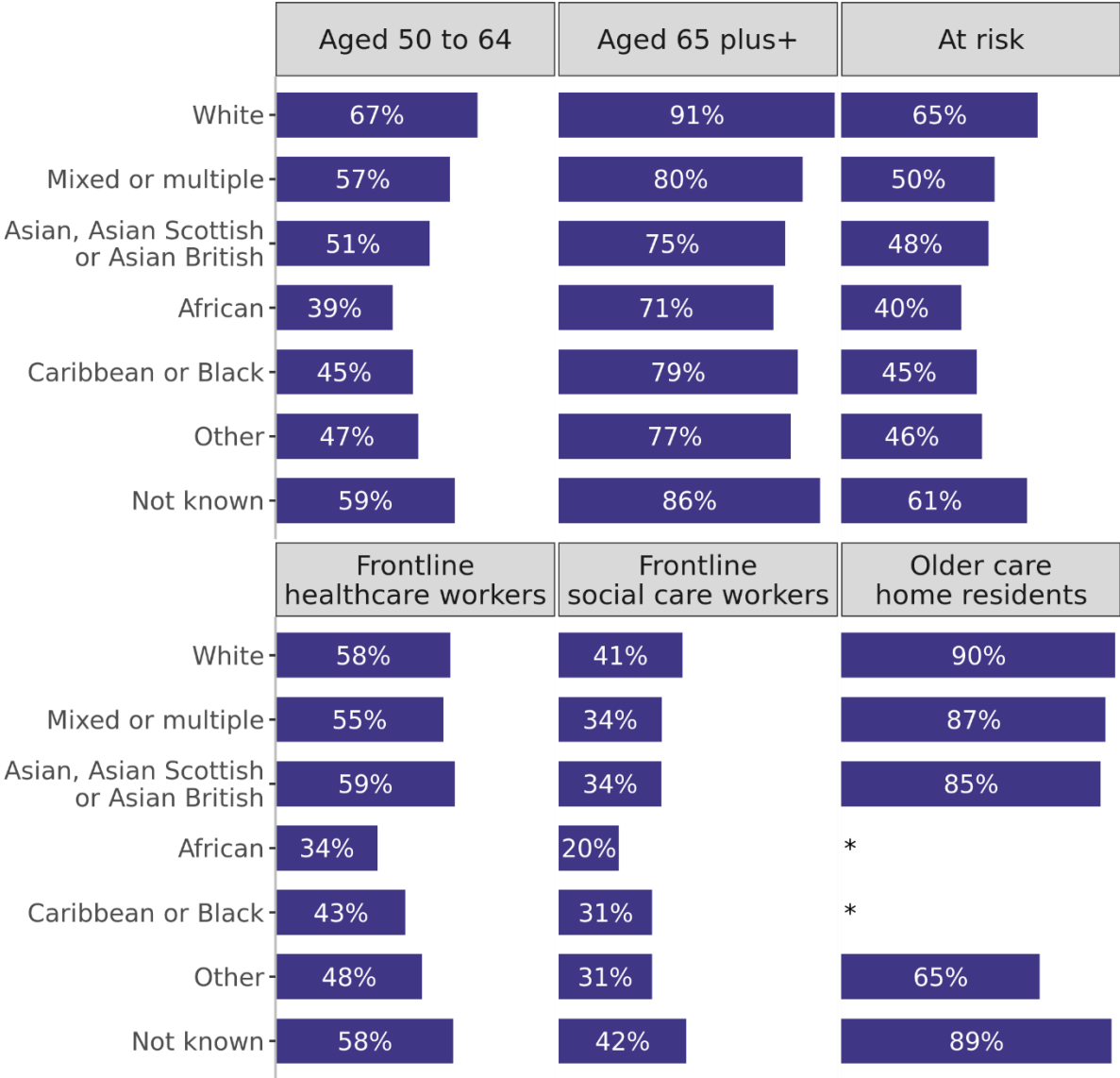
COVID-19 vaccination: As at 29 January 2023,⁷⁶ 1,880,210 COVID-19 vaccinations had been administered to eligible individuals in Scotland (72% of the eligible population). Overall, COVID-19 vaccine uptake was highest in White ethnic groups (73%) and lowest in African ethnic groups (33%). See Figure 8 below for further details.

Figure 8: Percentage uptake of winter 2022 COVID-19 vaccination by ethnic group, 29 January 2023



COVID-19 vaccine uptake was lowest in African ethnic groups across all eligible populations. See Figure 9 below for further details.

Figure 9: Percentage uptake of winter 2022 COVID-19 vaccination by eligible population and ethnic group, 29 January 2023



* Data are suppressed for populations of less than 10 due to risk of disclosure

A more detailed breakdown of winter 2022 flu and COVID-19 vaccine uptake by ethnicity, including data for individual NHS Boards and eligible population, can be found in the interactive [Flu and COVID-19 vaccination uptake in Scotland dashboard](#)⁷⁶ and [equality winter 2022 supplementary tables](#)⁷⁶ accompanying the report.

In recognition of the need to understand the reasons for these differences in vaccine uptake across different communities, Public Health Scotland published reports looking at **factors affecting uptake of the COVID-19 vaccine**³⁵ and an **Evaluation of the COVID-19 vaccination programme**.³⁶ In addition, in conjunction with the Scottish Government and the University of Glasgow, Public Health Scotland participated in community engagement events with African and Caribbean communities to learn about their experiences during the pandemic, culminating in the production of the film '**Scotland African Voices: COVID-19 Vaccine Debate**'.⁷⁷ Further information on this work can be found in the 'Evidence into action' section later in this report.

To promote winter 2022 vaccine uptake, Public Health Scotland produced resources providing information about the COVID-19 and flu vaccination programmes in a variety of formats and languages.⁷⁸

On 27 March 2023 the spring COVID-19 vaccination programme commenced.⁷⁹ This programme offers COVID-19 vaccination to eligible groups and represents the next stage in Scotland's broader COVID-19 vaccination programme. To promote uptake of the spring COVID-19 vaccination, Public Health Scotland has produced information resources about the vaccination programme in a variety of formats and languages.⁸⁰ A further update on vaccination uptake by ethnic group will be produced after the spring vaccination programme ends on 30 June 2023.

Respiratory infections: Data on hospital admissions due to COVID-19 by ethnic group and by month have been published within the **COVID-19 & Respiratory Surveillance in Scotland dashboard**.⁸¹ These data have accompanied the weekly COVID-19 report (now known as the 'Weekly national respiratory infection and COVID-19 statistical report') since 7 January 2021 and are updated quarterly.

Wider impacts of COVID-19

The COVID-19 pandemic has had a wider impact on the health and care of the population as a result of lockdowns, economic pressures and changes to health services. Public Health Scotland continues to publish a range of analyses on the impact of COVID-19 across different services within NHSScotland on the **COVID-19**

wider impacts on the healthcare system interactive dashboard.⁸² From February 2022, analyses were introduced to examine summary trends in outpatient appointments by ethnic group, and in October 2022 new analyses for hospital admissions were added. These data are updated quarterly.

Referrals to weight management services

Diabetes is a major public health concern as it causes disability and increases the risk of coronary heart disease and other health problems.⁸³ The prevalence of diabetes in Scotland is increasing⁸⁴ and the majority (88%)⁸⁴ of people in Scotland with diabetes have type 2 diabetes which is largely associated with excess body weight and physical inactivity.⁸⁵ Weight management services play an important role in helping people living with, or at risk of, type 2 diabetes to lead a healthy lifestyle, lose weight and improve their health.⁸⁶

People from Black African, Caribbean and South Asian backgrounds are at disproportionate risk of developing type 2 diabetes.^{87,88,89,90,91,92} However, until recently, there was little information available on the number of people from minority ethnic backgrounds accessing and attending weight management services.⁹³

In October 2019, the type 2 diabetes/weight management core dataset was introduced to support the evaluation of the **Type 2 diabetes prevention, early detection and early intervention: framework**⁸⁶ and **Standards for the delivery of tier 2 and tier 3 weight management services for children, young people and adults in Scotland.**⁹⁴ Ethnicity data is one of the key areas of focus for this dataset.

The latest **Referrals to NHS Board commissioned weight management services publication**,⁹⁵ covering data from 1 October 2019 to 30 September 2021, was published in December 2022. It provides information on the characteristics of those referred to weight management services, the numbers completing the core programme/active intervention phase and weight loss achievement, including by ethnic group. It should be noted that these data are published as experimental statistics as the dataset is still being refined and improved.

