CENTRAL AND EASTERN EUROPEAN COMMUNITY HEALTH PROFILE 2023



Community	y Evidence Summaries	viii
Executive S	Summary	ix
Central and	d Eastern European Community in the UK	ix
Methodolo	рgy	xii
1. Introd	luction	1
1.1 C	Overview	1
1.1.1	History	1
1.1.2	Defining the Central and Eastern European Population	1
1.1.3	Sports and Culture	3
1.2 N	Aigration Patterns	5
1.2.1	Global Migration Patterns	5
1.2.2	Migration to the UK	5
1.2.3	Migration to the West Midlands	11
1.2.4	Migration to Birmingham	12
1.3 L	anguage and Literacy	25
1.3.1 l	anguage	25
1.3.2	English Language Proficiency	27
1.4 D	emographics	27
1.4.1	Population Size	27
1.4.2	Age Profile	29
1.4.3	Religion	30
1.4.4	Ethnicity	30

2. Cor	mmunity Profile	32
2.1	Getting the Best Start in Life	32
2.1	.1 Fertility	33
2.1	.2 Maternal Health	33
2.1	.3 Infant Mortality, Stillbirths and Live Births	34
2.1	.4 Dental Decay in Children	36
2.1	.5 Children's Mental Health and Wellbeing	36
2.1	.6 Education	37
2.2	Mental Wellness and Balance	40
2.2	.1 Mental Health	41
2.2	.2 Alcohol	45
2.2	.3 Substance Misuse	49
2.2	.4 Smoking	50
2.2	.5 Domestic Violence	51
2.2	.6 Hate Crimes and Discrimination	52
2.3	Healthy and Affordable Food	55
2.3	.1 Diet and Nutrition	55
2.3	.2 Obesity	57
2.3	.3 Food Insecurity	58
2.4	Active at Every Age and Ability	59
2.4	.1 Physical Activity	59
2.4	.2 Mobility	63
2.5	Living, Working and Learning Well	64
2.5	.1 Education, Qualification, Skills and Training	64
2.5	.2 Employment and Economic Activity	67
2.5	.3 Deprivation	73
2.5	.4 Housing	75

	2.5.5	Physical Health	77
	2.5.6	Living with a Physical Disability	81
	2.5.7	Lived Experience	82
2	.6 P	Protect and Detect	83
	2.6.1	Cancer Screening	83
	2.6.2	Vaccination Programmes	85
	2.6.3	Sexual Health	88
	2.6.4	Other Infectious Diseases	90
	2.6.5	Oral Health	91
	2.6.6	Barriers to using UK health services	92
2	.7 A	Ageing Well and Dying Well	94
	2.7.1	Life Expectancy and Healthy Life Expectancy	94
	2.7.2	Dementia	95
	2.7.3	Frailty	95
	2.7.4	Loneliness and Isolation	96
	2.7.5	Care Homes and Domiciliary Care	96
	2.7.6	End-of-life and Palliative Care	96
2	.8 C	Contributing to a Green and Sustainable Future	97
	2.8.1	Access to Green Spaces	97
	2.8.2	Air Pollution	98
	2.8.3	Urban Heat Island Effect	99
3.	Closin	g the Gaps	101
4.	Concl	usion	101
5.	Арреі	ndices	103
Α	ppendi	ix 1: Search Strategy	103

Appendix 2: Exclusion and Inclusion Criteria	111
Appendix 3: Abbreviations	112
Appendix 4: Birmingham and National Central and East	ern European
Organisation Contact Details	113
Appendix 5: Raw Data Tables	114
5. Acknowledgments	116
7. References	117

List of Figures

Figure 1: Map of White: Other White Population distribution: Birmingham, 2021	29
Figure 2: Age Profile of the Central and Eastern European born population in England and Wales, 2021	29
Figure 3: Spatially assessed heat-health risk: Birmingham, 2011	100
List of Tables	
Table 1: Central and Eastern European States included in this Community Health Profile	2
Table 2: Population estimates for countries within the Central andEastern European Region, 2023	5
Table 3: Top 10 non-UK countries of birth: England and Wales, 2011 and 2021	6
Table 4: Top 10 non-UK passports held: England and Wales, 2011 and 2021	6
Table 5: Year of Arrival in the UK by Central and Eastern European Country of Birth: England and Wales, 2021	8
Table 6: Length of Residence in the UK by Central and Eastern European Country of Birth, England and Wales, Census 2021	10
Table 7: Age of Arrival in the UK by Central and Eastern European Country of Birth: England and Wales, 2021	11

Table 8: Central and Eastern European Country of Birth, West Midlands, 2021 Census	11
Table 9: West Midlands National Insurance Registrations (NINo) for EU2 and EU9 Countries from 2018 to 2019	12
Table 10: Central and Eastern European Country of Birth, Birmingham, 2021 Census	13
Table 11: Top 5 Birmingham Wards with the largest Polish-born populations	24
Table 12: Top 5 Birmingham Wards with the largest Romanian-born populations	24
Table 13: Top 10 Birmingham wards with the largest Central and Eastern European country of birth populations, Census 2021	24
Table 14: The two main languages spoken, excluding English or Welsh in Wales: England and Wales, 2021	26
Table 15: Percentage of usual resident population aged three years and over whose main language is a Central and Eastern European language, Birmingham, 2021	26
Table 16: English Language Proficiency by Central and Eastern European Country of Birth: England and Wales, Census 2021	27
Table 17: Percentage identifying as White Other by top 5 Central and Eastern European Countries of Birth, England and Wales, Census 2021	28

Table 18: Top 10 Birmingham Wards by White Other Ethnicity: Birmingham, 2021	28	Table 28: Percentage of adults screened positive for probable PTSD on PCL-C in past month and whether experienced trauma, by ethnic group, England and Wales 2014	42
Table 19: Religion by Central and Eastern European Country of Birth, England and Wales, Census 2021	30	Table 29: Adult ADHD Self-reported scale scores by ethnic group, England and Wales 2014	42
Table 20: Detailed Ethnic Group Data on 'White', 'White: Other White' or 'Other Ethnic Group': Birmingham, 2021	31	Table 30: Percentage of Positive Screening for Bipolar Disorder by ethnic group, 2014	42
Table 21: Country of Birth for non-UK born mothers, England and Wales 2021	34	Table 31: Adult mean WEMWBS score by gender and ethnic group: England, 2019	43
Table 22: Country of Birth for non-UK fathers, England and Wales 2021	35	Table 32: Type of treatment for mental or emotional problems by ethnic group, England and Wales 2014	44
Table 23: Infant Mortality rate (per 1,000 live births) by cause of death and ethnicity of the baby: England and Wales, 2017 to 2019 (combined)	35	Table 33: Suicidal thoughts, suicide attempts and self-harm by ethnic group, England and Wales 2014	45
Table 24: Live Births, stillbirths, and infant mortality by ethnic group: England and Wales, 2017 to 2019 (combined)	36	Table 34: Alcohol consumption by ethnic group: England, 2011 to 2019	45
Table 25: Dental decay at 5-years-old by ethnic group, England, 2017 Table 26: Percentage of pupils achieving a grade 5 or above in GCSE	36	Table 35: Alcohol consumption at least once per week by ethnic group: England, 2011 to 2019	46
English and Maths by ethnic group and FSM eligibility: England, academic year 2020 to 2021	39	Table 36: Percentage of deaths attributable to Alcohol in Central and Eastern European EU Countries and EU, 2019	47
Table 27: Percentage of Common Mental Health Disorders in the past week among all adults by ethnic group, England and Wales 2014	41	Table 37: Drugs used in the past year, all adults, by ethnic group, England and Wales 2014	49

Table 38: Signs of dependence on cannabis and other drug(s) by ethnic group, England and Wales 2014	50	Table 48: Physical activity participation amongst those who are not physically active by ethnic group: England, 2020	60
Table 39: Prevalence of smoking by ethnic group, England and Wales 2011 to 2019	50	Table 49: Levels of participation in different sports & activities in White Other adults: England, 2020	61
Table 40: E-cigarette use by ethnic group, 2011 to 2019	50	Table 50: Perceptions regarding physical activity by ethnic group and 'Agree or Strongly agree' response categories: England, 2020	61
Table 41: Percentage of deaths attributable to Tobacco in Central and Eastern European EU Countries and the EU (2020)	51	Table 51: Percentage of death attributable to low physical activity in Central and Eastern European EU Countries, EU and UK (2020)	62
Table 42: Percentage of Adults, Men and Women reporting smoking tobacco daily in Central and Eastern European countries, 2019	51	Table 52: Residents with higher education qualifications, by country of birth ordered: England and Wales, 2021	65
Table 43: Daily Fruit and Vegetable consumption by ethnic group, England and Wales 2019	55	Table 53: Highest Level of Qualification by country of birth and ethnicity: England and Wales, 2021	66
Table 44: Percentage of adults aged 16 years and over who are eating 'five-a-day', by ethnicity: England 2019 to 2020	56	Table 54: Central and Eastern Europe Migrants who have a higher education qualification: England and Wales, 2021	66
Table 45: Overview of poor diet that includes low fruit and vegetable intake and high sugar and salt consumption and the implication to		Table 55: Percentage of usual residents aged 16 years and over in	00
mortality in Central and Eastern European EU countries, 2020	57	employment by country of birth, England and Wales, Census 2021	67
Table 46: Age standardised waist circumference among adults aged 16 and over by ethnic group: England, 2011 to 2019	58	Table 56: Percentage of unemployed usual residents aged 16 years and over by passport held, England and Wales, Census 2021	68
Table 47: Proportion of the White Other population who are physically active by gender, socioeconomic status and disability or LTHC: England, 2020	60	Table 57: Employment history of people not in employment by country of birth and ethnicity: England and Wales, 2021	68

Table 58: Economic activity status by ethnic group, of those aged 16 to 64 years: England and Wales, 2021	69	Table 69: Occupancy Rating by Country of Birth: England and Wales, 2021
Table 59: Reasons for not working or not seeking work or being available to work (economic inactivity), by ethnic group of those aged 16 to 64 years: England and Wales, 2021	69	Table 70: Self-assessed general health by ethnic group, England and Wales, 2019 Table 71: Age-standardised self-assessed general health by ethnic
Table 60: Economic Activity Status by Country of Birth: England and Wales, 2021	70	Table 72: Self-assessed general health by country of birth and
Table 61: Current occupation by Country of Birth and ethnicity: England and Wales, 2021	72	ethnicity: England and Wales, 2021 Table 73: Age standardised prevalence of hypertension in adults
Table 62: Percentage of people living in the most deprived 10% of neighbourhoods, by type of deprivation and ethnicity, England and Wales, 2021	73	aged 16 or older by ethnic group: England, 2011 to 2019 Table 74: Lifetime risk of a cancer diagnosis in Central and European countries, by sex, 2020
Table 63: Dimensions of Household Deprivation by Ethnic Group, Birmingham, Census 2021	74	Table 75: Disability by Country of Birth and ethnicity: England and Wales, 2021
Table 64: Dimensions of Household Deprivation by Country of Birth: England and Wales, Census 2021	74	Table 76: Age standardised prevalence of longstanding and limiting longstanding conditions among adults aged 16 and older, by ethnic groups England, 2012 to 2018
Table 65: Percentage of families receiving state support, by ethnicity and type of support, England and Wales, 2021	74	group: England, 2012 to 2018 Table 77: Age standardised COVID-19 vaccinations administered to
Table 66: Tenure by Country of Birth, England and Wales, 2021 Table 67: Tenure by Ethnic Group: Birmingham, 2021	75 76	adults aged 50 years and over, by self-reported ethnic group: England, December 2020 to December 2021
Table 68: Occupancy Rating by Ethnic Group: Birmingham, 2021	76	Table 78: Willingness to take any vaccine in the UK Household Longitudinal Study by ethnic group, England and Wales, 2020

Table 79: Rate of STI diagnosis (per 100,000 population), by ethnic group

Table 80: Life expectancy at birth for Central and Eastern European countries and EU, 2020

Table 81: Environmental Justice Map mean index score for wardswith largest 'Other White' communities: Birmingham, 201497

Table 82: Average air pollution of four main air pollutants by MSOA: Birmingham, 2020

A BOLDER HEALTHIER BIRMINGHAM

88

94

99

Community Evidence Summaries

As part of the Public Health Division's work to improve the understanding of the diverse communities of Birmingham, we are developing a series of evidence summaries to improve awareness of these communities and their needs.

There are common objectives for each of the evidence summaries, which are:

- To identify and summarise the physical health, mental health, lifestyle behaviour, and wider determinants of health-related issues affecting the specific community nationally and locally.
- To identify and summarise gaps in knowledge regarding the physical health, mental health, lifestyle, behavioural and wider determinants of health-related issues that may be affecting the specific community both nationally and locally.
- To collate and present this information under the ten key priority areas identified in the Health and Wellbeing Strategy for Birmingham 2022 to 2030.
- To engage with the local communities on the evidence found and any gaps.
- To promote the use of these summaries for Local Authority and wider system use for community and service development.

• To empower communities, by providing them with a summary of health inequalities, which can be used to advocate for change across local systems to improve outcomes.

Executive Summary

The Central and Eastern European Community Health Profile identifies and summarises the national and local evidence concerning the health, lifestyle behaviours and the wider determinants of health that affect Birmingham's Central and Eastern European community. It covers health topics throughout the life course, from maternity to ageing and dying well and includes health status risk factors such as diabetes and cardiovascular disease. The report also covers health protection and prevention topics such as screening and vaccinations, as well as other themes such as knowledge and understanding of health issues affecting the Central and Eastern European community.

There has been evidence of health inequalities between different community groups across the UK for some time, some of which have been exacerbated by the Coronavirus pandemic. This Community Health Profile aims to unpack some of these issues, with a focus on the Central and Eastern European community.

Much of the data for examining health outcomes in this profile has been taken from open-source research and health records. It is worth noting that the sample sizes, coverage, and quality for some studies are imperfect and limit the generalisability of findings. The picture is complex not only between different community groups but also across different conditions. Understanding and knowledge is also limited by a lack of good quality data. This health profile aims to highlight the available health data and the current gaps in our knowledge and understanding.

Central and Eastern European Community in the UK

The Central and Eastern European community has been present in the United Kingdom for several centuries. In 1901 the United Kingdom census recorded 86,240 Eastern Europeans in England and Wales, and a further 10,373 in Scotland. This represents an increase of over 55,000 on the previous census in 1891.(1)

During the aftermath of the World War II, approximately 80,000 Eastern Europeans, who were displaced or homeless, settled in the UK. Central and Eastern European refugees were also recruited as labourers from the European Voluntary Workers scheme and greatly assist in the re-building on Great Britain.(2)

Since the opening of the EU accession during the 2000s, many Eastern Europeans have migrated to the UK. Within the first five years, over 1.4 million Eastern Europeans arrived in Britain, the Worker Registration Scheme showed that the highest proportion of these were from Poland (66%), followed by Slovakians (11%) and Lithuanians (9%).(3) In June 2016, a referendum on the country's membership of the European Union took place. With a result to leave, many Eastern Europeans' relationship with, or perceived status in, the United Kingdom changed permanently with the reduction in net migration. Despite the referendum's result, Poland and Romania remain in the top 10 non-UK countries of birth within the UK.(4)

At a local authority level, the first wave Central and Eastern European migrants who arrived in Birmingham post 1939 were distinctly affected by the consequence of World War II. In the 1960s, the Polish community in Birmingham built Millennium House on Bordesley Street to celebrate their culture and to this day conduct many social, youth, and religious groups together.

In 2021, there were 34,344 first generation Central and Eastern European migrants in Birmingham.(5) In contrast to the West Midlands, where the largest population is from Romania (36%) and the second largest from Poland (29%).(6) There are also large populations from Albania, Bulgaria, Lithuania, Slovakia, and Latvia.

The key health inequalities identified within this Central and Eastern European Community Health Profile are:

Getting the Best Start in Life

- Just under a quarter (23%) of maternal deaths in the UK from years 2017 to 2019, for women whose place of birth was known, were women born outside the UK; of these 12% were women from Eastern Europe.(7)
- In 2021 in England and Wales, Romania was the most common country of birth for non-UK-born mothers, and this was up from second in 2020. In 2021, the number of births by women from Poland decreased, and ranked 4th, this compares to Poland ranking 1st from 2012 to 2018. Lithuania saw an increase and ranked 8th in 2021, this compares to 7th in 2015 to 2018. Albania moved into the top ten most common countries.(6)
- Of the 6.6 million pupils in English schools, about 119 thousand (1.8%) are from Eastern European countries with Polish speakers making up nearly half of this group overall with 53,915 pupils.(8)

Mental Wellness and Balance

- For recent Central and Eastern European migrants, language barriers and an unfamiliarity with the local culture can be an alienating experience associated with stress, loneliness, and depression.(9)
- In 2020 to 21 in England, there were 5,764 per 100,000 (5.8%) White Other people using NHS mental health, learning disability and autism services, compared with 4,063 (4.1%) for the total population.(10)
- Of those born outside the UK, Eastern and Western Europeans had the highest suicide rate of 51%.(11)

Active at Every Age and Ability

- In Birmingham from 2020 to 2021, the White Other population, (which is typically used to record people from Central and Eastern Europe), had higher rates of physical activity, 65% were classified as active and 25% were fairly active and 11% were classified as inactive, this compares to compared with 63%, 26% and 11% respectively for the White British population.(12)
- Evidence from the Active Lives Survey, 2020, indicates that White Other adults are most likely to participate in sport in the last 28 days by activities such as walking for leisure, running or track and field athletics, fitness classes and cycling for travel.(12)

Living, Working and Learning Well

- According to the 2021 Census, those born in EU2 countries (Romania and Bulgaria) had the lowest percentage employed in professional occupations (9.1%) compared to the UK population.(6)
- In the 2021 Census, In England and Wales, the percentage of unemployed people aged 16 years and over by passport held in EU2 and EU8 is over 4%, this compares to 3% for those holding a British passport.(6)
- In the 2021 Census, In England and Wales, adults born in EU2 have the highest percentage of people in employment (82%) followed by EU8 (78%), this compares to 55% of the UK-born population.(13)
- In the 2021 Census, In England and Wales, 35% of Polish and 33% of Romanian born residents in the UK have a higher education, compared with 31% of the UK-born population.

Protect and Detect

- A migrant health guide in 2014 showed that, amongst the Central and Eastern European community there were high and moderate rates (5% to 10% of adult prevalence) of chronic hepatitis B, this compares to 0.3% for the UK population.(14)
- Barriers to providing optimal care to EU8 migrants include: communication (information gathering and giving); confidentiality when using family or friends as translators; the impact of patient healthcare expectations on communication and the length of the consultation; and frustration with the process of the consultation.(15)

• In 2020 in England and Wales, 26% of the White Other population was unlikely or very unlikely to be vaccinated.(16)

Ageing and Dying Well

• There is no specific data on the Central and Eastern European Community.

Contributing to a Green and Sustainable Future

- In 2022 in Birmingham, Gravelly Hill ward contains the highest proportion of White Other residents (9.3%); this ward is classified as an area of the city with the least environmental justice (0.41) for citizens.(17)
- It is estimated that in 2019 51% of the White Other community in Birmingham do not have access to good quality green spaces, compared with 11% of the White British population.(18)
- In 2019, approximately 22% of the White Other community lived in the 15 most polluted Middle Layer Super Output Areas (MSOAs) in Birmingham, compared with 5.4% of the White British population.(18)

Methodology

An exploratory search was undertaken by the Public Health Communities Team using a range of databases such as National Data Sources, NOMIS (Office for National Statistics), and PubMed to identify information about the Central and Eastern European communities for this profile. Keyword search terms and subject headings relevant to the themes were identified. All references used within this profile are outlined in the references section.

A subsequent exploratory search, examined the following sources:

a. National data sources

Census Data:

Data has been extracted by ethnicity and country of birth from the Office for National Statistics (ONS) for the 2021 census. Data from the 2011 census have only been used as a comparison and or where 2021 data were not available. Any conclusions based on historical data or information should be considered with caution. The relevant ethnicity category in the 2021 census which has been included in analysis within this report is the 'White: White Other'. Central and Eastern European Country of Birth includes an aggregation of those born in the Central and Eastern European countries of birth listed as options in the 2021 Census. In this report, people of 'White: English, Welsh, Scottish, Northern Irish or British' ethnicity are referred to as White British.

NOMIS data:

Data has been extracted by ethnicity from the 2011 and 2021 census rounds: Nomis: official census and labour market statistics. It should be noted that the most recently available national data is from the 2011 and 2021 census rounds; any conclusions based on historical data and information should be considered with caution.

Government and Health System Data Sources:

Routinely collected government data has been extracted where relevant information on White Other ethnicity was available, including education data from the Department for Education, crime data from the Home Office and housing data from the Ministry of Housing, Communities and Local Government (MHCLG). Some data on the White Other population for these routine sources were masked, due to small numbers.

National voluntary and community sector reports:

These have been identified through Google Scholar and national websites, specifically where relevant Central and Eastern European community-level data was available, such as:

- The King's Fund
- British Heart Foundation
- Sport England
- <u>Versus Arthritis</u>
- <u>Diabetes UK</u>
- British Lung Foundation
- <u>Cancer Research UK</u>
- World Health Organisation

b. Academic Database Search

Systematic literature searches were performed in Medline, Embase, PsychInfo and Web of Science on December 12, 2022. All searches contained terms covering relevant UK geography terms and terms to describe the Central and Eastern European community. Searches were limited to studies published in the English language, published from 2012 onwards. Full search strings can be found in Appendix 1.

c. Grey Literature

Where information sources had not been identified through a or b, further searches through Google and Google Scholar using topic-specific search terms were carried out. Resources relevant to the UK were included, i.e. data and information stemming from local or national-level reports and or surveys.

d. Data consolidation and analysis

Findings from international and national systematic reviews and largescale epidemiological and qualitative research studies were also considered for inclusion. International research findings were included if they were comparable or relevant to the national population.

In addition, some "snowballing" - a technique where additional relevant research is identified from the reference list and citations of the initial search or published article - was also applied. Additional evidence was identified from reference lists using this approach, where these additional resources enhanced the knowledge base. Generally, searches were limited to literature from the last 10 years; information from a further 5 to 10 years prior was included if the results were too limited. Results retrieved from the initial searches were reviewed by the author against the search strategy (Appendix 1). The articles utilised in this document were then analysed, identified, and cross-referenced with other themes throughout the profile. All resources utilised have also been reviewed against the inclusion and exclusion criteria (Appendix 2).

e. Caveats and Limitations

It is important to note that the Central and Eastern European Community Health Profile is limited by the data sources available. In some instances, data on the Central and Eastern European community living in Birmingham is absent or only focuses on a sub-section of the community (e.g., international students or first-generation migrants). In addition, data from the 2021 Census included in the report reflects the data that was available from the dataset at that time. It may have been updated by the ONS since.

Additionally, methodology and ethnicity categories vary depending on which source of health data have been utilised. For example, it should be the scope of the term and ethnic group 'White Other' can vary substantially between studies and data sources. Similarly, the 2021 Census data on Central and Eastern European countries of birth used throughout this profile, only relates to first generation migrants from these countries, and does not necessarily reflect the experiences of second generation migrants etc. This inconsistency in data collection can lead to multiple different conclusions being drawn from the same data, creating consequences when interpreting data within this report for healthcare and policy decisions.

f. Statistics

This report draws on evidence from a variety of research studies with different methodologies and results. Data throughout this report have

been presented to two significant figures where possible; proportions may not add up to 100% due to rounding.

In this report, "n" is used to represent the numerator of a percentage (e.g., the number of people with the event of interest) and "N" is used to represent the denominator (e.g., the population from which the numerator was drawn).

1. Introduction

1.1 Overview

1.1.1 History

Central and Eastern Europe is a sub-region of Europe steeped in history. Since the Middle Ages, Central and Eastern Europe has been inhabited by numerous ethnic and religious groups with differing languages and cultures. This region has found itself throughout history often wedged between empires from Russian, Ottoman-Turkish and Habsburg Austrian-German; and has experienced conflicts, such as the First and Second World Wars, the Cold War, the Yugoslav Wars, and more recently the Russo-Ukrainian War, and significant political change from the formation and collapse of the Soviet Union, and the formation of the European Union (EU). This geo-political reality has shaped and defined the region throughout history and to date.(19)

1.1.2 Defining the Central and Eastern European Population

Central and Eastern Europe is a geopolitical term indicating a sub-region of the European continent with varying geographical boundaries. Some sources define Central and Eastern European nations as those that border the Baltic and Barents seas in the north, the Adriatic, Black and Caspian seas and the Caucasus Mountains and Ural Mountains in the south. Other sources define Central and Eastern European countries as post-Soviet Union states who gained independence following the dissolution of the Soviet Union. International and regional organisations such as the United Nations (UN), European Union (EU), the Organisation for Economic Co-operation and Development (OECD), or the International Labour Organisation (ILO) have different definitions of Central and Eastern Europe. For example, the OECD's list includes 12 countries: Albania, Bulgaria, Croatia, the Czech Republic (further referred to as "Czechia"), Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia, and Lithuania. The International Labour Organisation (ILO) includes other 5 countries in the Balkans (Bosnia and Herzegovina, Kosovo, Montenegro, the Republic of North Macedonia, and Serbia), and two countries in Eastern Europe (Georgia and Ukraine).(20)

Clear definitions of Central and Eastern Europe also vary within each country and among the communities, both within the nations and the Central and Eastern European diaspora living in the UK. The Central and Eastern European community encompasses a variety of cultures, ethnicities, and people with a rich history which has shaped the region.

Ethnicity is a multi-dimensional, complex, and subjective concept, and there are various ways in which a person can choose to define their ethnicity. This may include common ancestry, elements of culture, identity, religion, language, and physical appearance. It is generally accepted that an ethnic group includes all these aspects, and others, in combination. Where possible, we have considered how the variables of ethnic group, national identity, language, and religion interact.

Considerable overlap and fluctuation among definitions of ethnicity depend upon the context in which they are used. For this Community Health Profile, we will use a collective definition which includes geographic and socio-political boundaries to adhere to neutral criteria that define

Central and Eastern Europe, as such, the nations included within this Community Health Profile will be of definitions from the UN regarding Eastern European member states and EU Accession eight (EU8) and Accession two (EU2) states. **Table 1** provides an overview of the states defined within the Central and Eastern European Community Health Profile and identifies those that are or are not UN and EU member states.

According to the 2021 Census, 49% (1,809,009) of the 'White: Other White' (further referred to as White Other) ethnic group in England and Wales were born in Central and Eastern European countries (first generation migrants). Census data is not available on second or third generation migrants from Central and Eastern Europe. However, for this profile, it has been assumed that overall, over 50% of the White Other group is from a Central and Eastern European background, justifying the presentation of data on people of White Other ethnicity.

Table 1: Central and Eastern European States included in this CommunityHealth Profile

Country	United Nations	European Union
	Member State	Member State
Albania	Yes	Candidate Country
Armenia	Yes	No
Azerbaijan	Yes	No
Belarus	Yes	No
Bosnia and Herzegovina	Yes	Candidate Country
Bulgaria	Yes	Yes (A2)
Croatia	Yes	Yes
Czechia	Yes	Yes (A8)
Estonia	Yes	Yes (A8)
Georgia	Yes	Candidate Country
Hungary	Yes	Yes (A8)
Latvia	Yes	Yes (A8)
Lithuania	Yes	Yes (A8)
Montenegro	Yes	Candidate Country
North Macedonia	Yes	Candidate Country
Poland	Yes	Yes (A8)
Republic of Moldova	Yes	Candidate Country
Romania	Yes	Yes (A2)
Russian Federation	Yes	Yes
Serbia	Yes	Candidate Country
Slovakia	Yes	Yes (A8)
Slovenia	Yes	Yes (A8)
Ukraine	Yes	Candidate Country

Source: United Nations, Department for General Assembly and Conference Management, UN, Regional groups of Member States and UK Gov, Countries in the EU and EEFA.(21)

As outlined in **Table 1**, many Central and Eastern European states are members of economic or political unions such as the UN or EU, which have had a significant impact on the sub-region. While some common characteristics were developed over a long history, there are also some marked economic, social, and cultural differences across and within countries. Whilst this Community Health Profile cannot cover the in-depth and often complex history of the Central and Eastern European sub-region and its countries, it will provide an overview of the health and well-being of people from Central and Eastern Europe living in Birmingham and its surroundings.

Due to differences in definitions and data availability, throughout this report Eastern European is sometimes used as a proxy.

1.1.3 Sports and Culture

Sport

Central and Eastern Europe is home to a diverse range of sports, both traditional and modern. Many sports are played, some of which are played at the highest level of across world in internationally recognised competitions.

Ice hockey has been a popular sport with Czechia hosting the International Ice Hockey Federation Ice Hockey World Championship in 2024 for the eleventh time.(22) Football has been popular with several leagues and tournaments, with teams such as Zenit Saint Petersburg, FC Shakhtar Donetsk, Dynamo Kyiv and CSKA Moscow competing in the UEFA Champions League, UEFA Europa League and UEFA Conference League. Many notable footballers have come from Central and Eastern European countries, from Ferenc Puskas and Lev Yashin from Hungary, Gheorghe Hagi from Romania, Andriy Shevchenko from Ukraine and Luka Modric from Croatia.

Basketball is another popular sport in Central and Eastern Europe, with many national teams competing in the Euro League and many national teams succeeding in the Olympic Games. Notable figures are National Basketball League players Luka Doncic from Slovenia and Nikola Jokic from Serbia. Basketball is the most popular sport in Lithuania. Lithuanian American basketball coaches and players in the 1930s helped the Lithuania men's national basketball team win the last EuroBasket tournaments before World War II, in 1937 and 1939, causing a massive impact in Lithuanian society and a basketball popularity spike, since then, despite Lithuania's small size, with a population of just almost 2.9 million, the country's devotion to basketball has made them a traditional force of the sport in Europe.(23)

Boxing is also a popular sport in Central and Eastern Europe; brothers Vitaly and Wladimir Klitschko and Vasiliy Lomachenko from Ukraine have all been boxing world champions.

Gymnastics is also a widespread sport in Central and Eastern Europe, with notable Romanian gymnast Nadia Comaneci, the first gymnast to be awarded a perfect score of 10.0 at the Olympic games.

More information on sports and physical activity among the UK Central and Eastern European population can be found in section 2.4.1 of this report.

Culture

The culture within Central and Eastern Europe is often cited as a product of its geography and distinct historical evolution in which culture and religion are often intertwined, as many people value collectivism over individualism, with the community being important to many Central and Eastern Europeans.(24) The sub-region has played a significant part in the modern world, with significant contributions to art, music, philosophy, mathematics, science, politics, and literature.(25, 26, 27)

Festivals

Several key events are celebrated in Central and Eastern Europe, especially around religious festivities, which are generally celebrated. Popular festivities include the traditional Christian festivities of Christmas, Lent and Easter (which vary according to the lunar calendar), and among different faiths. For example, Roman Catholics celebrate Christmas on the 25th of December, whereas Eastern Orthodox Christians celebrate it on the 6th of January, which corresponds to the festivity of Epiphany which celebrates the baptism of Christ. Lent, Ash Wednesday, and Easter also vary depending on different liturgic calendars used within the Catholic and Orthodox Churches.