Findings and discussion

Between 1 October 2019 and 30 September 2021 there were 17,881 referrals to NHS Board commissioned weight management services (15,972 adult referrals and 1,909 child referrals). Ethnic group was refused or not provided on 33% of referrals for all ages over the two-year period combined, rising slightly from 31% in the first year of data collection to 35% in the second year. Among children and young people, there was a higher proportion of referrals where ethnic group was refused or not provided (40.5%), compared to adults (32%).

Service users are considered to have completed a core weight management programme/active intervention phase if they attended at least 75% of planned sessions. The report provides information on adults who have completed a core weight management programme/active intervention phase and who have achieved 5% or more weight loss during the core programme/intervention phase. Among adults, 620 were confirmed as having completed the core programme/active intervention phase and had both ethnicity and measurable data on weight loss recorded. The proportion of adults achieving 5% or more weight loss was slightly lower in those in the White ethnic group (30%) compared to all other ethnic groups combined (36%).

It is hoped that, as this dataset matures and develops, the quality and completeness of the ethnicity data will improve. This will enable access to weight management service programmes and outcomes for individuals from minority ethnic groups to be monitored and improved, and to aid the provision of culturally appropriate support.⁹⁶

National drug and alcohol treatment waiting times

Information on referrals to specialist drug and alcohol treatment services in Scotland are included in the 'National drug and alcohol treatment waiting times' reports published quarterly. For releases from 27 September 2022, the full report provides a summary of the demographics of referrals starting treatment at community-based services, including ethnicity. The [latest national drug and alcohol waiting times](#)

data available,⁹⁷ published on 28 March 2023, are for the quarter ending 31 December 2022.

In the quarter ending 31 December 2022, overall, there were 3,754 referrals to community-based services for people starting treatment for problematic use of alcohol, 2,589 for drugs and 775 for co-dependency (the use of both drugs and alcohol). The ethnicity of those starting treatment was broadly similar between substance types. However, the ethnicity of the person starting treatment was missing (refused or unknown) for between 29% and 33% of records (see **Table 3.1**⁹⁷ accompanying the main report for details).

Social care

Social care is provided to people to meet a diverse range of support needs and there are choices about how this support is delivered. The information recorded about the people receiving social care in its various forms contributes to understanding this diversity in needs. The most recent Public Health Scotland **Insights in social care: statistics for Scotland** publication, released on 28 February 2023,⁹⁸ provides information on people receiving social care support and services in Scotland. The ‘people supported’ interactive dashboard provides information on the ethnicity of people who received social care services or support in Scotland.

Evidence into action

Vaccine uptake in minority ethnic groups

As discussed above, Scottish data have consistently shown an increased risk of serious illness and death from COVID-19 among many minority ethnic groups.¹ Vaccination is seen as the best way people can protect themselves from the virus and to promote vaccine uptake across all communities in Scotland, Public Health Scotland produces vaccination information resources in a number of languages and formats.^{78,80} Public Health Scotland also signposts on its website to resources

available to support increased vaccine confidence among people from minority ethnic backgrounds in Scotland.⁹⁹ However, COVID-19 vaccination uptake rates have been persistently lower in some minority ethnic groups compared to the rest of the population.^{1,70,71}

To understand the reasons for vaccine hesitancy in these communities, Public Health Scotland published an interim report looking at **factors affecting uptake of the COVID-19 vaccine**³⁵ in June 2022, followed by a final report **evaluating the COVID-19 vaccination programme 2022/22**³⁶ in October 2022. These reports examined COVID-19 vaccine uptake in minority ethnic groups, variation in appointment booking methods and vaccine delivery models by ethnicity, and regression modelling of the likelihood to receive a COVID-19 vaccine by ethnicity. The comprehensive and in-depth research presented in these reports shows a similar picture of vaccine uptake, with lower uptake in most minority ethnic groups (and particularly in Polish, Gypsy/Traveller and African groups).

Public Health Scotland has also worked with the Scottish Government and Dr Josephine Adekola at the University of Glasgow on research into low COVID-19 vaccine uptake in the African, Caribbean, and Black communities. This research culminated in the production of a film, '**Scotland African Voices: COVID-19 Vaccine Debate**',⁷⁷ which is now being used as an educational tool to engage and connect communities and public bodies to influence policy to reduce health inequalities in Scotland. The film covers three community engagement events in Glasgow, Edinburgh and Aberdeen and interviews with leading academics, Public Health Scotland, and Scottish Government officials. The film was premiered at an event in Glasgow on 7 October 2022, followed by a **panellist discussion**¹⁰⁰ on the key themes discussed in the film with academics, health officials, policymakers and members of the African, Caribbean and Black communities. In January 2023 funding was secured from the **Glasgow Knowledge Exchange Fund**¹⁰¹ to screen the film in six locations across Scotland. Public Health Scotland, the Scottish Government and the University of Glasgow were jointly shortlisted for an award in the 'Making a Social Difference' category of **The Scottish Knowledge Exchange Awards 2023**¹⁰² for their work on this research.

Key factors affecting vaccine uptake

These studies have identified key factors affecting vaccine uptake among minority ethnic groups. They highlight that minority ethnic groups with lower vaccine uptake – in particular, Gypsy/Travellers, Polish, African, Caribbean and Black communities – may have multiple and varied barriers to engaging with vaccination programmes.

While there were common reasons for low vaccine uptake across all minority ethnic groups, some reasons were specific to individual groups. Within the Polish community, government distrust, deep-rooted vaccine hesitancy and anti-vaccine views were factors affecting uptake. There were issues with awareness of national vaccination materials and the ability to access, read and understand them in some minority ethnic groups, such as Gypsy/Travellers. Issues affecting vaccine uptake raised by African, Caribbean and Black communities included negative experiences post vaccination, language barriers and a lack of trust in health and political systems.

From these findings, it is clear that additional steps must be taken to facilitate vaccine confidence and uptake among minority ethnic groups in future vaccination programmes.

Recommendations

Building on their findings, these studies recommend actions to specifically promote vaccine confidence and vaccine uptake in minority ethnic groups in future vaccination programmes, including:

- The Scottish Government, Public Health Scotland, and local NHS Boards should improve trust by continuing to work in partnership with trusted voices and stakeholders representing people from minority ethnic communities, such as faith or community-leader and third-sector organisations. This will promote a better understanding of the distinct needs of different groups, reduce practical barriers, and inform service improvements.
- Public Health Scotland should improve communications by providing accessible information in culturally appropriate languages and media. This

information should be based on scientific evidence and disseminated via trusted sources.

- Local messaging tailored to specific groups should be disseminated via religious leaders or other trusted community members to supplement national messaging. Targeted communication by locally trusted individuals has been shown to be successful in driving uptake in people from minority ethnic communities.
- There should be greater use of outreach vaccination clinics which take place in convenient locations, such as places of worship, to reach minority ethnic groups that may not be vaccinated through any other model.
- Improve the availability and quality of ethnicity data and undertake more regular monitoring of uptake by ethnicity. This will permit variation in uptake to be identified, and timely and targeted intervention to address this variation.

Public health messaging project

A lack of accessible information has been a contributory factor in the disproportionate impact of COVID-19 on minority ethnic communities¹⁰³ as well as the low uptake of vaccines within some minority ethnic communities.¹⁰⁴ The Scottish Government Expert Reference Group on COVID-19 and Ethnicity made the following recommendation:³

'The Scottish Government must take action to ensure the inclusivity of public health messaging around COVID-19 for all minority ethnic communities and migrants. This should take into account language barriers, literacy levels, cultural factors, religious beliefs and differential access to health-related information among diverse communities.'

Access to public health information in languages other than English is usually made available on request. This often means information is directly translated into other

languages and these translations do not consider cultural differences, meaning of idioms, or examples.

To improve the access to public health messages and guidance during the pandemic, the Scottish Government worked with the **Minority Ethnic Carers of People Project (MECOPP)**¹⁰⁵ to produce community voice-over versions of numerous audio-visual resources and supported the dissemination of information via community networks. This was to ensure that the health messages were relevant and accessible to different minority ethnic communities.