Carnivals are often celebrated, with regional differences such as Uzgavenes in Lithuania, Maslentisa in Russia, Karneval, Maškare, or Fašnik in Croatia, Masopust in the Czech Republic, Busojaras in Hungary, and Pust in Slovenia.

Some countries celebrate the 1st of March to welcome spring. This celebration is historically rooted and involves gifting a small token to others, often made of red and white thread which are symbols of

protection and good fortune, a celebration which has been inscribed in the United Nations Educational, Scientific and Cultural Organisation (UNESCO) list of intangible heritage.(28) The specifics of this tradition differ among countries and it is known as "Baba Marta" in Bulgaria and North Macedonia, "Martisor" in Romania, and "Dita a Veres" in Albania.

Independence days mark another important tradition for several Central and Eastern European Countries, many are marked by displays of flags, fireworks, speeches and parades. Estonia and Lithuania are two Central and Eastern European countries which have two independence days and celebrate it twice throughout the year.

Food

Central and Eastern European traditions are historically rooted and form a set of customs, rites, habits, and skills practised and passed down from generation to generation. These traditions, especially food-related, clearly distinguish some unique characteristics of the nations inhabiting the region. The cuisine is an integral part of every national culture. It depends on such factors as the geographical location of the country, its climatic conditions, and the history, religion, and traditions that people have developed over many centuries. Foods have roots in the land, with traditional black rye bread, plenty of potatoes, herrings and other fish, livestock, and game.

More information relating to the dietary behaviours of the UK Central and Eastern European population can be found in section 2.3.1 of this report.

1.2 Migration Patterns

1.2.1 Global Migration Patterns

Central and Eastern Europe is a region with millions of people living within each country (**Table 2**). The largest countries within this region are Ukraine with over 43 million residents, Poland with over 38 million residents, Romania with an estimated 19 million residents, and Russia, with over 147 million residents, the largest population in Europe.

Table 2: Population estimates for countries within the Central and EasternEuropean Region, 2023

Country	Population total	
Albania	3,101,621	
Armenia	2,989,091	
Azerbaijan	10,420,515	
Belarus	9,383,853	
Bosnia and Herzegovina	3,807,764	
Bulgaria	6,827,736	
Croatia	4,169,239	
Czechia	10,706,242	
Estonia	1,202,762	
Georgia	4,936,390	
Hungary	9,670,009	
Latvia	1,821,750	
Lithuania	2,655,755	
Montenegro	602,445	
North Macedonia	2,133,410	
Poland	37,991,766	

Country	Population total
Moldova	3,250,532
Romania	18,326,327
Russia	141,698,923
Serbia	6,693,375*
Slovakia	5,425,319
Slovenia	2,099,790
Ukraine	43,306,477

*Note: does not include the population of Kosovo

Source: Central Intelligence Agency, 2023 (29)

Trends in the migration of those from Central and Eastern Europe can be largely attributed to the expansion of the EU, which allowed for the increase in the free movement of people between EU member states. The first and largest EU expansion dates back to 2004 when 7 out of 10 counties from the former "Eastern Bloc" joined the EU (Czechia and Slovakia, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia, formerly part of Yugoslavia); the most recent expansion was in 2007, with the inclusion of Bulgaria and Romania.

1.2.2 Migration to the UK

The Central and Eastern European community has been present in the United Kingdom for several centuries. The 1901 UK census recorded 86,240 Eastern Europeans in England and Wales and 10,373 in Scotland. This represented an increase of over 55,000 people on the previous census, in 1891.(1)

Post war refugees and labour

During the aftermath of World War II, approximately 80,000 Eastern Europeans, who were displaced or homeless, settled in the UK.(2) Central and Eastern European refugees were also recruited as labourers from the European Voluntary Workers scheme and greatly assisted in the rebuilding of Great Britain.(1)

EU Accession

Since the opening of the EU accession during the 2000s, many Eastern Europeans have migrated to the UK. Within the first five years, over 1.4 million Eastern Europeans arrived in Britain. The Worker Registration Scheme showed that the highest proportion of these was from Poland (66%), followed by Slovakia (11%), and Lithuania (9%).(3)

UK EU referendum

In June 2016, a referendum on the UK's membership of the European Union took place. As it resulted in the decision to leave, many Eastern Europeans' relationship with, or perceived status in, the United Kingdom changed permanently with the reduction in net migration. Despite the referendum result, Poland and Romania remain in the top 10 non-UK countries of birth within the UK, as seen in **Table 3** below.

Table 3: Top 10 non-UK countries of birth: England and Wales, 2011 and2021

Rank in 2021	Country of birth	2011	2021
1	India	694,148	920,361
2	Poland	579,121	743,083
3	Pakistan	482,137	623,557
4	Romania	79,687	538,840

A BOLDER HEALTHIER BIRMINGHAM

Rank in 2021	Country of birth	2011	2021
5	Ireland	407,357	324,670
6	Italy	134,619	276,669
7	Bangladesh	211,500	273,042
8	Nigeria	191,183	270,768
9	Germany	273,564	263,368
10	South Africa	191,023	217,180

Source: Office for National Statistics, Census 2021 (4)

Those who listed Romania as their country of birth increased from 80,000 in 2011 to 539,000 in 2021, a 576% increase, making Romania the fourth most common non-UK country of birth. This increase was the highest out of any country and is driven by working restrictions for Romanian citizens being lifted in 2014. Poland also saw an increase in immigration from 579,000 in 2011 to 743,000 in 2021 (1.2%).(4)

There has been an increase over the years of non-UK passports held, with Poland, Romania, and Lithuania in the top ten countries of passports held. **Table 4** provides an overview of the trends since the 2011 census.

Table 4: Top 10 non-UK passports held: England and Wales, 2011 and 2021

Rank in 2021	Country of Passport	2011	2021
1	Poland	558,082	760,146
2	Romania	73,208	550,298
3	India	314,641	369,224
4	Italy	154,743	368,738
5	Ireland	372,389	364,726
6	Portugal	117,805	286,489

Rank in 2021	Country of Passport	2011	2021
7	Spain	81,594	216,728
8	Lithuania	104,676	185,159
9	Pakistan	149,386	166,425
10	France	146,032	163,517

Source: Office for National Statistics, Census 2021 (4)

Polish (760,000, 1.3%), Romanian (550,000, 0.9%) and Indian (369,000, 0.6%) were the three most common non-UK passports held by usual residents in England and Wales in 2021. Usual residents are the main population base for census statistics. It includes people usually living in England and Wales and excludes non-UK born short-term residents and visitors. Mirroring the trend from country of birth, Romania also had the largest increase in non-UK passport holders in England and Wales (652%) between 2011 and 2021. (4)

There has been an increase over the years of year of arrival in the UK by those born in a Central and Eastern European Country. **Table 5** provides an overview of the trends from before 1991 to 2021.(4) Whilst most first-generation migrants from the Central and Eastern European community arrived in the UK between 2001 to 2010 (35%), there is some variation between different countries of birth. Most migrants from Poland (54%) arrived between 2001 to 2010, 16% between 2011 to 2013, 16% between 2014 to 2016, 7.7% between 2017 to 2019, and 2.6% between 2020 to 2021.

This pattern is reflected by the other Accession 8 countries (EU8). In contrast, migrants from Accession 2 countries (Romania and Bulgaria) and candidate countries (particularly Albania and Moldova) have typically arrived more recently; 14% of migrants from Romania arrived between 2001 to 2010, 11% between 2011 to 2013, 36% between 2014 to 2016, 28% between 2017 to 2019, and 9.8% between 2020 to 2021.(4)

Table 5: Year of Arrival in the UK by Central and Eastern European Country of Birth: England and Wales, 2021

Year of Arrival in the UK	Before 1991	1991 to 2000	2001 to 2010	2011 to 2013	2014 to 2016	2017 to 2019	2020 to 2021
Albania	181	6,792	9,210	6,921	15,837	23,084	6,650
Armenia	50	490	800	286	305	367	144
Azerbaijan	34	451	1,322	302	378	672	322
Belarus	109	725	2,759	738	781	920	426
Bosnia and Herzegovina	542	4,878	958	320	380	533	184
Bulgaria	844	5,009	35,813	22,035	41,562	33,564	11,427
Croatia	1,591	3,987	984	634	2,001	2,553	1,077
Czechia	1,970	4,189	18,898	7,039	6,355	5,287	2,430
Czechoslovakia not otherwise specified	428	68	159	32	26	25	9
Estonia	167	657	4,598	1,723	1,310	1,021	535
Hungary	3,855	2,192	27,804	23,098	20,688	13,571	4,192
Козоvо	388	23,073	4,481	621	810	773	367
Latvia	485	1,660	45,171	19,116	11,280	8,350	2,522
Lithuania	420	6,254	81,382	32,641	24,691	15,425	3,344
Moldova	41	451	3,173	4,113	16,529	23,687	7,395
Montenegro	178	472	199	46	54	79	44
North Macedonia	389	1,022	1,381	682	1,795	1,732	546
Poland	15,294	17,682	398,840	115,428	119,263	57,425	19,149
Romania	1,593	5,682	75,245	60,249	194,265	149,003	52,801
Russia	1,285	7,883	18,674	6,230	7,850	9,119	5,009
Serbia	1,907	2,674	1,999	918	2,041	1,590	586
Slovakia	431	3,867	38,322	12,487	9,376	6,512	2,946
Slovenia	332	180	611	489	835	689	396
Ukraine	680	4,598	11,414	3,787	6,742	8,629	3,663
Union of Soviet Socialist Republics not otherwise specified	80	401	594	166	171	139	49
Yugoslavia not otherwise specified	809	843	217	54	80	49	19

Year of Arrival in the UK	Before 1991	1991 to 2000	2001 to 2010	2011 to 2013	2014 to 2016	2017 to 2019	2020 to 2021
Georgia	70	566	1,959	529	755	820	326
ALL Central and Eastern European	34,153	106,746	786,967	320,684	486,160	365,618	126,558

Source: Office for National Statistics, Census 2021 (6)

Table 6 builds upon this immigration trend, identifying the length of residence in the UK by country of birth for those born in a Central and Eastern European country. This dataset shows established and emerging community groups. For example, 43% of Central and Eastern European migrants have lived in the UK for 10 years or more, which aligns with the EU Accessions from 2004 to 2012. Migrants from Accession 8 countries are more likely to have lived in the UK for 10 years or more (e.g., 59% of Polish migrants). However, migrants from Accession 2 and candidate countries are more likely to have lived in the UK less than 10 years (e.g., 30% of Romanian migrants have lived in the UK for less than 2 years). It should be noted that national travel restrictions during the Covid-19 pandemic likely reduced migration in 2020 and 2021.

Table 6. Length of Residence in the LIK h	v Central and Eastern European Countr	y of Birth, England and Wales, Census 2021
Table 0. Length of Residence in the OK b	y Central and Eastern European Countr	y of birth, England and Wales, Census 2021

Length of Residence by Central and Eastern European Country of Birth	10 years or more (%)	5 to 10 years (%)	2 to 5 years (%)	Less than 2 years (%)
Albania	24	25	33	18
Armenia	56	19	14	11
Azerbaijan	53	16	16	15
Belarus	57	20	13	11
Bosnia and Herzegovina	82	8	6	4
Bulgaria	28	34	24	13
Croatia	51	16	18	15
Czechia	55	24	12	8
Czechoslovakia not otherwise specified	88	7	3	2
Estonia	55	26	10	8
Hungary	52	21	15	11
Козоvо	36	39	16	8
Latvia	91	4	2	2
Lithuania	55	29	10	5
Moldova	55	30	11	4
Montenegro	7	27	42	25
North Macedonia	79	8	6	6
Poland	37	25	24	12
Romania	59	27	9	4
Russia	16	37	30	16
Serbia	50	20	15	14
Slovakia	56	20	15	9
Slovenia	58	26	9	6
Ukraine	32	30	22	15
Union of Soviet Socialist Republics not otherwise specified	43	21	20	15
Yugoslavia not otherwise specified	68	18	8	5
Georgia	90	6	2	1
ALL Central and Eastern European	43	30	18	9

Source: Office for National Statistics, Census 2021 (6)

Most first-generation migrants to the UK from Central and Eastern European countries were aged between 16 and 24 years (34%) and 25 to 34 years (31%) when they arrived in the UK. This may be reflective of those migrating to the UK for work or study.

Table 7: Age of Arrival in the UK by Central and Eastern European Countryof Birth: England and Wales, 2021

Age of Arrival in the UK	Observation	Central and Eastern European Country of Birth Population (%)
Aged 0 to 15 years	351,852	16
Aged 16 to 24 years	751,389	34
Aged 25 to 34 years	690,082	31
Aged 35 to 49 years	346,593	16
Aged 50 to 64 years	76,421	3
Aged 65 years and over	10,551	<1
Total	2,226,888	100

Source: Office for National Statistics, Census 2021 (6)

1.2.3 Migration to the West Midlands

In 2021, there were 194,029 first-generation Central and Eastern European migrants in the West Midlands. Most first-generation migrants in the West Midlands from Central and Eastern Europe are from Poland (37%) and Romania (29%). There are also large populations from Latvia, Lithuania, Bulgaria, and Hungary. **Table 8** shows the total West Midlands and Birmingham population for each Central and Eastern European country of birth, with a percentage of the total Central and Eastern European population in the region.

A BOLDER HEALTHIER BIRMINGHAM

Table 8: Central and Eastern European Country of Birth, West Midlands,2021 Census

Country of birth	Observation	Proportion of Central and Eastern European population (%)
Poland	72,749	37
Romania	56,425	29
Latvia	10,240	5.3
Bulgaria	9,807	5.1
Lithuania	9,647	5
Slovakia	7,221	3.7
Hungary	6,552	3.4
Albania	4,873	2.5
Czechia	3,859	2
Moldova	3,376	1.7
Russia	2,443	1.3
Ukraine	1,622	0.84
Kosovo	867	0.45
Croatia	758	0.39
Bosnia and Herzegovina	653	0.34
Estonia	620	0.32
Serbia	607	0.31
Belarus	383	0.20
North Macedonia	323	0.17
Georgia	227	0.12
Armenia	177	0.09
Slovenia	155	0.08
Azerbaijan	149	0.08

Country of birth	Observation	Proportion of Central and Eastern European population (%)
Yugoslavia not otherwise specified (Former State)	143	0.07
Union of Soviet Socialist Republics not otherwise specified (Former State)	58	0.03
Europe: Other Europe: Montenegro	48	0.02
Europe: Other Europe: Czechoslovakia not otherwise specified (Former state)	47	0.02
Total	194,029	100

Source: Office for National Statistics, Census 2021 (6)

Most of the arrivals of the Central and Eastern European populations in the West Midlands can be attributed to EU Accession between 2004 and 2012. National Insurance Number (NINo) registrations show the total number of registrations issued to adult overseas nationals entering the UK. NINo registrations of overseas nationals show the number of migrants who register for a NINo during the year. Local Government Inform note that this data is a good measure of inflows of migrant workers from outside the UK, yet it does not measure outflows of the same people.(30)

Table 9: West Midlands National Insurance Registrations (NINo) for EU2and EU9 Countries from 2018 to 2019

Local Authority	EU2 total	EU8 total
Birmingham	3,368	970
Coventry	2,409	921
Dudley	318	92
Sandwell	816	420
Solihull	72	47
Walsall	584	283
Wolverhampton	1,680	283

Source: NINo Registrations 2018 to 2019 (31)

National Insurance Registration data from 2018 to 19 in Birmingham shows there were 3,368 registrations from EU2 countries and 970 registrations from EU8.

1.2.4 Migration to Birmingham

The first wave Central and Eastern European migrants who arrived in Birmingham after 1939 were distinctly affected by the consequences of the World War II. In the 1960s, the Polish community in Birmingham built Millennium House on Bordesley Street to celebrate their culture and to this day conduct many social, youth and religious groups together.(5) According to the 2021 census, there are 34,344 first-generation Central and Eastern European migrants in Birmingham. In contrast to the West Midlands, the largest population is from Romania (36%) and the second largest from Poland (29%). There are also large populations from Albania, Bulgaria, Lithuania, Slovakia, and Latvia (see **Table 10**). **Table 10:** Central and Eastern European Country of Birth, Birmingham,2021 Census

Country of birth	Observation in	Percentage in
	Birmingham	Birmingham %
Romania	12,239	35
Poland	9,967	29
Albania	1,628	5
Bulgaria	1,597	5
Lithuania	1,480	4
Latvia	1,308	4
Slovakia	1,058	3
Hungary	921	3
Czechia	892	3
Moldova	677	2
Russia	618	2
Ukraine	349	1
Kosovo	318	1
Bosnia and Herzegovina	287	1
Croatia	244	1
Serbia	181	1
Estonia	179	1
Georgia	71	0.2
Belarus	69	0.2
Armenia	65	0.1
Azerbaijan	46	0.1

Country of birth	Observation in Birmingham	Percentage in Birmingham %
North Macedonia	41	0.1
Yugoslavia not otherwise specified	37	0.1
Slovenia	33	0.1
Montenegro	15	<0.1
Union of Soviet Socialist Republics not otherwise specified	14	<0.1
Czechoslovakia not otherwise specified	10	<0.1
Total	34,344	100

Source: Office of National Statistics, Census 2021 (6)

Whilst the 2021 Census allows us to identify populational totals based on self-reported national identity, some people born in Central and Eastern European countries identify as British nationals, which limits the metrics' usefulness in understanding Central and Eastern European communities. Thus, country of birth is used instead. With this considered, 1.1% of the population in Birmingham were born in Romania and 0.9% in Poland (6). The wards with the largest populations of those who were born in Poland and Romania are outlined below in **Table 11** and **Table 12**. However, both populations are distributed broadly across Birmingham.

Table 11: Top 5 Birmingham Wards with the largest Polish-bornpopulations

Ward	Polish-born population in ward	Birmingham Polish-born population in ward (%)
Stockland		
Green	1,037	10
Erdington	612	6.1
Acocks Green	477	4.8
Ladywood	393	3.9
Kingstanding	358	3.6

Source: Office for National Statistics, Census 2021 (6)

Table 12: Top 5 Birmingham Wards with the largest Romanian-born populations

MSOA	Romanian-born population in ward	Birmingham Romanian-born population in ward (%)
Soho &		
Jewellery		
Quarter	643	5
Stockland Green	599	5
Ladywood	481	4
North		
Edgbaston	480	3
Erdington	452	4

Source: Office for National Statistics, Census 2021 (6)

Table 13 provides an overview of the total Central and Eastern Europeanborn population living in Birmingham. The population is spread widely

across all of the wards, with Stockland Green, Ladywood, Soho & Jewellery Quarter, North Edgbaston, Erdington being the largest populations. The full table can be found in the **Appendix 5.1**: Birmingham wards showing population distribution of residents born in Central and Eastern Europe: Birmingham, 2021.

Table 13: Top 10 Birmingham wards with the largest Central and EasternEuropean country of birth populations, Census 2021

Birmingham Ward	Central and Eastern European Country of Birth Population
Stockland Green	2,115 (6.1%)
Ladywood	1,905 (5.5%)
Soho & Jewellery Quarter	1,649 (4.8%)
North Edgbaston	1,479 (4.3%)
Erdington	1,415 (4.1%)
Acocks Green	1,068 (3.1%)
Handsworth Wood	986 (2.8%)
Holyhead	889 (2.5%)
Kingstanding	884 (2.5%)
Gravelly Hill	787 (2.2%)
All Central and Eastern European	34,344

Source: Office for National Statistics, Census 2021 (6)

Note: percentage shows the percentage of the total Central and Eastern European population in Birmingham

Ukraine Sponsorship Scheme and Ukraine Family Scheme

Since the most recent escalation of the ongoing Russo-Ukrainian war (2014), with the invasion of South Ukraine in February 2022, local authorities were asked to play a critical role in the delivery of the Homes for Ukraine scheme based on their ability to support local communities and offer Ukrainians a warm welcome. Birmingham has welcomed around 800 individuals (including children) as part of the scheme; however, numbers fluctuate due to movements between local authorities.

Birmingham City Council is working with and supporting various community organisations via Birmingham Voluntary Service Council to deliver additional services via small grants. More work is planned around English Speakers of Other Languages (ESOL), Employment and Wellbeing.

1.3 Language and Literacy

1.3.1 Language

1.3.1.1 Languages Spoken in Central and Eastern Europe

Central and Eastern Europe is a region with a vast amount of diversity in language. Slavic languages are typically spoken within the region and are classed into three sub-groups: East, South and West. These sub-groups include more than twenty languages, ten of which have over ten million speakers and are considered national languages in the countries where they are predominantly spoken. Russian, Belarusian, and Ukrainian are the most common languages for the Slavic Eastern group. Polish, Czech, and Slovak are the most common languages for the Slavic Western group. Bulgarian and Macedonian are the most common Eastern dialects of the Southern group. Serbo-Croatian and Slovenian are the most common western dialectics of the Slavic Southern group.

1.3.1.2 Central and Eastern European languages in the UK

In 2021, Romanian moved into the top 10 of main languages spoken in the UK, excluding English (English or Welsh in Wales). This was the largest increase over the decade.(32) In total, 0.8% of people (472,000) listed Romanian as their main language, up from 0.1% (68,000) in 2011 in the UK. This mirrors a similar increase in the number of people who listed Romania as their country of birth between 2011 and 2021 (0.8% change). It also mirrors an increase in the number who chose only a Romanian national identity (0.7% change).(32)

Polish remained the most common main language accounting for 1.1% (612,000) of usual residents, for those who do not have English (English or Welsh in Wales) as a main language.(32)

The most common main languages, other than English (English or Welsh in Wales), were: Polish (1.1%, 612,000), Romanian (0.8%, 472,000), Panjabi (0.5%, 291,000), and Urdu (0.5%, 270,000), as summarised in

26 Introduction Central and Eastern European Community Health Profile 2023

Table 14.

Table 14: The two main languages spoken, excluding English or Welsh inWales: England and Wales, 2021

Language	2011	2021
Polish	546,000 (Ranked 1st)	612,000 (Ranked 1st)
Romanian	68,000 (Ranked 19th)	472,000 (Ranked 2nd)

Source: Office for National Statistics, Census 2021 (32)

As shown in

Table 15, the largest percentage of usual languages spoken in Birmingham within the Central and Eastern European community are Polish, and Romanian. It should be noted that this data does not encapsulate all speakers, as it does not include the 27% with English as a first language, but potentially Central and Eastern European languages as a second language.

Table 15: Percentage of usual resident population aged three years andover whose main language is a Central and Eastern European language,Birmingham, 2021

Main Language	Percentage of usual resident
	population
Polish	0.9
tomanian	0.7
lovak	0.7
zech	0.06
thuanian	0.8
atvian	0.5
lungarian	0.08
ulgarian	0.11
stonian	<0.01
ovenian	<0.01
banian	0.09
krainian	0.01
ny other Eastern European Language	<0.01
ion-EU)	
ıssian	0.11%
osnian	0.07
roatian	0.07
erbian	0.07
lontenegrin	0.07

Source: Office for National Statistics, Census 2021 (32)

A BOLDER HEALTHIER BIRMINGHAM

1.3.2 English Language Proficiency

As shown in **Table 16**, English language proficiency by Central and Eastern European country of birth differs. Across the UK, data shows that 29% of those with a Central and Eastern European country as their country of birth can speak English very well, despite it not being their main language. This figure increases to 30% who note they can speak English well despite it not being their main language. Whilst English language proficiency is generally high amongst this population group, it is important to highlight that over 12% cannot speak English well and 1.7% cannot speak English at all.

Table 16: English Language Proficiency by Central and Eastern EuropeanCountry of Birth: England and Wales, Census 2021

Proficiency in English Language	Central and Eastern European Born (%)
Main language is English	587,675 (26%)
Main language is not English: Can speak English very well	642,342 (29%)
Main language is not English: Can speak English well	678,999 (30%)
Main language is not English: Cannot speak English well	272,412 (12%)
Main language is not English: Cannot speak English	37,496 (2%)

Source: Office for National Statistics, Census 2021 (6)

1.4 Demographics

1.4.1 Population Size

1.4.1.1 National Population

Across the 19 ethnic groups within the 2021 Census, the largest percentage increase was seen in the number of people identifying through the White Other category. Within the 2021 Census, a write-in option was available for many sociocultural questions to make it easier for respondents to self-define when completing the census. This response option allowed people to specify their country of birth, national identity, ethnic group, main language, and religion.

From 2011 to 2021, the White Other population increased by 38% in absolute terms, corresponding to a 1.8% increase in the national population.

- 2011 population size: 2,485,942 (4.4% of the population in England)
- 2021 population size: 3,667,997 (6.2% of the population in England)(33)

The largest ethnic groups specified within White Other in England and Wales included 'White Polish', with 614,000 (1.0%) of the overall population identifying this way, and 'White: Romanian', with 343,000 people (0.6%) identifying this way.(33)

Furthermore, 81% of those born in Central and Eastern European countries identify as White Other. **Table 17** shows the top 5 Central and Eastern European countries of birth in England and Wales and the percentage of these populations that identify as the White Other ethnic group. From this,

we can see that White Other is a useful representation of these Central and Eastern European populations. The main ethnic groups, besides White Other, were White British, White Roma, and Any Other Ethnic Group.

Table 17: Percentage identifying as White Other by top 5 Central andEastern European Countries of Birth, England and Wales, Census 2021

Central and Eastern European Country of Birth	White Other %
Europe: Other Europe: Poland	90
Europe: Other Europe: Romania	80
Europe: Other Europe: Lithuania	84
Europe: Other Europe: Bulgaria	80
Europe: Other Europe: Hungary	85

Source: Office for National Statistics, Census 2021 (6, 33)

1.4.1.2 Regional Population

4.2% (248,565) of the population of the West Midlands identify as White Other ethnic group, making it the fourth largest ethnic group in the West Midlands.(6)

1.4.1.3 Birmingham Population

As per the 2021 Census, 4% of people in Birmingham were White Other; the highest densely populated area of those who are classed as such was in the Central Middle Layer Super Output Area (MSOA) in Birmingham (15%) as seen in Table 18.(6) **Table 18:** Top 10 Birmingham Wards by White Other Ethnicity:Birmingham, 2021

Birmingham Electoral Wards	Percentage of the population who are White Other (%)	Number of the population who are White Other
Ladywood	13	3,380
Stockland Green	9	2,178
North Edgbaston	8	1,859
Soho & Jewellery Quarter	8	2,018
Gravelly Hill	8	788
Erdington	7	1,608
Edgbaston	7	1,389
Holyhead	6	768
Harborne	6	1,425
Bournbrook & Selly Park	5	1,262
All White Other	4	45,914

Source: Office for National Statistics, Census 2021 (6)

The population density of the White Other community can also be visualised by a heat map of Birmingham, as seen in **Figure 1**. The White Other community is predominantly concentrated in the city centre of Birmingham, with a small concentration in the north of the city.

Figure 1: Map of White: Other White Population distribution: Birmingham, 2021



Source: Office for National Statistics, 2021 Census (34)

Similar to the Central and Eastern European country of birth population, the White: Other White population of Birmingham is distributed widely across the wards. However, Ladywood, Stockland Green, Soho & Jewellery Quarter, North Edgbaston, Erdington have the largest populations.

1.4.2 Age Profile

Figure 2 (Appendix 5.2: Age Profile of the Central and Eastern European born population: England and Wales, 2021 for full data table) shows that

the majority of Central and Eastern European first generation migrants in England and Wales are between the ages of 25 and 49, which likely reflects those migrating for work. The Central and Eastern European population under the age of 15 is significantly lower than the general UK population under 15 (7.3% and 19% respectively). However, it should be recognised the data is limited as it does not reflect second generation migrants. Furthermore, the population over the age of 65 is significantly lower for the Central and Eastern European population (2.9%) than the general UK population (19%).

Figure 2: Age Profile of the Central and Eastern European born population in England and Wales, 2021


Source: Office for National Statistics, Census 2021 (6)

1.4.3 Religion

Central and Eastern Europe has a diverse religious landscape, but in most countries the Christian Faith is the most popular, with Orthodoxy and Catholicism being the most common denominations.

The region is home to three-quarters of the world's Orthodox population. Orthodox Christians make up 57% of the regions' population, with Russia (100 million) and Ukraine (35 million) having the largest populations of Orthodox Christians. Furthermore, Moldova (92%), Georgia (89%), Armenia (89%) and Romania (86%) have the highest percentages of Orthodox Christians in their adult populations. The Catholic majority countries are Poland (87%), Croatia (84%), Lithuania (75%) and Hungary (56%). In Czechia, most of the adult population claim no religious affiliation (72%). In Bosnia, Estonia, and Latvia a survey found that they are so religiously diverse that there is no single dominant religious affiliation. All three countries had sizable Orthodox minorities (35% Bosnia, 25% in Estonia and 21% in Latvia). Latvia and Estonia also have substantial populations of Lutherans (23%) and in Bosnia over half (52%) of adults are Muslim.

As shown in **Table 19**, 70.9% (1,578,766) of first-generation Central and Eastern European migrants in England and Wales are Christian, 17% (383,573) have no religion, and 3.1% (68,031) are Muslim. Populations from most Central and Eastern European countries of birth reflect this pattern. However, first generation migrants from Azerbaijan (38%), Bosnia and Herzegovina (31%), Kosovo (48%) and Albania (30%) have significantly larger Muslim populations.

	Central and Eastern European Country of
Religion	Birth Population
Christian	1,578,766 (80%)
Buddhist	3,535 (0.2%)
Hindu	731 (<0%)
Jewish	4,446 (0.2%)
Muslim	68,031 (3%)
Sikh	502 (0%)
Other religion	11,131 (0.5%)
No religion	383,573 (17%)
Not answered	176,186 (8%)

Table 19: Religion by Central and Eastern European Country of Birth,England and Wales, Census 2021

Source: Office for National Statistics, Census 2021 (6)

1.4.4 Ethnicity

The 2021 Census questionnaire included tick-boxes grouped under broad headings, with more specific ethnic groups to select underneath. Respondents could also write in a different ethnic group under broad headings if theirs were not included in the tick-boxes.

Detailed Ethnic group data allows us to see the self-reported ethnicity of those classed as 'White', White Other, or 'Other Ethnic Group'.

Large changes were also seen in the number of people identifying their ethnic group as 'Other Ethnic Group: Any other ethnic group' (1.6%, 924,000 in 2021, up from 0.6%, 333,000 in 2011).(33)

Table 20 shows that the highest population from Central and Eastern European countries in Birmingham were Polish, Romanian, Bulgarian, Lithuanian, and Albanian.