Through this work, much has been learned about the development and dissemination of public health messages for minority ethnic communities. To ensure this learning is not lost, Public Health Scotland, the Scottish Government and MECOPP have worked in partnership to develop a joint public health messaging project. This project, which started in December 2022 and will run until December 2023, will:

- Provide advice to assist Public Health Scotland and the Scottish Government to identify the best ways to distribute public health messages to ensure that they can reach and be understood by their intended audience.
- Work with the Gypsy/Traveller community to understand how they perceived and used COVID-19 and flu vaccination information provided by both Public Health Scotland and the Scottish Government. A national information policy and development worker has been recruited to work with MECOPP and work has begun to develop a series of focus groups with members of the Gypsy/Traveller community.
- See Public Health Scotland and the Scottish Government communications teams working together to establish appropriate processes for developing new information materials that better meet the needs of their intended audience.
- Develop and provide activities to build understanding and capacity on inclusive communications.

Health inequalities faced by the Gypsy, Roma and Traveller community

The Gypsy, Roma and Traveller community experience significant health inequalities.¹⁰⁶ These include: a higher suicide rate than the general population;¹⁰⁷ poorer mental health linked to poverty, social exclusion, stigma and hate crime;¹⁰⁸ barriers when accessing health services;¹⁰⁹ lower uptake of preventative health services, including antenatal and postnatal care and childhood development assessments;¹¹⁰ and living in unsafe environments.¹¹¹

The **Race equality framework for Scotland 2016 to 2030**¹¹² commits to ensuring equality of opportunity for all Scotland's Gypsy/Travellers and improving the lives of Gypsy/Travellers is crucial to tackling these deep-rooted inequalities to deliver a fairer Scotland.¹¹³

Over several years, Public Health Scotland has established and built cross-sector relationships with the Scottish Government, the Convention of Scottish Local Authorities (COSLA), local NHS Board and health and social care partnership (HSCP) colleagues, and key third-sector partners. Working with these partners, Public Health Scotland has been involved in initiatives to help reduce the inequalities experienced by the Gypsy/Traveller community.¹¹⁴ For example, Public Health Scotland has worked with the Scottish Government and COSLA to shape and inform the national action plan **Improving the lives of Gypsy/Travellers: 2019–2021**.¹¹³ Public Health Scotland has also worked with the Scottish Government to co-design **Access to Healthcare – GP Registration cards**¹¹⁵ to help Gypsy/Travellers to overcome difficulties in registering with a GP. They've also contributed to the development of an e-learning module for NHS and health and social care staff to raise awareness of Gypsy/Traveller culture, lifestyle and the inequalities they experience.

Through its work with the **Scottish NHS and HSCP Gypsy/Traveller Forum**,¹¹⁶ Public Health Scotland contributed to the **Framework for local authorities and partners on keeping Gypsy/Travellers safe during the COVID-19 pandemic**¹¹⁷ and provided advice on the aspects of place that support health and wellbeing to

inform the development of a **design guide for Gypsy/Traveller sites**.¹¹⁸

Public Health Scotland has also contributed to proposals that have resulted in the **Community Health Matters**¹¹⁹ project. This project, which is delivered by **MECOPP**,¹⁰⁵ trains local Gypsy/Traveller women as community health workers to help improve health outcomes for Gypsy/Travellers. The Community Health Matters project is being evaluated by Dundee University. An interim evaluation report has been produced,¹²⁰ with the final evaluation report due to be published in summer 2023.

To help improve the health and wellbeing of the Gypsy/Traveller community, Public Health Scotland has recently released two publications aimed at staff in NHS Boards and HSCPs.¹²¹ The first, '**How you can improve the health of Gypsy/Travellers in Scotland**',¹²¹ highlights practical solutions that NHS Boards and HSCPs have put in place to try to mitigate the health inequalities experienced by Gypsy/Travellers in Scotland. It draws on examples of good practice, explains some of the causes of these inequalities and why there is a need for focused action. The second publication, '**Improving access for Gypsy/Travellers to the NHS and health and social care in Scotland: considerations for carrying out an equality and health inequality impact assessment**',¹²¹ aims to support people who are undertaking an equality impact assessment (EQIA) or health inequality impact assessment (HIIA) to consider the likely impacts of policy, strategy or service development on Gypsy/Travellers in Scotland.

Public Health Scotland is committed to working in partnership with local areas and third-sector organisations to connect with and hear directly from the Gypsy/Traveller community, to inform planning and redesigning of services. Public Health Scotland continues to work with local NHS Boards and third-sector organisations on improving Gypsy/Travellers' access to services, particularly in primary care, to support Gypsy/Travellers to understand their rights to healthcare, raise awareness of the inequalities experienced by Gypsy/Travellers and highlight where change is needed. Public Health Scotland is working in partnership with COSLA to commission research to evaluate the **Negotiated Stopping Places pilot**.¹²² The evaluation will explore how Gypsy/Travellers access health services while travelling, including continuity of

care and temporary registration with a GP. It will also explore the impact on mental health of travelling and not having safe spaces to stop. The report of the evaluation is expected in October 2023.

Improving data collection, reporting and use of data and evidence

The sections above summarise improvements in data collection and analysis that have been put in place since March 2022. However, more work is needed across other datasets to allow routine monitoring of racialised health inequalities across the health and care system.

Public Health Scotland is committed to publishing more data which meet the needs of policymakers, service providers and the patients and communities they serve **to monitor and reduce racialised health inequalities.**



Once ethnicity data have been collected, it is important to report in a way that does not cause discrimination, blame communities for differential health outcomes or further exacerbate these inequalities. Public Health Scotland will implement best practice in the collection and analysis of data,¹²³ using intersectional data and analysis to look at the complex mix of factors that result in health inequalities.^{124,6} In addition, it will be important to consider how the data will be analysed and used to design, re-shape and improve services to meet the specific needs of minority ethnic groups. Showing how these data have been used and the changes made as a result is important for building trust with individuals and communities.^{125,126}

The following section summarises some of the work that Public Health Scotland is taking forward in partnership with others to make this happen.

Happy to ask, happy to tell

Good-quality data are critical for monitoring equity of access and outcomes, generating high-quality evidence and conducting research on inequalities at a population level. Only by progressing the collection and analysis of ethnicity data will it be possible to measure and monitor racialised health inequalities.

Most of the national data that Public Health Scotland collects and publishes are sourced from administrative and clinical systems in the NHS and the wider health and care sector. Health and care workers play a key role in collecting these data, and on improving the completeness and quality of the data being collected,^{125,126} but often lack confidence in asking for personal information, such as ethnicity.

To improve the reliability and value of ethnicity data, community and healthcare workers must understand why ethnicity data are being asked for and how they will be used. Addressing this issue is key to improving data quality and completeness so that data can be used to better effect. It is also likely to improve the willingness of people to provide this information.¹²⁷

The 'Happy to ask, happy to tell' toolkit is key to improving data quality and completeness of ethnicity data. It will support staff requesting these data to have a greater understanding of why this is important.



The **'Happy to ask, happy to tell'**¹²⁸ toolkit, originally published in 2012 by NHS Health Scotland (now part of Public Health Scotland), aims to provide staff collecting equalities data with the confidence to request this information and an understanding of why this is important. At the start of July 2022, Public Health Scotland started working, in partnership with the **University of Strathclyde Centre for Health Policy**¹²⁹ and a peer researcher from **Homeless Network Scotland**,¹³⁰ to review and update this toolkit.

As a first step, an engagement plan was developed, mapping out the stakeholders to be involved. A schedule of questions was then designed to obtain information to

better understand what makes people feel safe when being asked for their information and the best way for health professionals to ask for this. Information was obtained via:

- **Focus groups:** Six focus groups were run between September 2022 and January 2023 to capture the views of people representing the protected characteristics, including different minority ethnic groups. Public Health Scotland provided funding for venues, refreshments, interpretation and translation services, and group facilitators. To help reduce barriers to attendance and participation, all focus group attendees were given a £20 voucher and travel expenses to compensate them for their time. There was also an offer of paying for childcare and carer support if required. To maximise the information collected, a questionnaire was also developed from the focus-group schedule that could be completed by people that could not attend a group in person. The questionnaire could be completed with the support of the peer researcher. By the end of January 2023, the views of 80 participants had been shared: 60 focus group participants, 12 self-completed questionnaires, and 8 interviews.
- **An NHS staff survey:** In addition, a survey of NHS staff was carried out during December 2022 and January 2023, asking about their experience of asking for equalities data and what resources or training they would need to support them. The 358 responses to the survey were received from 11 local NHS Boards, primary care settings, the Scottish Ambulance Service, the State Hospital, and the Golden Jubilee National Hospital. Respondents worked in a variety of services including hospital, community, GP practices, dental and prison, both in clinical and administrative roles.
- **A third-sector workshop:** Public Health Scotland and partners also ran a third-sector workshop to hear the experience of organisations that support people with protected characteristics to access health and care. This workshop aimed to understand what support and changes these organisations would like to see to ensure that equalities information is shared more fully, and to understand the systemic issues arising for people who have protected characteristics. Representatives were asked to describe how equality data,

including ethnicity data, are asked for and recorded. To allow organisations from across Scotland to attend, the workshop was held using a hybrid approach, in person in Glasgow and online. Representatives from 36 organisations attended, representing eight protected characteristics under The Equality Act 2010. Characteristics represented were age, disability, gender reassignment, pregnancy and maternity, race and ethnicity, religion or belief, sex and sexual orientation.