Table 20: Detailed Ethnic Group Data on 'White', 'White: Other White' or 'Other Ethnic Group': Birmingham, 2021

Ethnic Group	Total in
	Birmingham
White: Polish	8,407
White: Romanian	7,364
White: Other Eastern European	2,301
Other ethnic group: Romanian	1,152
White: Bulgarian	944
White: Lithuanian	919
White: Albanian	888
White: Latvian	762
White: Hungarian	642
White: Slovakian	597
White: Russian	503
White: Czech	471
Other ethnic group: Polish	176
Other ethnic group: Albanian	161
White: Bosnian	154
White: Croatian	149
Other ethnic group: Other Eastern European	144
White: Ukrainian	138
White: Serbian	133
White: Kosovan	117
Other ethnic group: Czech	101
Other ethnic group: Slovakian	95

Ethnic Group	Total in Birmingham
Other ethnic group: Bulgarian	93
White: Estonian	90
White: Armenian	58
White: Slovenian	57
White: Georgian	42
White: Moldovan	38
White: Belarusian	37
Other ethnic group: Armenian	21
Total	26,754

Source: Office for National Statistic, Census 2021 (35)

At the time of publication, there is limited data specific to the UK and to Birmingham on the Central and Eastern European community. In national, regional and local data, Central and Eastern European communities are typically included under the broad ethnic category of White Other or 'White Other ethnic Group'. However, it should be noted that this category also often includes Gypsy, Roma, and Traveller, Irish and a range of White Other ethnicities. Ratios are often not given; thus, the data needs to be interpreted with caution. Given the large population of Central and Eastern European communities, there is a strong case for more detailed administrative data collection. This must be supplemented with smallerscale, localised surveys, and qualitative studies which can provide valuable insight into the lived experiences of the Central and Eastern European communities. Of value would be research on community perceptions, socio-economic determinants, and help-seeking behaviours.

2. Community Profile

2.1 Getting the Best Start in Life

Key Findings

- Just under a quarter (23%) of maternal deaths in the UK from years 2017 to 2019, for women whose place of birth was known, were women born outside the UK; of these 12% were women from Eastern Europe.
- In 2021 in England and Wales, Romania was the most common country of birth for non-UK-born mothers, and this was up from second in 2020. Poland saw a decrease in birth for mothers, and ranked 4th, this compares to Poland ranking 1st from 2012 to 2018. Lithuania saw an increase and ranked 8th in 2021, this compares to 7th in 2015 to 2018. Albania moved into the top ten most common countries.
- From 2017 to 2019 in England and Wales, the 'White' ethnic group has the lowest infant mortality rate across all years, at 3.0 deaths per 1,000 live births in 2019. Furthermore, both subcategories of the White ethnic group (White British and White Other) have an infant mortality rate below the rate for all infants across the time period (3.0 and 2.7 infant deaths per 1,000 live births in 2019 respectively).

- In England and Wales from 2017 to 2019, within the White Other ethnic group stillbirths are higher (3.8 per 1,000) than the White British ethnic group (3.5 per 1,000).
- Data from England in 2017 found that the proportion of 5-year-old children with obvious dental decay was the significantly higher in the Eastern European children (49%).
- From 2016 to 2018, in the UK, 23% of children from the White Other ethnic group live in low-income households, compared with the national average of 20% and the White British population (17%).
- Data from a 2019 study of primary schools in England, suggests that have Czech, Slovak, Hungarian, Polish, Romanian, Latvian, Lithuanian, and Bulgarian as a first language are particularly underachieving.
- In the 2021-22 academic year, nationally the White Other ethnic group had 15.1% of students who were eligible for free school meals, an 2.2% increase from 2020 to 2021 (12.9%). This compares to the 1.6% increase for the ethnic group White British in the academic year of 2020 to 2021 (20%) to the academic year of 2021 to 2022 (21%).

2.1.1 Fertility

Fertility among a population can be represented using the 'Total Fertility Rate (TFR)', which can be defined as "the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing years." (36)

Fertility rates for many migrant groups in Britain have declined to around the national average and below it, in some cases, with a general decrease in TFRs noted for all women from 2004 to 2021. The Office for National Statistics (ONS) does not hold TFRs by ethnicity; data is only available for the mother's birth country. In 2021 it was reported that non-UK-born women overall still have higher TFRs (2.03) than UK-born women (1.54) in England and Wales.(37)

In 2021, the percentage of live births to non-UK-born women decreased in England, dropping from 30% in 2020 to 29% in 2021.

2.1.2 Maternal Health

2.1.2.1 Maternal Mortality

Maternal mortality is likely higher among all minority ethnic groups than the White ethnic group. The MBRRACE-UK Saving Lives, Improving Mothers' Care 2021 report outlined maternal mortality by ethnicity and country of birth.

Just under a quarter of women who died in 2017 to 19 (23%) whose place of birth was known were born outside the UK; 22% of these women were known not to be UK citizens, and citizenship was not recorded for a further 20%. Overall, 6% of the women who died were not UK citizens, although this may be underestimated since citizenship was not recorded for 7%. Women who died that were born abroad and were not UK citizens had arrived in the UK a median of 4 years before they died (range 0 to 15 years). Women who died who were born abroad were from Asia (39%, mainly India, China, and Bangladesh) and Africa (32%, mainly Nigeria), Eastern Europe (12%), with the remainder (17%) from other parts of Europe, the Americas, Australasia, and the Caribbean.(7)

2.1.2.2 Migrant Births

Birth outcomes in migrants vary, but the relative explanatory influence of obstetric practice in origin and destination countries has been underinvestigated. In a 2014 study which compared birth outcomes of Scots and Polish migrants to Scotland using Polish obstetric data, 119,698 Scottish and 3105 Polish births to primiparous women in Scotland 2004 to 2009 were analysed. (38) Poles are the largest group of migrants to Scotland, and Poland has significantly more medicalised maternity care than Scotland. Scottish maternity and neonatal records linked to birth registrations were analysed for differences in modes of delivery and pregnancy outcomes between Polish migrants and Scots. These were compared to the Polish Health Fund and survey data. It showed Poles were less likely than Scots to have a Caesarean section and more likely to have a spontaneous vaginal or instrumental delivery. The Caesarean section rate in Poland is significantly higher, and instrumental delivery rate is lower than other groups of women in Scotland. This study concluded that Polish mothers' being slightly healthier than Scots explained some of the lower rates of Caesarean section rates. However, dominant obstetrics models in the two countries seem likely to influence the differences between Poles delivering in Poland and Scotland.(38)

2.1.2.3 Antenatal Care

A 2017 study focusing on immigrant women provides useful insight into the barriers faced by minority communities accessing antenatal care services. The study noted that pregnant women who are recent immigrants, refugees or asylum seekers may have complex social factors which need to be factored in when considering access to maternity care. It was found that some of these women may not fully benefit from antenatal healthcare services in the UK due to potentially limited English language abilities, lack of knowledge about the health services and or poor communication with staff delivering healthcare.(39)

National Institute for Health and Care Excellence (NICE) guidance suggests that healthcare staff should be given specific training to meet these women's needs. This observation may apply to women who have recently migrated to the UK from Central or Eastern European countries and or have limited English language skills and knowledge about Britain's healthcare services.(40)

2.1.3 Infant Mortality, Stillbirths and Live Births

2.1.3.1 Live Births

Census 2021 data for England and Wales states that 29% of live births were to non-UK born women; in Birmingham this rises to 43%.

As **Table 21** shows, Romania became the most common country of birth for non-UK-born mothers in 2021, from second in 2020 with a 1.2% rise in the number of births. Albania moved into the top 10 most common countries of birth for both non-UK-born mothers and non-UK-born fathers

for the first time. Births to mothers from Poland saw the largest decrease in 2021, with an 8.6% decrease.(6, 37)

Table 21: Country of Birth for non-UK born mothers, England and Wales2021

Country	Rank in 2012	Rank in 2015	Rank in 2018	Rank in 2021	Overall Trend (Increase, Decrease, No change)
Romania	9th	4th	3rd	1st	Increase
Pakistan	2nd	2nd	2nd	2nd	No change
India	3rd	3rd	4th	3rd	No change
Poland	1st	1st	1st	4th	Decrease
Bangladesh	4th	5th	5th	5th	Decrease
Nigeria	5th	6th	6th	6th	Decrease
Germany	7th	8th	8th	7th	No change
Lithuania	8th	7th	7th	8th	No change
United States of	14th	11th	10th	9th	Increase
America					
Albania	41st	28th	21st	10th	Increase

Source: Office for National Statistics, Census 2021 (6)

Country	Rank in 2012	Rank in 2015	Rank in 2018	Rank in 2021	Overall Trend (Increase, Decrease, change)	No
Pakistan	1 st	1 st	1 st	1 st	No change	
India	3 rd	3 rd	4 th	2 nd	Increase	
Romania	9 th	6 th	2 nd	3 rd	Increase	
Poland	2 nd	2 nd	3 rd	4 th	Decrease	
Nigeria	5 th	5 th	6 th	5 th	No change	
Bangladesh	4 th	4 th	5 th	6 th	Decrease	
Afghanistan	11 th	13 th	11 th	7 th	Increase	
Albania	36 th	30 th	23 rd	8 th	Increase	
Somalia	6 th	7 th	8 th	9 th	Decrease	
Ghana	12 th	11 th	9 th	10 th	Increase	

Table 22: Country of Birth for non-UK fathers, England and Wales 2021

Source: Office for National Statistics, Census 2021 (6)

As **Table 22** shows, births to fathers born in Poland had the largest decrease, falling by 10% from 10,542 in 2020 to 9,458 in 2021. This has been decreasing since 2015.(37) Lithuania saw an increase and ranked 8th in 2021, this compares to 7th in 2015 to 2018. Albania moved into the top ten most common countries of birth for both non-UK-born mothers and non-UK-born fathers for the first time.

2.1.3.2 Infant Mortality

Data on Births and Infant Mortality by ethnicity in England and Wales, 2017 to 2019 combined data for the White British and White Other to form the 'White' ethnic group. Based on this aggregation, the 'White' ethnic group has the lowest infant mortality rate across all years, at 3.0 deaths per 1,000 live births in 2019. Furthermore, both subcategories of the 'White' ethnic group (White British and White Other) have an infant mortality rate below the rate for all infants across the period (3.0 and 2.7 infant deaths per 1,000 live births in 2019 respectively).(41)

Table 23: Infant Mortality rate (per 1,000 live births) by cause of death andethnicity of the baby: England and Wales, 2017 to 2019 (combined)

Ethnic group	Immaturity Related Conditions (%)	Congenital Anomalies (%)	Other (%)
White Other	1.2	0.9	0.7
White British	1.3	0.9	0.9

Source: Office for National Statistics, 2021 (41)

2.1.3.3 Stillbirths

Stillbirth rates also vary by ethnicity and country of birth of the mother. Stillbirth rates have generally decreased across all ethnic groups in England and Wales since data collection began in 2007, although there have been fluctuations between individual years. In 2021, 28% of live births were to non-UK-born women; this is a decrease from 29% in 2020. Age-specific fertility rates among non-UK-born women remain higher for every age group than UK-born women in 2021.

As shown in **Table 24**, within the White Other ethnic group, stillbirths are higher (3.8 per 1,000) than White British ethnic group (3.5 per 1,000).

Table 24: Live Births, stillbirths, and infant mortality by ethnic group:England and Wales, 2017 to 2019 (combined)

Ethnic group	Live Births (2019)	Stillbirths per 1,000 total births (2017 to 2019)	Infant deaths per 1,000 live births (2017 to 2019)
White Other	74,332	4	3
White British	377,916	3	3

Source: ONS in The King's Fund Report (42)

2.1.4 Dental Decay in Children

Prevalence of childhood dental decay is reported as "the percentage of 5year-old children with one or more teeth with visually obvious dental decay experience". In 2019, 23% of 5-year-old children in England were reported to experience dental decay. This figure has stayed consistent with previous data; the prevalence was 23% in 2017.

Dental decay for children from the Eastern European ethnic group is available in the 2017 oral health survey of 5-year-old children report. In the report, the proportion of 5-year-old children with obvious dental decay was significantly higher in the Eastern European (49%) and Chinese (41%) ethnic groups, as seen in **Table 25**.

Table 25: Dental decay at 5-years-old by ethnic group, England, 2017

Ethnic group	5 year olds with dental decay (%)
Eastern European	49
Other Ethnic Group	41
White	21

Source: Public Health England, National Dental Epidemiology Programme for England (43)

With children who have any obvious dental decay, the number of teeth affected is reported. Eastern European had the largest number of teeth affected by decay, 5.1 and 4.6 respectively. This is compared with 3.4 of the total population with decay experience.(42)

2.1.5 Children's Mental Health and Wellbeing

2.1.5.1 Child Poverty

One measure of childhood poverty is those living in households with relative low income, defined as below 60% of the median household income, before housing costs (BHC) or after housing costs (AHC).(44) From 2020 to 2021, approximately 3.9 million children lived in relative poverty in the UK AHC. That equates to 27% of children.(45)

ONS data using three-year average statistics from 2016 to 2018 indicate that a greater proportion of children from ethnic minority communities live in low-income households. 23% of children from the White Other ethnic group live in low-income households, compared with the national average of 20% and the White British population (17%).(44)

In addition to absolute and relative incomes, material deprivation is also utilised to measure poverty and the living standard of children. Material deprivation refers to the "self-reported inability of individuals or households to afford particular goods and activities". In 2018, 12% of children nationally fell below the low-income and material deprivation threshold. Data is unavailable for the White Other ethnic group and only available for the Other ethnic group (19%).(46)

2.1.6 Education

2.1.6.1 School Readiness

The Early Years Foundation Stage (EYFS) profile provides statistics on children's development at the end of the academic year when a child turns 5. The assessment framework evaluates development across seven areas of learning, including physical development, communication and language and expressive arts and design. Nationally 65% of children were reported to have a 'good level of development' from 2021 to 2022. Within the "Any Other White" ethnic group, 62% had a good level of development, and 60% had a good level of development in the West Midlands. This compares to 67% of White British children nationally and 66% in the West Midlands.(46)

2.1.6.2 School Suspensions

Suspensions for the White Other ethnic group for the 2020 and 2021 school year were 2.4%, compared with 4.8% for the White British ethnic group. Suspension rates vary by school type. For State-funded Primary schools, the rate for the White Other ethnic group was 0.53%, compared with 5.3% for State-Funded Secondary and 3.2% for Special schools. Across all ethnic groups, suspension rates were higher in secondary and special schools than in primary schools. In Birmingham, the average suspension rate across all ethnic groups was 3.5%; there is currently no data available for the White Other ethnic group locally.(46)

2.1.6.3 Progress 8 scores

Progress 8 scores are a useful measure of educational attainment as it measures how much progress students make between the ages of 11 and 16 across eight core subjects, compared with other students with similar starting points. The baseline score of 0 indicates achievement at 16 which is in line with an average rate of progression compared with children with similar KS2 results. A score of +1 indicates a student has achieved one grade higher than children with similar KS2 results, and a score of -1 shows a student achieved one grade lower than the average compared with children with similar KS2 results. (47)

The average Progress 8 score across ethnic groups in England from 2018 to 2019 was -0.03. White Other pupils nationally achieved a progress 8 score of 0.45, there is currently no regional nor local data for White Other pupils.