There were common themes emerging from the focus groups, staff survey and third-sector workshop. The key themes in relation to racialised health inequalities were:

- **A lack of accessible information:** Both staff and patients spoke about a lack of accessible information on why equalities data were being collected, how they will be held, what they will be used for and who they will be shared with. This led to a reluctance from staff to ask for information and a reluctance from patients to answer questions. It also eroded trust in the services being accessed.
- **Communication issues:** There were issues raised around communication including a lack of translated resources, a lack of support for people with sensory disabilities, the method of communication used, and the staff to whom patients were asked to disclose information. Inability to access appropriate interpreting services was a barrier to accessing healthcare, with a reliance on support from trusted third-sector organisations.
- **Trust:** Trust was highlighted as an important theme. Minority ethnic participants in the focus groups spoke about the lack of understanding of the term 'ethnicity' and why it was important to their health and treatment. Some focus group participants expressed a fear of receiving differential treatment and some staff said they feared being labelled a racist or having a negative or aggressive response from patients when asking about ethnicity.

- **Judgement, isolation and stigmatisation:** Third-sector organisations said that people feel judged, isolated and stigmatised when they access healthcare settings and are asked for equality data.
- **Racism and stereotyping:** People from minority ethnic communities talked about the racism they experienced, both in overt ways and in more subtle stereotyping about the community they were from. When people raised racist incidents with healthcare providers, their concerns were not investigated or upheld.
- **Repeated requests for information:** The lack of sharing of equality data across healthcare settings leads to people having to be asked the same questions repeatedly.

The information and recommendations from the focus groups, responses from the staff survey and third-sector workshop will be published in June 2023 and will be used to update the 'Happy to ask, happy to tell' toolkit, creating materials for staff and resources for the public to improve the collection of equalities data. This work will be carried out in collaboration with NHS Education for Scotland. The training and resources will be piloted in NHS Fife during the year, with a view to being finalised by the end of 2023.

This work will play a vital role in delivering the vision of the Scottish Government's **Health and social care: data strategy**⁶ by contributing to its key ambition:

'To empower those delivering health and social care services to have the confidence and ability to gather, safely use, and share data to sustainably improve services and ensure outcomes are being met.'

Coding and recording of ethnicity

Work is ongoing on the implementation of Census 2022 ethnicity codes within routine hospital datasets, the ethnic group dimensions in the corporate data warehouse and

other Public Health Scotland datasets. The **NHS Scotland data dictionary**¹³¹ has recently been updated to reflect the Census 2022 ethnicity codes to promote adoption of these across NHS Scotland.

Discovery¹³² is an online NHS management information system that provides approved users with access to a range of comparative healthcare information to support performance and quality improvement and to underpin service planning and delivery across health and social care in Scotland. Analyses of hospital admissions and outpatient attendances by ethnic group were introduced from October 2022, allowing NHS Board users including managers, analysts, and clinicians access to up-to-date and comparative information. The system also provides information on ethnicity data completeness to support continued improvement in data recording.

Vaccination

Vaccination data are extracted from the National Clinical Data Store (NCDS) which sources data from both the **Turas Vaccination Management tool**¹³³ and GP patient management systems. Ethnicity recording became mandatory in November 2021 as part of the COVID-19 and flu vaccination programme. Currently the vaccination management tool is set up to record vaccinations against a range of conditions including COVID-19, flu, pneumococcal infection, shingles and some travel vaccinations. To promote the recording of ethnicity information, a set of **frequently asked questions**¹³⁴ about the collection and recording of ethnicity are included in the vaccination management tool user guide.

Referrals to weight management services

Early feedback from NHS Boards on their experience of implementing the national core dataset for weight management services in Scotland (including ease of collection, for both children and young people and adult services), and developments since the introduction of the dataset (such as the expansion of remote and digital delivery of services) has led to the development, testing and roll-out of an online data collection system. This work has been led by NHS Education for Scotland (NES) on behalf of the Health Improvement Division (Diet and Healthy Weight Team) at

Scottish Government. Public Health Scotland has worked closely with NHS Boards, Scottish Government and NES during the development of the system to help ensure consistency of data collection between NHS Boards.

Next steps

Public Health Scotland will continue to work with the Scottish Government, the Racialised Health Inequalities in Health and Social Steering Group and the **Anti-Racism Interim Governance Group to Develop National Anti-Racism Infrastructure (AIGG)**⁴ to implement the **recommendations of the Scottish Government's Expert Reference Group on COVID-19 and Ethnicity (ERG)**.³

Following a **consultation and stakeholder events**¹³⁵ that Public Health Scotland contributed to, the Scottish Government launched **Scotland's Equality Evidence Strategy 2023–2025**⁷ on 24 March 2023. The launch of this strategy marks the commencement of the second phase of the Scottish Government's **Equality Data Improvement Programme (EDIP)**.¹³⁶ Public Health Scotland will work with the Scottish Government, EDIP and other partners to implement the actions identified to help to achieve the vision set out in this strategy.

In line with the Scottish Government's **Health and social care: data strategy**,⁶ Public Health Scotland is using record linkage to maximise the power of the ethnicity data collected through its data schemes to promote increased analysis on ethnic inequalities in health and social care. Through its partnership with **Research Data Scotland**,¹³⁷ Public Health Scotland has also supported work to develop an **equalities dataset for research**.¹³⁸ Ensuring safe and appropriate access to these data to produce statistics and research that are in the public good is paramount. Running parallel to this work is the ongoing programme to modernise the Community Health Index (CHI) system and the GP patient registration system (GPPRS). The new systems will have the capacity to collect ethnicity with the potential to become an additional source of this information.

Public Health Scotland will continue to work, in partnership with others, to coordinate and take action to improve the collection and use of ethnicity data within health and

social care. This will provide data and evidence on racialised inequalities in health. Working with partners at both national and local levels, Public Health Scotland will use these data to continue to highlight and take actions to reduce health inequalities across communities in Scotland. Engaging with, and learning from, those with lived experience from the communities represented in these data will be a key focus for this work.

References

- ¹ Public Health Scotland. Monitoring ethnic health inequalities in Scotland during COVID-19: data and evidence. Edinburgh; 2022.
<https://www.publichealthscotland.scot/publications/monitoring-ethnic-health-inequalities-in-scotland-during-covid-19/monitoring-ethnic-health-inequalities-in-scotland-during-covid-19-data-and-evidence/> (accessed 21 April 2023).
- ² Razai MS, Kankam HKN, Majeed A, Esmail A, Williams DR. Mitigating ethnic disparities in COVID-19 and beyond. *BMJ* 2021;372:m4921.
- ³ Scottish Government. Recommendations of the Expert Reference Group on COVID-19 and Ethnicity (ERG) <https://www.gov.scot/publications/expert-reference-group-on-covid-19-and-ethnicity-recommendations-to-scottish-government/> (accessed 22 May 2023).
- ⁴ Scottish Government. Anti-Racism Interim Governance Group to Develop National Anti-Racism Infrastructure (AIGG) <https://www.gov.scot/groups/interim-governance-group-to-develop-national-anti-racism-infrastructure/> (accessed 21 April 2023).
- ⁵ Scottish Government. Race quality: immediate priorities plan (IPP). Edinburgh; 2021. <https://www.gov.scot/publications/immediate-priorities-plan-race-equality-scotland/pages/0/> (accessed 21 April 2023).
- ⁶ Scottish Government. Health and social care: data strategy. Edinburgh; 2023. <https://www.gov.scot/publications/data-strategy-health-social-care-2/> (accessed 21 April 2023).
- ⁷ Scottish Government. Scotland's Equality Evidence Strategy 2023–2025. Edinburgh; 2023. <https://www.gov.scot/publications/scotlands-equality-evidence-strategy-2023-2025/> (accessed 21 April 2023).
- ⁸ UK Government. Healthy beginnings: applying All Our Health. London; 2022. <https://www.gov.uk/government/publications/healthy-beginnings-applying->

[all-our-health/healthy-beginnings-applying-all-our-health#promoting-best-start-in-life-in-your-professional-practice](#) (accessed 21 April 2023).