In the academic year 2020 to 2021, 52% of pupils in England achieved a grade 5 or above in GCSE English and maths. This compares to 53% of pupils from the White Other ethnic group. This statistic is lower for boys from the White Other ethnic group (49%) and higher for girls from the White Other ethnic group (57%).(47)

2.1.6.4 Educational Attainment

A 2019 study explored the educational attainment of Eastern European children in primary schools in England, utilising the detailed National Pupil Database and school census data for 586,181 pupils who completed Key Stage 2 in England in 2016. Analyses by ethnicity and language were used to illustrate patterns of attainment for each group. Further analysis by social background was undertaken to explore the main factors influencing school performance and pupil attainment . The main findings confirmed that many Eastern European pupils have low attainment. The study also identified that government statistics have masked their performance in English schools and failed to distinguish between White Other ethnic groups. Data suggested that speakers of Czech, Slovak, Hungarian, Polish, Romanian, Latvian, Lithuanian, and Bulgarian are particularly underachieving and that the difference between their educational performance and others is larger than any other main groups. Despite wide variation in performance between regions in England, large attainment gaps between Eastern European and White British children exist. Some of the main reasons for underachievement identified from the study are the lack of fluency in English, economic deprivation, a disrupted or non-existent prior education and parental lack of understanding of the British education system.(48)

Research conducted by the Migration Policy Institute and published in 2010 suggests that the immigrant population in England increased by 76%, from 4.9 million to 8.6 million, between 2002 and 2015. Of these, 3.1 million were European citizens who migrated to the UK as part of the right to a free movement of people and labour within the EU.(49) Additionally, around 1.3 million were Eastern European, including 813,700 Polish and 170,000 Lithuanians.(50) Of the 6.6 million pupils in English schools, about 119 thousand (1.8%) are from Eastern European countries with Polish speakers, making up nearly half of this group with 53,915 pupils.(8)

Within the White Other category, there is a large variation in performance depending on the language spoken. Previous research on the education background of immigrants from the White Other ethnic group from the European Economic Area suggests that, on average, they were younger and better educated than native population migrants and that 47% of them achieved tertiary education.(51)

There is little clarity on the number of EU pupils in schools. As a result of lack of data, the educational underachievement of Eastern European migrant students in British schools has seldom been mentioned. (49, 52, 53, 54) Previous research noted that Eastern European pupils were classified

confusingly under the White Other ethnic group in the schools' census.(55) There is therefore a need to further explore how national categories may be used to improve our understanding of the performance of pupils who speak different Eastern European languages in schools.

2.1.6.5 KS2 and GCSE

Analysis of KS2 and GCSE data highlighted that within the White Other ethnic group achievement by languages in one inner London local authority suggested that, within the White Other ethnic category, there is a large variation in performance depending on the language that is spoken. The highest-achieving groups at KS2 and GCSE were West European language speakers of German, Dutch, French and Swedish, who all outperformed pupils who had English as a first language. The lowest achieving groups were from Eastern Europe, including pupils speaking Russian, Polish, Albanian, Czech, Slovak, and Romanian, with very few in these groups achieving expected outcomes. Also, low performing were Romanian-, Latvian-, Hungarian- and Lithuanian-speaking pupils, with barely half of these pupils achieving expected levels.

Previous studies attribute the roots of underachievement to lack of understanding of the British education system, low expectations from teachers, lack of fluency in English, poverty, and overcrowding. (56, 57) This is further supported by another recent report stating that 'poverty makes things harder; 68% of Lithuanian-speaking children and 63% of Polishspeakers live in poor areas where schools tend to be worse. (58)

2.1.6.6 Special Educational Needs

There is currently no data on the special educational needs of the Central and Eastern European community in the UK.

2.1.6.7 Free School Meals

Eligibility for free school meals (FSM) in England is used as an indicator of deprivation. The data shows that, for pupils eligible for FSM, 30% got a grade 5 or above, compared with 57% of non-eligible pupils in every ethnic group, they were less likely to get a grade 5 or above than non-eligible pupils.(59)

A 2013 study highlighted that pupils taking FSM perform less well generally than their non-FSM counterparts.(60)

In the 2021 to 2022 academic year, the White Other ethnic group had 15% of students eligible for free school meals, an 2.2% increase from the previous academic year (13%). This compares to the 1.6% increase for the ethnic group White British in the 2020 to 2021 academic year (20%) to the 2021 to 2022 academic year (22%), this is shown in **Table 26.**(61)

Table 26: Percentage of pupils achieving a grade 5 or above in GCSE Englishand Maths by ethnic group and FSM eligibility: England, academic year2020 to 2021

Ethnic Group	No FSM (%)	FSM (%)
White Other	55	36
White British	56	24
Average (all ethnic groups)	57	30

Source: Department for Education (59)

2.2 Mental Wellness and Balance

Key Findings

- WEMWEBS evidence has shown that in England from the years 2011 to 2019, all adults from the Other White Background ethnic group scored 52.9/70 from the years 2011 to 2019. This was the second highest of all observed ethnic groups. Other White Women (52.6/70) and men (53.2/70) had the second highest scores when looking at gender by ethnicity.
- In the 2014 Adult Psychiatric Morbidity Survey, 14% of all adults in the White Other ethnic group reported experiencing any common mental health disorder in the past week, which was the lowest of any ethnic group.
- For recent Central and Eastern European migrants to the UK, language barriers and an unfamiliarity with the local culture can be an alienating experience associated with stress, loneliness, and depression.
- Data on the Central and Eastern European community's contact with mental health services is not routinely recorded, and there is significant variation in the data from smaller studies. In 2020 to 2021 in England, there were 5,764 per 100,000 (5.8%) White Other people using NHS mental health, learning disability and autism services, compared with 4,063 (4.1%) for the total population.

- Between 2009 and 2012, in an area inner-city London, of those born outside the UK, Eastern and Western Europeans had the highest suicide rate (51%).
- From the Health Survey for England 2011 to 2019, alcohol consumption was higher for men in the Other White Background ethnic group (88% and 58%, respectively) compared with women (81% and 42%, respectively).
- Men from the White Other ethnic group made up a higher proportion of alcohol-specific admissions compared with admissions for all causes, meaning admissions for alcohol misuse are disproportionate for this group.
- Data from 2017 shows that nationally, the White Other ethnic group was the second highest proportion of admissions for all causes for both men and women (3.7% and 4.4%, respectively).
- Any illicit drug use in the past year by all adults in England in 2014, the White Other ethnic group (9.2%) was the highest except Black/Black British (12%).
- Evidence shows that Polish women are over-represented in femicide (intentional killing by female gender) statistics. Statistics from a 10-year overview of femicide between 2009 to 2018, shows that Polish women constitute 15% of non-UK born victims.
- A 2022 study of noonle living in the LIK found that 40% of young
 A 2022 study of noonle living in the LIK found that 40% of young

There is currently no UK or Birmingham data exploring the mental health of specific Central and Eastern communities. In national and local data, Central and Eastern European communities are typically included under the broad ethnic category, White Other, which will be used as a proxy for understanding mental health in this community. However, it should be noted that this category also often includes Gypsy, Roma, Traveller, Irish and a range of other white ethnicities, and ratios are often not given. Thus, the data has limited reliability and usefulness, and given the large populations of Central and Eastern European communities, there is a significant need for differentiation in the data. However, there are smallscale, localised surveys and qualitative studies providing valuable insight into lived experiences of mental health in Central and Eastern European communities, particularly those focusing on community perceptions, socio-economic determinants, and help-seeking behaviours.

2.2.1 Mental Health

2.2.1.1 Prevalence of Mental Illness

Mental health is an increasingly important and common health concern across the country. According to Mind UK, 1 in 4 people will experience a mental health problem of some kind each year in England. The amount of people with common mental health problems went up by 20% between 1993 and 2014, and the percentage of people reporting severe mental health symptoms in any given week rose from 7% in 1993, to over 9% in 2014.(62)

In the 2014 Adult Psychiatric Morbidity Survey, 14% of all adults in the White Other ethnic group reported experiencing any common mental

health disorder in the past week, which was the lowest of any ethnic group.(63)

Table 27: Percentage of Common Mental Health Disorders in the past weekamong all adults by ethnic group, England and Wales 2014

Common Mental Health Disorder (CMD)	White British (%)	White Other (%)
Generalised anxiety disorder	6.3	4.3
Depressive episode	3.4	2.6
Phobias	2.5	1.1
Obsessive compulsive disorder	1.2	3
Panic disorder	0.5	0.2
CMD-Not Otherwise Specified	8.7	7.9

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

In the 2014 Adult Psychiatric Morbidity Survey, based on the Post-Traumatic Stress Disorder (PTSD) checklist civilian version (PCL-C), the White Other ethnic group reported the lowest prevalence for PTSD in the past month for men (1.8%), women (2.5%) and all adults (2.2%) compared with the White British population.(63)

Table 28: Percentage of adults screened positive for probable PTSD on PCL-C in past month and whether experienced trauma, by ethnic group,England and Wales 2014

PTSD on PCL-C in past month and whether experienced trauma	White British (%)	White Other (%)
Trauma experienced (Men)	32.3	29.8
PTSD screen positive (Men)	3.5	1.8
Trauma experienced (Women)	31.5	35.3
PTSD screen positive (Women)	4.9	2.5
Trauma experienced (All Adults)	31.9	32.7

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

The percentage of adults scoring 4 to 6 or more which indicates probable Adult Attention Deficit Hyperactivity Disorder (ADHD) (6.7%) and 6 (0.3%) on the ADHD Self Report Scale was the lowest for adults in the White Other ethnic group.(63)

Table 29: Adult ADHD Self-reported scale scores by ethnic group, Englandand Wales 2014

Adult ADHD Self-Report Scale Scores	White British (%)	White Other (%)
Men (4 or more)	11	3.3
Men (All 6)	0.8	0.3
Women (4 or more)	9.4	9.7
Women (All 6)	0.6	0.3

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

In the 2014 Adult Psychiatric Morbidity Survey, Men in the White Other ethnic group had the highest percentage of positive screenings for bipolar disorder (3.1%), women had the second lowest (1.1%) and all adults had the second highest (2%).(63)

Table 30: Percentage of Positive Screening for Bipolar Disorder by ethnicgroup, 2014

Positive Screenings for Bipolar disorder	White British (%)	White Other (%)
Men	2.3	3.1
Women	1.8	1.1
All adults	2	2

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

In the 2014 Adult Psychiatric Morbidity Survey, all adults in the White Other ethnic group had the second-highest prevalence of experiencing suicidal thoughts (21%), suicide attempts (6.1%) and self-harm (6.1%) for all ethnic groups.(63)

2.2.1.2 Warwick-Edinburgh Mental Wellbeing Scale

The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) can be utilised to get a broader understanding of mental well-being. The WEMWBS scale has been developed to monitor the mental well-being of the general population aged 13 to 74; the scores range from 14 to 70.

The Health Survey for England Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) has shown that all adults from the 'Other White Background' ethnic group scored 52.9 out of 70, the second highest. The women's

WEMWBS (52.6 out of 70) was the second highest, and the men's WEMWBS (53.2 out of 70) was the second highest.(64)

Table 31: Adult mean WEMWBS score by gender and ethnic group:England, 2019

Ethnic Group	All Adult Mean WEMWBS score (out of 70)	Women Mean WEMWBS score (out of 70)	Men Mean WEMWBS score (out of 70)
White British	51	50	51
Other white backgrounds	53	53	53

Source: NHS Digital, Health Survey for England 2011 to 2019 (64)

2.2.1.3 Factors influencing mental health

Within surveys and qualitative studies it is well attested that mental health in Central and Eastern European communities is often negatively affected by factors relating to migration stress, discrimination and xenophobia, and financial difficulties.(9, 65, 66, 67, 68, 69)

For recent Central and Eastern European migrants, language barriers and an unfamiliarity with the local culture can be an alienating experience associated with stress, loneliness, and depression.(9) Language barriers particularly are associated with reduced self-esteem, self-efficacy, and a loss of identity.(65) Furthermore, studies have shown that even for voluntary migration from Central and Eastern European countries, the process of grief and loss, and feelings of abandoning one's home country, can be a psychologically distressing experience. Furthermore, historical conflicts, political instability and oppression in home countries can be closely related to trauma for Central and Eastern European migrants.(70) Migration stress is closely associated with and exacerbated by experiences of discrimination and financial hardship.

More recently, public media discourse relating to European migrants has become hostile, with narratives of Eastern European migrants 'stealing jobs', and draining public services and welfare becoming particularly prominent, following the Brexit vote.(65, 71) This has been connected to racial and xenophobic abuse experienced by Central and Eastern European migrants within schools, the workplace and in the street.(72) This is both a negative influence on mental health and a barrier to help-seeking behaviour. The experiences of discrimination and hate crime in this community will be discussed later in this chapter.

Studies have identified financial hardship associated with unemployment, job loss, low income, and exploitation to be a major factor in poor mental health in Central and Eastern European communities. In Chojnacki's survey of Polish migrants in the UK, 51% (N=202) identified 'work stress' as a cause of mental health difficulties.(65) Firstly, the phenomenon of 'talent loss' is well attested to, whereby language barriers and discrimination result in highly skilled and educated migrant workers occupying low-skilled jobs, which they are overqualified for, leading to feelings of frustration, boredom, professional identity loss and, in some cases, low mood.(65) For those in work, low income and long-working hours were identified as factors leading to stress and anxiety. In contrast, for those unable to work, a lack of awareness of how and where to obtain government support on arrival further impacted mental health.

2.2.1.4 Barriers to seeking support

Data on the Central and Eastern European community's contact with mental health services is not routinely recorded, and there is significant

variation in the data from smaller studies. In 2020 to 2021, according to NHS Digital, 5,764 out of 100,000 patients (5.8%) categorised as White Other used NHS mental health, learning disability and autism services, compared with 4,063 (4.1%) from the total population.(10)

The NHS Digital Mental Health Services Dataset shows that there were 140 per 100,000 detentions under the mental health act for the White Other ethnic group, compared with 100.4 per 100,000 (0.10%) for the total population).(73)

The 2014 Adult Psychiatric Morbidity Survey showed that 92% of people in the White Other ethnic group were not receiving treatment for mental or emotional problems. Of the 7.6% receiving treatment, 6.2% were only on medication, 0.9% were receiving only counselling or therapy, and 0.4% were receiving both.(63)

A 2018 study by Gondek and Kirkbride (N=536) suggested underutilisation of services in the Polish community, 58% of respondents (N=562) met the criteria for being likely to have a mental health disorder. However, only 16% of respondents had sought professional help in the UK.(68) Another 2020 study showed that out of the 369 participants who reported mental health problems, 41% sought support for their difficulties through the NHS in England.(65) Mental health stigma, community attitudes towards helpseeking, language barriers, and low confidence and trust in services have been identified as barriers to accessing mental health services within the Central and Eastern European community in several studies.(65, 68, 70, 74, 75) **Table 32:** Type of treatment for mental or emotional problems by ethnicgroup, England and Wales 2014

Type of Treatment for mental or emotional problems	White British (%)	White Other (%)
No treatment	85.5	92.4
Medication only	11.4	6.2
Counselling or therapy only	1.4	0.9
Both medication and counselling	1.7	0.4
Any treatment	14.5	7.6

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

A 2017 study by Chtereva and colleagues identified stigma surrounding mental health in Central and Eastern European communities with participants in one study reporting feelings of shame and fear of isolation from the community and views that mental health issues made you weak or should be kept private.(70) Participants expressed a preference for selfhelp strategies and seeking family and wider community support if needed and believed that professional help was for people who were seriously mentally unwell.

Low confidence in the ability of mental health services to help was also identified as a barrier. People expressed concerns about being misunderstood because of language barriers making it challenging to explain their experiences, and because of a lack of cultural awareness of mental health professionals.(74) It has also been suggested that there might be a lack of understanding of UK mental health services or a mistrust resulting from historic abuse of mental health institutions to oppress political dissidents during the communist era.