- ⁹ Scottish Government. The best start: five year plan for maternity and neonatal care. Edinburgh; 2017. <https://www.gov.scot/publications/best-start-five-year-forward-plan-maternity-neonatal-care-scotland/pages/1/> (accessed 21 April 2023).
- ¹⁰ Scottish Government. Maternal and child health. <https://www.gov.scot/policies/maternal-and-child-health/> (accessed 21 April 2023).
- ¹¹ Scottish Government. Improving maternal and infant nutrition: a framework for action. Edinburgh; 2011. <https://www.gov.scot/publications/improving-maternal-infant-nutrition-framework-action/> (accessed 21 April 2023).
- ¹² NHS Race & Health Observatory. Ethnic Inequalities in Healthcare: A Rapid Evidence Review. Summary. Edinburgh; 2022. https://www.nhsrho.org/wp-content/uploads/2022/02/RHO-Rapid-Review-Final-Report_Summary_v.4.pdf (accessed 21 April 2023).
- ¹³ Qureshi Z, Richards A, Sinha I, Lokulo-Sodipe O, Rose A. How does ethnicity affect child health outcomes? Don't Forget the Bubbles; 2021. Available at: <https://doi.org/10.31440/DFTB.46593> (accessed 21 April 2023).
- ¹⁴ Raleigh V, Holmes J. The health of people from ethnic minority groups in England; 2021. https://www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/maternal-report-2022/MBRRACE-UK_Maternal_MAIN_Report_2022_UPDATE.pdf (accessed 21 April 2023).
- ¹⁵ Knight M, Bunch K, Patel R et al. (Eds.) on behalf of MBRRACE-UK. Saving Lives, Improving Mothers' Care Core Report - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2018-20. Oxford: National Perinatal Epidemiology Unit, University of Oxford; 2022. <https://www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/maternal->

[report-2022/MBRRACE-UK_Maternal_MAIN_Report_2022_UPDATE.pdf](#)

(accessed 21 April 2023).

- ¹⁶ Knight M, Bunch K, Vousden N et al. Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study. *BMJ* 2020; 369:m2107.
- ¹⁷ Vousden N, Bunch K, Morris E et al. The incidence, characteristics and outcomes of pregnant women hospitalized with symptomatic and asymptomatic SARS-CoV-2 infection in the UK from March to September 2022: A national cohort study using the UK Obstetric Surveillance System (UKOSS). *PLOS ONE* 16(5): e0251123.
- ¹⁸ Office for National Statistics (ONS). Births and infant mortality by ethnicity in England and Wales: 2007 to 2019.
<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/childhealth/articles/birthsandinfantmortalitybyethnicityinenglandandwales/2007to2019> (accessed 21 April 2023).
- ¹⁹ Draper ES, Gallimore ID, Smith LK et al, on behalf of the MBRRACE-UK Collaboration. MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2020. Leicester: The Infant Mortality and Morbidity Studies, Department of Health Sciences, University of Leicester; 2022. https://www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/perinatal-surveillance-report-2020/MBRRACE-UK_Perinatal_Surveillance_Report_2020.pdf (accessed 21 April 2023).
- ²⁰ Draper ES, Gallimore ID, Smith LK et al, on behalf of the MBRRACE-UK Collaboration. MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2020: Tables and Figures. Leicester: The Infant Mortality and Morbidity Studies, Department of Health Sciences, University of Leicester; 2022.
<https://www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/perinatal-surveillance-report-2020/MBRRACE->

[UK Perinatal Surveillance Report 2020__Tables_and_Figures.pdf](#)

(accessed 21 April 2023).

- ²¹ NHS Fife and Fife Health & Social Care Partnership. Mums Matter. Making maternity, health visiting and income maximisation services easily accessible to Gypsy/Traveller women in Fife. Lessons Learned. 2020.
<https://www.scotphn.net/wp-content/uploads/2021/02/Mums-Matter-Report-PRINT.pdf> (accessed 21 April 2023).
- ²² Public Health Scotland. Antenatal booking in Scotland; 28 March 2023.
<https://www.publichealthscotland.scot/publications/antenatal-booking-in-scotland/antenatal-booking-in-scotland-calendar-year-ending-31-december-2022/> (accessed 21 April 2023).
- ²³ University of Edinburgh. COVID-19 in Pregnancy in Scotland.
<https://www.ed.ac.uk/usher/eave-ii/covid-19-in-pregnancy-in-scotland> (accessed 21 April 2023).
- ²⁴ Public Health Scotland. COVID-19 statistical report. Edinburgh; 2022.
<https://publichealthscotland.scot/publications/covid-19-statistical-report/covid-19-statistical-report-28september-2022/> (accessed 21 April 2023).
- ²⁵ Public Health Scotland. Births in Scotland. Edinburgh; 2022.
<https://www.publichealthscotland.scot/publications/births-in-scotland/births-in-scotland-year-ending-31-march-2022/> (accessed 21 April 2023).
- ²⁶ Public Health Scotland. Infant feeding statistics. Edinburgh; 2022.
<https://publichealthscotland.scot/publications/infant-feeding-statistics/infant-feeding-statistics-financial-year-2021-to-2022/> (accessed 21 April 2023).
- ²⁷ Public Health Scotland. Early child development. Edinburgh; 2023.
<https://publichealthscotland.scot/publications/early-child-development/early-child-development-statistics-scotland-2021-to-2022/> (accessed 26 April 2023).

- ²⁸ National Institute for Health and Care Excellence (NICE). Guideline NG201: Antenatal Care. London; 2021.
<https://www.nice.org.uk/guidance/ng201/chapter/recommendations#organisation-and-delivery-of-antenatal-care> (accessed 21 April 2023).
- ²⁹ NHS inform. Ready Steady Baby, Pregnancy, Your antenatal care, Your booking appointment (booking visit). <https://www.nhsinform.scot/ready-steady-baby> (accessed 24 April 2023).
- ³⁰ Cresswell JA, Yu G, Hatherall B et al. Predictors of the timing of initiation of antenatal care in an ethnically diverse urban cohort in the UK. BMC Pregnancy Childbirth 13, 103 (2013).
- ³¹ UK Government. Health chiefs encourage more pregnant women to get their COVID-19 vaccine. London; 2021.
<https://www.gov.uk/government/news/health-chiefs-encourage-more-pregnant-women-to-get-their-covid-19-vaccine> (accessed 21 April 2023).
- ³² Professor Dame Sarah Gilbert. UK Government. Quote from Q&A at the end of the film Scotland African Voices: COVID-19 Vaccine Debate.
<https://www.youtube.com/watch?v=h1yNAZffpOg> (accessed 21 April 2023).
- ³³ NHS inform. Pregnancy, breastfeeding and the coronavirus vaccines.
<https://www.nhsinform.scot/covid-19-vaccine/pregnancy-breastfeeding-and-the-coronavirus-vaccines/> (accessed 21 April 2023).
- ³⁴ Royal College of Obstetricians & Gynaecologists. COVID-19 vaccines, pregnancy and breastfeeding FAQs. <https://www.rcog.org.uk/guidance/coronavirus-covid-19-pregnancy-and-women-s-health/vaccination/covid-19-vaccines-pregnancy-and-breastfeeding-faqs/> (accessed 21 April 2023).
- ³⁵ Public Health Scotland. Factors affecting uptake of the COVID-19 vaccine. Edinburgh; 2022. <https://publichealthscotland.scot/publications/factors-affecting-uptake-of-the-covid-19-vaccine-june-2022/factors-affecting-uptake-of-the-covid-19-vaccine-june-2022/> (accessed 21 April 2023).