2.2.1.5 Suicide

In a 2014 study aimed to identify trends of suicide or undetermined injury, admission with suicide or self-harm among black and minority ethnic (BME) groups in an inner-city area of London, 92 people died of suicide or undetermined injury between 2009 and 2012; 59% of these were born in the United Kingdom (UK) but outside London, while 55% were born in London. Of those born outside the UK, Eastern and Western Europeans had the highest suicide rate of 51%. In relation to admission with suicide or selfharm, 996 individuals from BME groups were admitted between 2010 and March 2013. Those of Arab origin, North and South Americans had the highest number of admissions (28%), while Eastern and Western Europeans had 26%.(11)

Table 33: Suicidal thoughts, suicide attempts and self-harm by ethnicgroup, England and Wales 2014

Suicidal thoughts, suicide attempts and self-harm	White British (%)	White Other (%)
Suicidal thoughts (Men)	19.6	23.6
Suicide attempts (Men)	5.3	6
Self-harm (Men)	5.8	8.3
Suicidal thoughts (Women)	23.5	18.6
Suicide attempts (Women)	8.5	6.2
Self-harm (Women)	10.3	4.3
Suicidal thoughts (All Adults)	21.6	20.8
Suicide attempts (All Adults)	6.9	6.1
Self-harm (All Adults)	8.1	6.1

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2016 (63)

2.2.2 Alcohol

There is no national data on alcohol consumption specifically focusing on Central and Eastern and European communities, so White Other has been used as a proxy. Within the Other White Background ethnic group, 84% of adults had drunk alcohol in the last year, and 50% drink alcohol at least once a week. This is the third highest of the 11 recorded ethnic groups after White British (88% and 56%, respectively), and White Irish (89% and 67%, respectively). Alcohol consumption is higher among men in the Other White Background ethnic group (88% and 58%, respectively) than women (81% and 42%, respectively).(64)

Table 34: Alcohol consumption by ethnic group: England, 2011 to 2019

	Ethnic Group	Drank alcohol in the last year (%)	Drinks alcohol at least once a week (%)
	White British	88	56
N	Other White background	84	50

Source: NHS Digital, Health Survey for England Additional Analyses, 2011 to 2019 (64)

UK Chief Medical Officers (CMOs) advise that adults should not regularly drink more than 14 units of alcohol per week to ensure the risk from alcohol is kept low. Based on these recommendations, 20% of men from the Other White Background ethnic group reported consuming more than 14 units per week, as opposed to 8% of women.

2.2.2.1 Alcohol Related Hospital Admissions

For men, the White British, White Irish, White Other, 'Indian', and 'Other ethnic groups' make up a higher proportion of alcohol-related hospital admissions compared with admissions from all causes. Men from the ethnic group White Other account for 3.7% of all cause admissions, 4.7% are alcohol specific admissions. For females from the ethnic group White Other, 4.4% of admission for all causes and 3.3% for alcohol specific admissions. These statistics are the highest amongst all ethnic groups except White British (all admissions for White British men, 75% and alcohol specific admissions 79%, all admissions for White British women 74% and alcohol specific admissions 84%).

Within the Other White Background ethnic group, 16% of adults were nondrinkers, which is the third lowest after White British (12%) and White Irish (11%); 14% drank more than 14 units a week and 2% drank more than 50 units a week (35 for women); 21% of men from the Other White Background ethnic group reported consuming more than 14 units per week (10% of women). Similarly, 3% of men from the Other White Background ethnic group reported consuming more than 50 units per week, and 2% of women report consuming more than 35 units per week.(64)

Ethnic Group	Non- drinker %	Up to 14 units (low risk) %	More than 14, up to 35 to 50 units (increasing risk) %	More than 35 to 50 units (higher risk) %
White British	12	61	22	5
Other white backgrounds	16	67	15	2

Table 35: Alcohol consumption at least once per week by ethnic group:England, 2011 to 2019

Source: NHS Digital, Health Survey for England Additional Analyses, 2011 to 2019 (64)

Men from the White Other ethnic group make up a higher proportion of alcohol-specific admissions compared with admissions for all causes, meaning admissions for alcohol misuse are disproportionate for this group. However, this is not the case for women from the White Other ethnic group.(76)

It has been suggested that for Polish migrant communities help for alcohol misuse may only be sought when it has affected physical health or led to loss of work, which might mean there is underrepresentation in treatment services.(77) Studies have suggested that within the Polish community, patterns of drinking and pathways into alcohol treatment services can vary significantly by gender and migration status.(77, 78, 79) A study explored the divergent pathways through alcohol use, misuse and treatment access in a group of Polish migrants in London. Using an intersectionality

framework, this study examined the ways that social attitudes toward gender in both communities and access to services related to migrant status and class are experienced. With a view to informing treatment services, they discussed how a better understanding of these pathways, and the factors likely to influence them, can be used to address challenges experienced by Polish migrant women with problematic alcohol use.(77)

It has been suggested that Polish migrant women's drinking was more likely to be alone, at home and intentionally hidden from those around them because of community stigma, which can mean they are more likely to be socially isolated through drinking and might be underrepresented within alcohol treatment services. It was also shown that Polish women's alcohol misuse could be associated with experiences of domestic violence. In contrast, for Polish men, alcohol consumption was rooted in their culture and associated with maintaining social connection and friendship and avoiding isolation, which could lead to resistance to alcohol treatment. For Polish men in the study, alcohol misuse had impacted employment, family relationships and often led to homelessness. Furthermore, for some Polish women, particularly for those who did not speak much English or work outside of the home, financial and practical dependence on men they were in relationships with could be a barrier to help-seeking for alcohol misuse. Polish women's pathways into services were more closely associated with involvement with social services, whereas men were more likely to self-refer into treatment.(77)

2.2.2.2 Country Level Data

Table 36: Percentage of deaths attributable to Alcohol in Central andEastern European EU Countries and EU, 2019

Country	Deaths attributable to Alcohol in Central and Eastern European EU Countries (2020) (%)
Estonia	8
Bulgaria	7
Hungary	7
Romania	7
Croatia	6
Czechia	6
Latvia	6
Lithuania	6
Poland	6
Slovenia	5
Total EU	6

Source: European Commission, 2021 (13)

6% of deaths in the EU in 2020 were attributable to alcohol, however **Table 36** shows that Estonia, Romania, Bulgaria and Hungary were all above this average. In Bulgaria, alcohol consumption among adults in 2019 (11.4 litres per capita) was higher than the EU average (10.1 litres) and has increased over the past decade. Overall alcohol consumption per adult in Croatia decreased by about 10% between 2010 and 2019 and was equal to the EU average in 2019. In Estonia, overall alcohol consumption has been decreasing over recent years. Latvia reports the highest level of alcohol consumption per adult in the EU, and it was more than 25% above the EU average in 2019. In Poland since 2012, the average alcohol consumption among adult Poles has been higher than the EU average and showed an upward trend between 2016 and 2019. In 2019, Polish adults drank, on average, 11.0 litres of pure alcohol compared with 10.1 litres across EU countries. In Romania, more than one third of adults reported engaging in episodic, heavy alcohol consumption at least once a month, one of the highest rates in the EU (35%). There is a strong gender gap in heavy drinking, with more than half of Romanian men (53%) reporting such behaviour but fewer than one in five women (18%) reporting the same. In Slovenia, alcohol consumption among adults has remained relatively steady over the last decade, almost one in four (23%) Slovenian adults reported episodic heavy alcohol consumption (binge drinking) at least once a month in 2019, which is above the EU average (19%). Slovenian men were twice as likely (31%) to report heavy episodic alcohol consumption than women (15%).(13)

2.2.2.3 Binge Drinking

Binge drinking is defined as consuming six or more alcoholic drinks on a single occasion for adults, 13.3% of Estonian adults reported binge drinking at least once a week in 2020. However, this diverges widely by gender, with 22% of males binge drinking at least once a week compared with only 4% of women. In Croatia, among adults, 16.6% reported at least one episode of binge drinking per month in 2019, which was slightly below the EU average (19%). As with many other risk factors, the difference between men and women is very marked (25% for men compared with 10% for women). Heavy alcohol consumption is much more frequent among Latvian men, with almost 1 in 4 reporting at least one episode of binge drinking at least once a month in 2019, compared with 1 in 15 women.(13)

2.2.2.4 Alcohol consumption among 15 year olds

According to the European Commission EU Country Health Profiles 2019, alcohol consumption among adolescents in Bulgaria is also concerning: the proportion of 15-year-olds who reported having been drunk more than once in their life was among the highest in the EU in 2018 (30% in Bulgaria compared with an EU average of 22%). In Estonia, 27% of 15-year-olds reported having been drunk more than once in their life in 2018, a share above the EU average (22%). In Hungary, the average citizen, aged 15 and over drank 11.4 litres of pure alcohol a year, a figure 5% lower than in 2000 but still 13% higher than the EU average. Excessive alcohol consumption is a concern among adolescents, with nearly one third of 15-year-olds in 2018 reporting being drunk more than once in their life. The EU average is lower, at approximately one in five 15-year-olds. Furthermore, the proportion of 15-year-olds in Latvia who reported having been drunk more than once in their life has come down: while in 2010, 47% reported repeated drunkenness, in 2018, the rate was 25% - only slightly above the EU average (22%). In Lithuania, one third of 15-year olds reported having been drunk more than once in their life – the second highest share in the EU after Denmark. The proportion of 15-year-olds who reported having been drunk more than once in their life in Poland fell from 26% in 2014 to 19% in 2018, which is below the 22% EU average. Nearly 40% of 15 and 16 year olds in Romania reported at least one episode of heavy drinking during the preceding month in 2019, which is similar to the EU average.(13)

It is unclear if the trends seen in Central and Eastern European Countries will be applicable to residents in the United Kingdom. However, the data offers an insight into the health of the population group.

2.2.3 Substance Misuse

There is currently no data on substance misuse for the Central and Eastern European population. Data from 2017 shows that nationally, the White Other ethnic group was the second highest proportion of admissions for all causes for both men and women (3.7% and 4.4%, respectively).(76)

Primary evidence and literature reviews highlighted much greater coverage of Black, Asian, and Multi-ethnic groups, such as South Asians and Black Caribbeans, compared with other minority ethnic groups, such as the Chinese, Vietnamese and Eastern Europeans. Furthermore, the report noted a small amount of information on prescription drug abuse among certain groups (Asians, Romani gypsies), as well as about the association between drug use and prostitution among Eastern European and South-East Asian women. However, this was not enough to be identified as a key theme in the report. The table below, taken from the Adult Psychiatric Morbidity Survey, shows that for any illicit drug use in the past year by all adults in 2014, the White Other ethnic group (9.2%) was the highest except for Black, Black British (12%). However, for signs of drug dependence in the past year in 2014, the White Other ethnic group was the lowest for dependency on cannabis (1.4%), lowest for dependency on other drugs (0.6%), and second for any drug dependence (2.1%) for all adults. The White Other ethnic group reported the absolute lowest drug dependence in men (2.1%) but the second highest in women (2.1%). There is no clear explanation about this difference between the prevalence of illicit drug use and drug dependence.(63). This is shown in Table 37 and Table 38.

Table 37: Drugs used in the past year, all adults, by ethnic group, Englandand Wales 2014

Drugs used in the past year (All Adults, 2014)	White British (%)	White Other (%)
Cannabis	7.2	8.4
Amphetamines	0.6	0.9
Amyl nitrite (poppers)	0.5	0.6
Anabolic steroids	0.2	-
Cocaine	2	1
Crack	0.1	-
Ecstasy	2	2
Heroin	0.2	0.4
Ketamine	0.6	0.6
Mephedrone	0.5	0.5
LSD	0.3	0.3
Magic mushrooms	0.3	1
Methadone	0.2	-
Tranquilisers	0.5	0.2
Volatile substances	0.0	0.3
Any drug in the past year	8	9

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2014 (63)

Table 38: Signs of dependence on cannabis and other drug(s) by ethnicgroup, England and Wales 2014

Signs of dependence on cannabis	White British %	White Other %
and other drug(s) (2014)		
Cannabis only (Men)	2.9	1.2
Other drug(s) ^c (Men)	1.1	0.9
Any drug dependence (Men)	4.0	2.1
Cannabis only (Women)	1.5	1.7
Other drug(s) (Women)	0.5	0.4
Any drug dependence (Women)	1.9	2.1
Cannabis only (All Adults)	2.2	1.4
Other drug (All Adults)	0.8	0.6
Any drug dependence (All Adults)	3	2.1

Source: NHS Digital, Adult Psychiatric Morbidity Survey, 2014 (63)

2.2.4 Smoking

According to ONS data, in 2021, 13% of adults aged 18 or older in England were current smokers.(80) Health Survey for England (HSE) 2011 to 2019 data provides a more detailed ethnic breakdown of smoking status where 24% of adults from the Other White Background ethnic group were current smokers, the highest of any ethnic group. Similarly, 20% of all adults in the White Other ethnic group reported having used an E-cigarette, which is the fourth highest of any ethnic group, as shown in **Table 39**.(64)

Within the UK, the smoking prevalence is typically higher in the UK-born population across ethnic groups, except for Chinese males, Bangladeshi males and White Other males and females(81).

Table 39: Prevalence of smoking by ethnic group, England and Wales 2011to 2019

Ethnic Group	Never regularly smoked cigarettes %	Used to smoke cigarettes regularly %	Current smoker %
White British	54	27	19
Other white	50	26	24
backgrounds			

Source: NHS Digital, Health Survey for England Additional Analyses, 2019 (64)

E-cigarette use amongst all adults form the Other White Background ethnic group was lower (80% have never used, 20% have used e-cigarettes) than White British (78% have never used, 22% have used e-cigarettes in England).