- ³⁶ Public Health Scotland. Evaluation of the COVID-19 vaccination programme. Edinburgh; 2022.
<https://www.publichealthscotland.scot/publications/evaluation-of-the-covid-19-vaccination-programme-october-2022/evaluation-of-the-covid-19-vaccination-programme-october-2022/> (accessed 21 April 2023).
- ³⁷ Calvert C, Carruthers J, Denny C et al. A population-based matched cohort study of early pregnancy outcomes following COVID-19 vaccination and SARS-CoV-2 infection. *Nat Commun* 13, 6124 (2022).
- ³⁸ Calvert C, Carruthers J, Denny C et al. A population-based matched cohort study of major congenital anomalies following COVID-19 vaccination and SARS-CoV-2 infection. *Nat Commun* 14, 107 (2023).
- ³⁹ Lindsay L, Calvert C, Shi T et al. Baby and Maternal Outcomes Following SARS-CoV-2 Infection and COVID-19 Vaccination During Pregnancy: A National Population-Based Matched Cohort Study.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4322399 (accessed 22 April 2023).
- ⁴⁰ NHS inform. Coronavirus (COVID-19) vaccine information in different languages.
<https://www.nhsinform.scot/covid19vaccinelanguages> (accessed 22 April 2023).
- ⁴¹ Scottish Government Equality Outcomes: Pregnancy and Maternity Evidence Review. Edinburgh; 2013. <https://www.gov.scot/publications/scottish-government-equality-outcomes-pregnancy-maternity-evidence-review/> (accessed 22 April 2023).
- ⁴² Bansal N, Chalmers JWT, Fischbacher C et al. Ethnicity and first birth: age, smoking, delivery, gestation, weight and feeding: Scottish health and ethnicity linkage study. *European Journal of Public Health*, Vol. 24, No. 6, 911–916.
- ⁴³ The Royal College of Obstetricians and Gynaecologists. Induction of Labour at Term in Older Mothers (Scientific Impact Paper No 34)
<https://www.rcog.org.uk/guidance/browse-all-guidance/scientific-impact->

[papers/induction-of-labour-at-term-in-older-mothers-scientific-impact-paper-no-34/](#) (accessed 22 April 2023).

- ⁴⁴ Maternal obesity in the UK: findings from a national project. Executive Summary and Key Recommendations 2010 UK.
<https://www.publichealth.hscni.net/sites/default/files/Maternal%20Obesity%20in%20the%20UK%20executive%20summary.pdf> (accessed 22 April 2023).
- ⁴⁵ Heslehurst N, Ells LJ, Simpson H et al. Trends in maternal obesity incidence rates, demographic predictors, and health inequalities in 36,821 women over a 15-year period. *BJOG: An International Journal of Obstetrics and Gynaecology* 2007;114(2):187–94.
- ⁴⁶ European Perinatal Health Report, 2015–2019; 2022.
<https://www.europeristat.com/index.php/reports/ephr-2019.html> (accessed 22 April 2023).
- ⁴⁷ Read AW, Prendiville WJ, Dawes VP, Stanley FJ. Cesarean section and operative vaginal delivery in low-risk primiparous women, Western Australia. *Am J Public Health*. 1994 Jan;84(1):37–42.
- ⁴⁸ National Sentinel Caesarean Section Audit Report. October 2001
https://orca.cardiff.ac.uk/id/eprint/93112/1/nscs_audit.pdf (accessed 22 April 2023).
- ⁴⁹ March of Dimes, PMNCH, Save the Children, WHO. Born too soon: the global action report on preterm birth. World Health Organization; 2012
<https://www.who.int/publications/i/item/9789241503433> (accessed 22 April 2023).
- ⁵⁰ Costeloe KL, Hennessy EM, Haider S et al. Short term outcomes after extreme preterm birth in England: comparison of two birth cohorts in 1995 and 2006 (the EPICure studies). *BMJ* 2012; 345: e7976.
- ⁵¹ Saigal S, Doyle LW. An overview of mortality and sequelae of preterm birth from infancy to adulthood. *Lancet* 2008; 371: 261–9.

- ⁵² Pulver LS, Guest-Warnick G, Stoddard GJ, Byington CL, Young PC. Weight for gestational age affects the mortality of late preterm infants. *Pediatrics* 2009; 123: e1072–7.
- ⁵³ World Health Organization. The optimal duration of exclusive breastfeeding. Geneva; 2001. <https://www.who.int/publications/i/item/WHO-NHD-01.08> (accessed 22 April 2023).
- ⁵⁴ Royal College of Paediatrics and Child Health. Breastfeeding in the UK – position statement; 2017. <https://www.rcpch.ac.uk/resources/breastfeeding-uk-position-statement> (accessed 22 April 2023).
- ⁵⁵ Public Health England. Scientific Advisory Committee on Nutrition. Feeding in the first year of life. London; 2018. <https://www.gov.uk/government/publications/feeding-in-the-first-year-of-life-sacn-report> (accessed 22 April 2023).
- ⁵⁶ Scottish Government. Scottish Maternal and Infant Nutrition Survey 2017. Edinburgh; 2018. <https://www.gov.scot/publications/scottish-maternal-infant-nutrition-survey-2017/pages/1/> (accessed 22 April 2023).
- ⁵⁷ Lennox A, Sommerville J, Ong K, Henderson H, Allen R. Diet and Nutrition Survey of Infants and Young Children, 2011. London: UK Government Department of Health; 2013. <https://www.gov.uk/government/publications/diet-and-nutrition-survey-of-infants-and-young-children-2011> (accessed 22 April 2023).
- ⁵⁸ Vaz JS, Maia MF, Neves PR et al. Monitoring breastfeeding indicators in high income countries: Levels, trends and challenges. *Maternal & Child Nutrition* 2021; 17(3): e14147.
- ⁵⁹ Whitford H, Hoddinott P, Amir LH et al. Routinely collected infant feeding data: Time for global action. *Maternal and Child Nutrition* 2018; 14(4): e12616.
- ⁶⁰ Scottish Government. Universal Health Visiting Pathway in Scotland – pre-birth to pre-school. Edinburgh; 2015. <http://www.gov.scot/Resource/0048/00487884.pdf> (accessed 22 April 2023).

- ⁶¹ Public Health Scotland. Off to a Good Start: all you need to know about breastfeeding. Edinburgh; 2021.
<https://www.healthscotland.com/documents/120.aspx> (accessed 22 April 2023).
- ⁶² Harvard University Center on the Developing Child. Why Children's Health is the Foundation of Lifelong Health.
<https://developingchild.harvard.edu/science/deep-dives/lifelong-health/> (accessed 23 April 2023).
- ⁶³ Public Health England. Health profile for England: 2018. Chapter 4: health of children in the early years. London; 2018.
<https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-4-health-of-children-in-the-early-years> (accessed 23 April 2023).
- ⁶⁴ Harvard University Center on the Developing Child. Resource Library. Developing Child. <https://developingchild.harvard.edu/resources/> (accessed 24 April 2023).
- ⁶⁵ Dearden L, Sibieta L. Ethnic inequalities in child outcomes. In: Hansen K, Joshi H, Dex S, editors. Children of the 21st century: the first five years. Bristol: The Policy Press; 2010, p. 169–84.
- ⁶⁶ Scottish Government. The Scottish Child Health Programme: Guidance on the 27–30 month child health review; 2012.
<https://www.gov.scot/publications/scottish-child-health-programme-guidance-27-30-month-child-health-review/> (accessed 23 April 2023).
- ⁶⁷ Public Health Scotland. Ready Steady Toddler!
<https://www.readysteadytoddler.org.uk/> (accessed 22 April 2023).
- ⁶⁸ Public Health Scotland. Flu immunisation programme 2022.
<https://publichealthscotland.scot/our-areas-of-work/immunisations/seasonal-immunisations/flu-immunisations/flu-immunisation-programme-2022/> (accessed 23 April 2023).

- ⁶⁹ BBC News. COVID-19 vaccine: First person receives Pfizer jab in UK; 2020. <https://www.bbc.co.uk/news/uk-55227325> (accessed 23 April 2023).
- ⁷⁰ Public Health Scotland. COVID-19 statistical report. All releases. <https://www.publichealthscotland.scot/publications/show-all-releases?id=20580> (accessed 23 April 2023).
- ⁷¹ Public Health Scotland. Weekly national respiratory infection and COVID-19 statistical report. All releases. <https://www.publichealthscotland.scot/publications/show-all-releases?id=102486> (accessed 23 April 2023).
- ⁷² Scottish Government. Winer Vaccination Programme 2022 to 2023: COVID-19 and seasonal flu deployment plan; 2022. <https://www.gov.scot/publications/winter-vaccination-programme-deployment-plan/pages/foreword/> (accessed 23 April 2023).
- ⁷³ UK Government. UK marks one year since deploying world's first COVID-19 vaccine; 2021. <https://www.gov.uk/government/news/uk-marks-one-year-since-deploying-worlds-first-covid-19-vaccine> (accessed 23 April 2023).
- ⁷⁴ Scottish Government. Coronavirus in Scotland – COVID rules and restrictions. <https://www.gov.scot/coronavirus-covid-19/> (accessed 23 April 2023).
- ⁷⁵ Scottish Government. Chief Medical Officer Letter SGHD/CMO(2022)30. [http://www.sehd.scot.nhs.uk/cmo/CMO\(2022\)30.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2022)30.pdf) (accessed 22 April 2023).
- ⁷⁶ Public Health Scotland. Weekly national respiratory infection and COVID-19 statistical report published 09 February 2023. <https://publichealthscotland.scot/publications/weekly-national-respiratory-infection-and-covid-19-statistical-report/weekly-national-respiratory-infection-and-covid-19-statistical-report-9-february-2023/> (accessed 23 April 2023).
- ⁷⁷ Scotland African Voices: COVID-19 Vaccine Debate. Full film; 2022. <https://www.youtube.com/watch?v=h1yNAZffpOg> (accessed 22 April 2023).

- ⁷⁸ Public Health Scotland. COVID-19 vaccine information and resources – Vaccine resources in other languages and alternative formats.
<https://www.publichealthscotland.scot/our-areas-of-work/conditions-and-diseases/covid-19/covid-19-vaccinations/covid-19-vaccine-information-and-resources/vaccine-resources-in-other-languages-and-alternative-formats/>
(accessed 23 April 2023).
- ⁷⁹ Scottish Government. Chief Medical Officer Letter SGHD/CMO(2023)3.
[https://www.sehd.scot.nhs.uk/cmo/CMO\(2023\)03.pdf](https://www.sehd.scot.nhs.uk/cmo/CMO(2023)03.pdf) (accessed 23 April 2023).
- ⁸⁰ NHS inform. COVID-19 spring booster leaflets.
<https://www.nhsinform.scot/springboosterleaflets> (accessed 23 April 2023).
- ⁸¹ Public Health Scotland. COVID-19 & Respiratory Surveillance in Scotland dashboard. <https://scotland.shinyapps.io/phs-respiratory-covid-19/> (accessed 23 April 2023).
- ⁸² Public Health Scotland. COVID-19 wider impacts on the healthcare system dashboard. <https://scotland.shinyapps.io/phs-covid-wider-impact/> (accessed 23 April 2023).
- ⁸³ The Scottish Public Health Observatory. Diabetes Key Points.
<https://www.scotpho.org.uk/health-conditions/diabetes/key-points/> (accessed 23 April 2023).
- ⁸⁴ Scottish Diabetes Group. Scottish Diabetes Survey 2021.
<https://www.diabetesinscotland.org.uk/wp-content/uploads/2023/02/Diabetes-Scottish-Diabetes-Survey-2021-final-version.pdf> (accessed 23 April 2023).
- ⁸⁵ World Health Organization. Diabetes fact sheet. <https://www.who.int/news-room/fact-sheets/detail/diabetes> (accessed 23 April 2023).
- ⁸⁶ Scottish Government. A Healthier Future: type 2 diabetes prevention, early detection and intervention: framework. Edinburgh; 2018.

<https://www.gov.scot/publications/healthier-future-framework-prevention-early-detection-early-intervention-type-2/pages/4/> (accessed 23 April 2023).

- ⁸⁷ Bhopal RS, Douglas A, Wallia S et al, 2014. Effect of a lifestyle intervention on weight change in south Asian individuals in the UK at high risk of type 2 diabetes: a family-cluster randomised controlled trial. *The lancet diabetes & endocrinology*, 2(3), 218–227.
- ⁸⁸ Goff LM, 2019. Ethnicity and type 2 diabetes in the UK. *Diabetic Medicine*, 36(8), 927–938.
- ⁸⁹ Agyemang C, van der Linden EL, Bennet L, 2021. Type 2 diabetes burden among migrants in Europe: unravelling the causal pathways. *Diabetologia*, 64(12), 2665–2675
- ⁹⁰ Leung G, Stanner S, 2011. Diets of minority ethnic groups in the UK: influence on chronic disease risk and implications for prevention. *Nutrition Bulletin*, 36(2), 161–198.
- ⁹¹ Whincup PH, Gilg JA, Papacosta O et al. Early evidence of ethnic differences in cardiovascular risk: cross sectional comparison of British South Asian and white children. *Bmj* 2002;324(7338):635.
- ⁹² Gupta M, Brister S, Verma S. Is South Asian ethnicity an independent cardiovascular risk factor? *Canadian Journal of Cardiology* 2006;22(3):193–97.
- ⁹³ Scottish Government. Minority ethnic groups – understanding diet, weight and type 2 diabetes: scoping review. Edinburgh; 2022.
<https://www.gov.scot/publications/understanding-diet-weight-type-2-diabetes-minority-ethnic-groups-scotland-access-experiences-services-support-weight-management-type-2-diabetes-recommendations-change/pages/1/> (accessed 23 April 2023).
- ⁹⁴ Public Health Scotland. Standards for the delivery of tier 2 and tier 3 weight management services in Scotland. Edinburgh; 2019.
<https://www.healthscotland.scot/publications/standards-for-the-delivery-of->

[tier-2-and-tier-3-weight-management-services-in-scotland](#) (accessed 23 April 2023).

- ⁹⁵ Public Health Scotland. Referrals to NHS Board commissioned weight management services. Edinburgh; 2022
<https://www.publichealthscotland.scot/publications/referrals-to-nhs-board-commissioned-weight-management-services/referrals-to-nhs-board-commissioned-weight-management-services-1-october-2019-to-30-september-2021/> (accessed 24 April 2023).
- ⁹⁶ National Institute for Health and Care Excellence (NICE). Type 2 diabetes prevention: population and community-level interventions. London; 2011.
<https://www.nice.org.uk/guidance/ph35#path=view%3A/pathways/preventing-type-2-diabetes/national-strategy-and-policy-to-prevent-type-2-diabetes.xml&content=view-node%3Anodes-conveying-healthier-lifestyle-messages-to-the-whole-pop> (accessed 23 April 2023).
- ⁹⁷ Public Health Scotland. National drug and alcohol treatment waiting times.
<https://www.publichealthscotland.scot/publications/national-drug-and-alcohol-treatment-waiting-times/national-drug-and-alcohol-treatment-waiting-times-1-october-2022-to-31-december-2022/> (accessed 24 April 2023).
- ⁹⁸ Public Health Scotland. Insights in social care: statistics for Scotland.
<https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-support-provided-or-funded-by-health-and-social-care-partnerships-in-scotland-202122/> (accessed 24 April 2023).
- ⁹⁹ Public Health Scotland. COVID-19 vaccine information and resources – Support for specific groups and communities.
<https://www.publichealthscotland.scot/our-areas-of-work/conditions-and-diseases/covid-19/covid-19-vaccinations/covid-19-vaccine-information-and-resources/support-for-specific-groups-and-communities/> (accessed 23 April 2023).

- ¹⁰⁰ Panelist discussion following Scotland African Voices: COVID-19 Vaccine Debate film screening; 2022. https://www.youtube.com/watch?v=-akC8rL_yFA (accessed 22 April 2023).
- ¹⁰¹ University of Glasgow. Glasgow Knowledge Exchange Fund. <https://www.gla.ac.uk/myglasgow/ris/knowledgeexchange/knowledgeexchangefunding/glasgowknowledgeexchangefund/> (accessed 22 April 2023).
- ¹⁰² Scottish Knowledge Exchange Awards 2023. <https://interface-online.org.uk/news/finalists-for-the-scottish-knowledge-exchange-awards-2023/> (accessed 22 April 2023).
- ¹⁰³ Phiri P, Delanerolle G, Al-Sudani A, Rathod S. COVID-19 and Black, Asian, and Minority Ethnic Communities: A Complex Relationship Without Just Cause JMIR Public Health Surveill 2021;7(2). <https://publichealth.jmir.org/2021/2/e22581/> (accessed 22 April 2023).
- ¹⁰⁴ Kamal A, Hodson A, Pearce J.M. A Rapid Systematic Review of Factors Influencing COVID-19 Vaccination Uptake in Minority Ethnic Groups in the UK. Vaccines 2021; 9(10) 1121. <https://www.mdpi.com/2076-393X/9/10/1121> (accessed 22 April 2023).
- ¹⁰⁵ Minority Ethnic Carers of People Project (MECOPP). <https://www.mecopp.org.uk/> (accessed 22 April 2023).
- ¹⁰⁶ Scottish Government. Gypsy/Travellers in Scotland: A Comprehensive Analysis of the 2011 Census, 2015. Edinburgh; 2015 <https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2015/12/gypsy-travellers-scotland-comprehensive-analysis-2011-census/documents/gypsy-travellers-scotland-comprehensive-analysis-2011-census/gypsy-travellers-scotland-comprehensive-analysis-2011-census/govscot%3Adocument/00490969.pdf> (accessed 23 April 2023).
- ¹⁰⁷ Friends, Families and Travellers. A research paper: Suicide prevention in Gypsy and Traveller communities in England, 2020. <https://www.gypsy->

traveller.org/wp-content/uploads/2020/10/Suicide-Prevention-Report-FINAL.pdf (accessed 23 April 2023).

- ¹⁰⁸ Greenfields M, Rogers C. Hate: 'As regular as rain', A pilot research project into the psychological effects of hate crime on Gypsy, Traveller and Roma (GTR) communities, 2020. <https://gateherts.org.uk/wp-content/uploads/2020/12/Rain-Report-201211.pdf> (accessed 23 April 2023).
- ¹⁰⁹ Equality and Human Rights Commission. Inequalities experienced by Gypsy and Traveller communities, 2009. <https://www.equalityhumanrights.com/en/publication-download/research-report-12-inequalities-experienced-gypsy-and-traveller-communities> (accessed 23 April 2023).
- ¹¹⁰ McFadden et al. Enhancing Gypsy/Travellers peoples' trust: using maternity and early years' health services and dental health services as exemplars of mainstream service provision; 2018. https://discovery.dundee.ac.uk/ws/portalfiles/portal/29156225/McFadden_et_al_2018_Exec_summary.pdf (accessed 23 April 2023).
- ¹¹¹ Greenfields M, Brindley M. Impact of insecure accommodation and the living environment on Gypsies' and Travellers' health; 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/490846/NIHB_-_Gypsy_and_Traveller_health_accs.pdf (accessed 23 April 2023).
- ¹¹² Scottish Government. Race equality framework for Scotland 2016–2030. Edinburgh; 2016. <https://www.gov.scot/publications/race-equality-framework-scotland-2016-2030/> (accessed 23 April 2023).
- ¹¹³ Scottish Government. Improving the lives of Gypsy/Travellers: 2019–2012. Edinburgh; 2019. <https://www.gov.scot/publications/improving-lives-scotlands-gypsy-travellers-2019-2021/> (accessed 23 April 2023).
- ¹¹⁴ Public Health Scotland. Blog. Muir K. Health Inequalities in the Gypsy, Roma and Traveller Community – How we are making change happen?

- <https://publichealthscotland.scot/our-blog/2022/june/health-inequalities-in-the-gypsy-roma-and-traveller-community-how-we-are-making-change-happen/> (accessed 23 April 2023).
- ¹¹⁵ NHS The Health Literacy Place. Access to Healthcare – GP Registration Cards. <http://www.healthliteracyplace.scot.nhs.uk/tools-and-techniques/access-to-healthcare-gp-registration-cards/> (accessed 22 April 2023).
- ¹¹⁶ Public Health Scotland. Scottish NHS and HSCP Gypsy Traveller Forum (SGTF). <https://www.scotphn.net/groups/scottish-nhs-and-hscp-gypsy-traveller-forum-sgtf/sgtf-resources-and-information/> (accessed 23 April 2023).
- ¹¹⁷ Scottish Government. Coronavirus (COVID-19) supporting Gypsy/Travellers: framework for local authorities. Edinburgh; 2022. <https://www.gov.scot/publications/covid-19-framework-local-authorities-supporting-gypsy-travellers/pages/1/> (accessed 23 April 2023).
- ¹¹⁸ Scottish Government. Gypsy/Traveller accommodation fund and site design guide: fairer Scotland assessment – summary. <https://www.gov.scot/publications/gypsy-traveller-accommodation-fund-site-design-guide-fairer-scotland-assessment-summary/> (accessed 23 April 2023).
- ¹¹⁹ MECOPP Community Health Matters Service. <https://static1.squarespace.com/static/62f4f5fa696d570e19a69429/t/6424537b4cc18e42d429066c/1680102267961/Community+Health+matters+Service.pdf> (accessed 23 April 2023).
- ¹²⁰ McFadden A, Biazus-Dalcin C. Gypsy/Traveller Community Health Worker Service: Interim Evaluation, August 2022; 2023. https://discovery.dundee.ac.uk/ws/portalfiles/portal/100415791/G_T_CHW_Interim_report_FINALfor_publication_April_23.pdf (accessed 16 May 2023).
- ¹²¹ Public Health Scotland. Improving access for Gypsy/Travellers to the NHS and health and social care in Scotland. Edinburgh; 2023. <https://www.publichealthscotland.scot/publications/improving-access-for-gypsytravellers-to-the-nhs-and-health-and-social-care-in->

[scotland/improving-access-for-gypsytravellers-to-the-nhs-and-health-and-social-care-in-scotland/](#) (accessed 22 April 2023).

¹²² COSLA. Councils to provide improved services to Gypsy/Travellers living roadside. Edinburgh; 2023. <https://www.cosla.gov.uk/news/2020/september-2020/councils-to-provide-improved-services-to-gypsytravellers-living-roadside> (accessed 22 April 2023).

¹²³ Scottish Government. Data collection and publication – ethnic group: guidance. Edinburgh; 2022. <https://www.gov.scot/publications/data-collection-publication-guidance-ethnic-group/> (accessed 24 April 2023).

¹²⁴ Scottish Government. Using intersectionality to understand structural inequality in Scotland: evidence synthesis. Edinburgh; 2022. <https://www.gov.scot/publications/using-intersectionality-understand-structural-inequality-scotland-evidence-synthesis/pages/1/> (accessed 24 April 2023).

¹²⁵ Creary N, Quashie S, Kennedy-Macfoy M et al, 2022. Closing the gap in patient data for Black and South Asian communities: A guide for NHS leaders and policy professionals. Liberating Knowledge. <https://understandingpatientdata.org.uk/insights-black-south-asian-people-patient-data> (accessed 22 April 2023).

¹²⁶ Creary N, Quashie S, Kennedy-Macfoy M et al, 2022. Closing the gap in patient data for Black and South Asian communities: A guide for healthcare workers. Liberating Knowledge. <https://understandingpatientdata.org.uk/insights-black-south-asian-people-patient-data> (accessed 22 April 2023).

¹²⁷ Bignall T, Phillips J. Race Equality Foundation report on Improving the recording of ethnicity in health datasets. Exploring the views of community respondents and the healthcare workforce; 2022. https://raceequalityfoundation.org.uk/wp-content/uploads/2023/01/CC165_REF_Wellcome_Trust_Report_FINAL.pdf (accessed 22 April 2023).

- ¹²⁸ Public Health Scotland. Happy to ask, happy to tell. Edinburgh; 2012.
<https://www.healthscotland.com/documents/3715.aspx> (accessed 22 April 2023).
- ¹²⁹ University of Strathclyde Centre for Health Policy.
<https://www.strath.ac.uk/humanities/centreforhealthpolicy/> (accessed 24 April 2023).
- ¹³⁰ Homeless Network Scotland. <https://homelessnetwork.scot/> (accessed 24 April 2023).
- ¹³¹ Public Health Scotland. Data Dictionary.
<https://www.ndc.scot.nhs.uk/Dictionary-A-Z/Definitions/index.asp?Search=E&ID=243&Title=Ethnic%20Group> (accessed 22 April 2023).
- ¹³² Public Health Scotland. Discovery.
<https://www.publichealthscotland.scot/services/discovery/#section-1-1> (accessed 22 April 2023).
- ¹³³ Turas Vaccination Management Tool. <https://learn.nes.nhs.scot/42708/turas-vaccination-management-tool> (accessed 22 April 2023).
- ¹³⁴ NHS Education for Scotland. TURAS. Vaccination Management Tool User Guide. Ethnicity Frequently Asked Questions. <https://learn.nes.nhs.scot/58906/turas-vaccination-management-tool/user-guides-and-faqs/ethnicity-faq> (accessed 22 April 2023).
- ¹³⁵ Scottish Government. Equality Evidence Strategy 2023–25 consultation.
<https://consult.gov.scot/housing-and-social-justice/equality-evidence-strategy-2023-25/> (accessed 22 April 2023).
- ¹³⁶ Scottish Government. Equality Data Improvement Programme (EDIP).
<https://www.gov.scot/groups/equality-data-improvement-programme-edip-group/> (accessed 22 April 2023).
- ¹³⁷ Research Data Scotland. <https://researchdata.scot/> (accessed 22 April 2023).

¹³⁸ Research Data Scotland. Blog. Buchanan D. Equality data – mind the gap; 2023.
<https://researchdata.scot/blog-equality-data-mind-gap> (accessed 22 April 2023).