Table 40: E-cigarette use by ethnic group, 2011 to 2019

Ethnic Group	Has never used e- cigarettes %	Has used e- cigarettes %
White British	78	22
Other white backgrounds	80	20

Source: NHS Digital, Health Survey for England Additional Analyses, 2019 (64)

2.2.4.1 Country Level Data

Smoking is a longstanding, major public health concern in Central and Eastern Europe, with 20% of adults in the EU in 2019 reporting smoking

daily. The percentage of adults that smoke daily in Lithuania, Poland, Romania and Slovenia are less than or equal to the EU average, whereas Croatia, Hungary and Latvia are above it. However, as shown in **Table 42**, this is much more prevalent among men than women, e.g. men in Latvia, Lithuania and Romania are at least 3 times more likely to smoke than women.(13)

Table 41: Percentage of deaths attributable to Tobacco in Central andEastern European EU Countries and the EU (2020)

Country	Percentage of deaths attributable to Tobacco in Central and Eastern European EU Countries (2020) %
Hungary	21
Poland	20
Croatia	20
Czechia	20
Bulgaria	18
Romania	17
Latvia	15
Slovenia	15
Estonia	15
Lithuania	14
Total EU	17
For Reference: UK	16

Source: European Commission, 2021 (13)

Table 42: Percentage of Adults, Men and Women reporting smokingtobacco daily in Central and Eastern European countries, 2019

Country	Percentage of adults smoking tobacco daily %	Percentage of men smoking tobacco daily %	Percentage of women smoking tobacco daily %
Hungary	25	33	20
Latvia	23	35	12
Croatia	22	26	20
Lithuania	19	30	10
Poland	20	23	15
Romania	20	31	8
Slovenia	18	-	-

Source: European Commission, 2021 (13)

2.2.4.2 Smoking among 15 year olds

Regular tobacco consumption among teenagers is a significant public health concern within Central and Eastern European countries. In 2018, 18% of 15 year olds in the EU reported smoking in the past month. This figure was 25% in Croatia, 23% in Hungary, 23% in Latvia, 20% in Czechia.(13)

2.2.5 Domestic Violence

Domestic abuse is defined in the UK by the Domestic Abuse Act 2021. The definition of domestic abuse is behaviour of a person ("A") towards another person ("B") if: (a) A and B are each aged 16 or over and are "personally connected" to each other, and (b) the behaviour is abusive (13). Behaviour is "abusive" if it consists of any of the following:

- Physical or sexual abuse
- Violent or threatening behaviour
- Controlling or coercive behaviour
- Economic abuse (acquiring, using, or maintaining money or other property, or obtaining goods or services)
- Psychological, emotional, or other abuse

The Crime Survey for England and Wales stated that from April 2019 to March 2020, 5.5% of all people in the UK aged between 16 and 74 years old reported being a victim of domestic abuse in the previous 12 months. From April 2019 to March 2020, 3.6% of those from the Other White Background ethnic group were reported domestic violence victims, suggesting that domestic violence in the Other White Background ethnic group was lower than the national average. Females from any Other White Background were more likely (4.7%) to be a victim of domestic violence than males (2.4%).(82)

2.2.5.1 Domestic Violence Against Women

A 2022 research study by Zielinska et al. investigated Polish women's experiences of domestic violence and abuse in the UK. (83) The study aimed to explore and understand why domestic abuse services receive few referrals from Polish women despite the Polish community constituting the second-largest foreign-born group in the UK with over 700,000 residents in the UK. Key themes from the project aligned towards the nature of abuse, identifying that women had to contend with multiple forms of abuse, with coercive and controlling behaviour amongst the most common, but always accompanied by other forms such as physical, psychological, economic, and sexual). Furthermore, women's understandings of abuse and possible

options were shaped by their migration experiences such as personal identity, social isolation, and practical concerns).(83)

It is difficult to measure the true prevalence of domestic abuse amongst Polish women in the UK, as the Crime Survey for England and Wales survey does not disaggregate by country of birth.

Evidence shows that Polish women are over-represented in femicide statistics. Statistics from a 10-year overview of femicide between 2009 to 2018 show that Polish women constitute 15% of non-UK-born victims. Two-thirds of all the killings are in the context of domestic violence, similar to the broader patterns of female femicide in the UK and worldwide. Over this decade, 19% of the 1,419 femicide victims were born outside the UK. Compared with the 13% of the UK population born outside the UK, this indicates that migrant women are at higher risk of femicide. Concerning Polish-born women, this data also shows that Polish-born victims were second in number only to UK-born victims, constituting 1.7% (24 women) of all victims. This is higher than the 1.2% of the UK population over this decade. The disproportionate numbers of Polish-born women in the femicide statistics may indicate higher prevalence levels of domestic abuse or greater barriers to leaving, hence a longer period spent within the abusive relationship, escalating the risk of serious harm and death.(84)

2.2.6 Hate Crimes and Discrimination

Data is not readily available on hate crimes by ethnic group for White Other nor specifically for Central and Eastern Europeans.

2.2.6.1 Experiences of Discrimination in the UK

Historically, trigger events have been shown to predict a rise in hate crimes, e.g., following the Brexit referendum, there was a reported increase in hate crimes related to race and religion. (85) Studies have identified that people from Central and Eastern European communities experience racialisation and xenophobia, which harms wellbeing. (71, 72, 74, 86) In a 2022 survey of 948 Central and Eastern European young people, 77% (n=882) said that they had experienced racism and xenophobia because of their nationality, accent, or appearance. Of the 882 participants who discussed their experiences of racism and xenophobia in the survey, 14% (n= 127) said these happened 'often' or 'very often', 32% (n= 278) said they 'sometimes' experienced racism, while 31% (n=274) said these experiences were 'rare'. Just under a quarter (23%, n= 203) said they had never experienced racism.(72)

Whilst their 'whiteness' has enabled a degree of invisibility, the complex intersections of ethnicity with skin colour, nationality, and social class, and rising anti-immigration discourses, has significantly impacted many lives. The racialisation of Central and Eastern European people has led to their categorisation as White Other and the privilege of their whiteness disappears, when their 'otherness' emerges through their accent or the influx of their native language when they speak English. Studies have highlighted an increased ethno-nationalism following the Brexit referendum, perpetuated by media discourses and hostile state policies, as enabling the xenophobia and othering experienced by Central and Eastern European migrants in the UK. The most common feelings reported by 948 Central and Eastern European young people in the 2022 survey in relation to the EU referendum were 'uncertain' (56%), 'worried' (54%) and 'scared' (27%) and almost half (49%) said they had seen 'more racism' since the EU

Referendum. Participants reported a range of xenophobic experiences (bullying, verbal and physical abuse, vandalism, discrimination) in schools, workplaces and in the street. However, the fact that Central and Eastern European migrants are white-passing or 'majority-group-passing' could mean that their mental health needs are overlooked and could obscure inequalities in access to services, care provision and clinical outcomes.(74)

2.2.6.2 Being LGBTQ+ in Central and Eastern Europe

Across Central and Eastern Europe many Lesbians, Gay, Bisexual, Trans, Queer and Intersex people are fighting for their individual and collective equal rights. Many laws have been passed and measures implemented to criminalise discrimination, violent acts, and hate speech based on sexual orientation and gender identity. However, according to the United Nations Development Programme (UNDP) there is much more that needs to be done to achieve full recognition and equality. This is key for our Central and Eastern European UK population as discrimination can have important impact upon lives for those born in Central and Eastern European countries, first- and second-generation migrants. Furthermore, it is often difficult to observe or measure discrimination directly. In 2018, 19% of the non-EU born and 8% of the EU-born population in the UK described themselves as members of a group that faces discrimination because of nationality, religion, language, race, or ethnicity.(87)

The focus of the UNDP report was on Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, and Serbia and presented analysis of these countries' legal, institutional, policy, social, cultural and economic environment on LGBTQI people. In Albania, the UNDP report showed that there have been substantial legal protections in the area of anti-discrimination. However, discrimination against LGBTQI people persists in

other areas. These include denial of the rights to marry and have a family, reassigned gender surgery for transgender people, and self-determination in relation to bodily integrity for intersex people. In Bosnia & Herzegovina, the UNDP report highlighted that LGBTQI activism over the past few years resulted in significant improvements in the institutional, legal and public policy framework for the protection of human rights of LGBTQI people. Serbia adopted a wide anti-discriminatory legal framework. However, there are legal gaps that leave the rights of LGBTQI people unregulated, including the rights of same-sex partners and access to documents for trans people. In the former Yugoslav Republic of Macedonia, over the past 10 years, there has been a decline in the protection of the rights of LGBTQI people, who are exposed to stigmatization, discrimination, and isolation.(87)

The European Union Agency for Fundamental Rights conducted a survey in 2013 on the Lesbian, Gay, Bisexual and Transgender communities across the EU, in light of a lack of comparable data. The 2013 survey provides valuable evidence of how LGBT persons in the EU and Croatia experienced bias-motivated discrimination, violence, and harassment in different areas of life, including employment, education, healthcare, housing, and other services. The findings showed that many hide their identity or avoid locations because of fear. Others experience discrimination and even violence for being LGBT. Most, however, do not report such incidents to the police or any other relevant authority.(88)

2.3 Healthy and Affordable Food

Key Findings

- A 2010 study found that migration to UK for Polish nationals has had impact on dietary patterns with migrants gradually meeting native-born levels of obesity following transition.
- Guidelines for those from a White European background for waist circumference are: below 94cm (37in) is 'low risk', 94–102cm (37-40in) is 'high risk' and more than 102cm (40in) is 'very high'. For women, below 80cm (31.5in) is low risk, 80–88cm (31.5-34.6in) is high risk and more than 88cm (34.6in)
- Data from the Active Lives Survey shows a higher proportion of adults consuming 5-a-day; however, these are likely overestimates compared with HSE data. Nationally from 2019 to 2020, 56.3% of the White Other ethnic group ate less than 5 portions of fruit and vegetables per day, which is comparable to all ethnic groups (55.4%) and White British (56.5%).
- The Health Survey for England 2011 to 2019, recorded the average BMI for each ethnic group in 2019. The mean BMI for Other White people in England was 25.4 for women and 26.2 for men. This compares to 27.5 and 27.4 respectively for the White British population.

2.3.1 Diet and Nutrition

A healthy diet has a key function in preventing non-communicable diseases (NCDs); healthy diet means eating a wide variety of foods in the right proportions and consuming the right amount of food and drink to achieve and maintain a healthy body weight. For this reason, understanding dietary patterns and preferences provide useful insight into the likely health outcomes and concerns within a community. Examples of NCDs include mental health conditions, stroke, heart disease, cancer, Type 2 diabetes, and chronic lung disease. (64)

2.3.1.1 Five-a-day

Data from HSE suggests that the Other White Background ethnic group had the second highest proportion of those eating at least 5 portions of fruit and vegetables per day (43%). (64)

Table 43: Daily Fruit and Vegetable consumption by ethnic group, Englandand Wales 2019

Ethnic Group	Mean daily portions of fruit and vegetables	Five or more portions consumed daily (%)
Other White	4.7	43
backgrounds		
White British	3.5	24

Source: NHS Digital, 2019 (64)

Data from the Active Lives Survey shows a higher proportion of adults consuming 5-a-day; however, these are likely overestimates compared with HSE data (89). Nationally from 2019 to 2020, 56.3% of the White Other

ethnic group ate less than 5 portions of fruit and vegetables per day, which is comparable to all ethnic groups (55.4%) and White British (56.5%).

Table 44: Percentage of adults aged 16 years and over who are eating 'five-a-day', by ethnicity: England 2019 to 2020

Ethnic Group	Percentage of adults aged 16 years and over who are eating 'five a day' by ethnicity %
White Other	56.3
White British	56.5

Source: Active Lives Survey (89)

A 2014 targeted health needs assessment was produced for the Eastern European Population in Warrington. It showed that changing food habits were linked to negative health effects among migrants. Research has shown that migrants are unlikely to be overweight or obese upon arrival in a Western country, but they slowly converge to native-born levels over time. This is supported by Rabikowska's 2010 study, that observed a link between eating British food and weight gain in a sample of Polish migrants.(90, 91) The study demonstrated that the migration to the UK had impact on dietary patterns with Polish migrants gradually meeting native-born levels of obesity following transition.

2.3.1.2 Food Behaviour and Habits

In 2018, Luton Borough Council conducted a gap-analysis to understand the food behaviour and habits of Eastern Europeans, specifically Polish immigrants, a group which constituted around 10% of the total local population. The study aimed to understand food-related behaviour by examining the role of key factors in food-related decision making amongst the Polish population, this included nutrition knowledge, perceptions of healthy diet, cost considerations, sources of information about nutrition, perceived influence of media, and peer pressure of family and friends. In addition, the study explored the significance of social and cultural factors in eating habits and evaluated the effect that school meals have on children's attitudes towards nutrition at home.(92)

In total, 33 semi-structured interviews with Polish immigrants were conducted. Emerging key themes aligned towards healthy food, described it as fresh, prepared from scratch at home, and cooked in an appropriate way. The main sources of information about food included their personal network and family and the internet. The main barriers to healthy eating were identified was the availability of unhealthy foods such as take-aways and unhealthy, pre-packaged foods in supermarkets; and lack of time to think about, prepare and cook healthy meals.

2.3.1.3 Country Level Data

In Central and Eastern European region poor diet that includes low fruit and vegetable intake, and high sugar and salt consumption differs across countries. According to the 2021 State of Health in the EU, Country Health Profiles by OECD, EU Commission and the European Observatory on Health Systems and Policies, low fruit and vegetable intake and high sugar and salt consumption were linked to increased mortality in several Central and Eastern European EU countries (Table 45).

Table 45: Overview of poor diet that includes low fruit and vegetable intakeand high sugar and salt consumption and the implication to mortality inCentral and Eastern European EU countries, 2020

Country	Poor diet identified (%)
Bulgaria	29
Croatia	22
Czechia	23
Estonia	18
Hungary	24
Latvia	17
Lithuania	25
Poland	20
Romania	25
Slovenia	16
EU Average	17

Source: European Commission, 2021 (13)

2.3.1.4 Food-based dietary guidelines

National food-based dietary guidelines provide context specific advice and principles on healthy diets and lifestyles. These are evidence-based and often respond to a country's public health and nutrition priorities, food production and consumption patterns, sociocultural influences, food composition data and accessibility. Typically, they propose a set of recommendations in terms of foods, food groups and dietary patterns to provide the required nutrients to promote overall health and prevent chronic diseases. Furthermore, many countries are working towards more holistic perspectives by addressing food combinations or meals, eating modalities, food safety considerations, lifestyle, and sustainability aspects in their food-based dietary guidelines.

Food-based dietary guidelines are needed, as often the causes of malnutrition are complex and multi-layered. National food-based dietary guidelines are provided in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Latvia, Poland, Romania and Slovenia. All of these countries' guidelines are very similar to those in the UK. The majority of countries provide a food pyramid divided into 4 to 6 food groups (Latvia and Poland represent their food guide as a plate, and Hungary represent theirs as a house, but the content does not differ). All of these countries recommend cereals, grains, tubers e.g. potatoes, alongside fruits and vegetables, make up the largest part of a person's diet. Furthermore, they all recommend animal source products e.g. meat, fish, and dairy. All of the guides recommend that foods high in fats and oils are important but should be eaten in moderation. At the top, or outside of, all of the diagrams are highly processed foods that are high in sugar or salt, which the guides suggest minimising. The guides from Bulgaria, Estonia, Poland, Romania, and Slovenia also emphasise the importance of consuming enough water and physical activity.(93)

2.3.2 Obesity

2.3.2.1 Body Mass Index

Body Mass Index (BMI) is a measure that uses weight (kg) divided by squared height (m²) to estimate an individual's obesity status. A BMI of 25kg/m² or higher is considered overweight.(64) In 2021, 26% of adults in England were obese and a higher proportion of men than women were either overweight or obese (69% compared with 59%).

The Health Survey for England recorded the average BMI for each ethnic group. The mean BMI within Other White Background was 25.4 for women and 26.2 for men. This compares to 27.5 and 27.4 respectively for the White British population.(64)

The Health Survey for England also showed that 68% of men and 50% of women from the White Other ethnic group were overweight or obese. This is compared with 67% and 59% of the White British population respectively.(64)

2.3.2.2 Waist Measurement

A larger waist usually also means there is excess fat inside your organs, and a larger waist usually also means there is excess fat inside your organs. Waist circumference can be utilised as an indicator for several health conditions. Excess fat around the abdomen usually suggests that there is excess fat inside the organs, which can contribute to high blood pressure and Type 2 diabetes.

For men, a waist circumference below 94cm (37in) is 'low risk', 94–102cm (37 to 40in) is 'high risk' and more than 102cm (40in) is 'very high'. For women, below 80cm (31.5in) is 'low risk', 80–88cm (31.5 to 34.6in) is 'high risk' and more than 88cm (34.6in) is 'very high risk'. These are the guidelines for people of White European, Black African, Middle Eastern, and mixed ethnicity. This is shown in **Table 46**.

Table 46: Age standardised waist circumference among adults aged 16 andover by ethnic group: England, 2011 to 2019

Waist Circumference	Other White Backgrounds (%)	White British (%)
Desirable waist circumference	52	36
High waist circumference	22	22
Very high waist circumference	26	42

Source: NHS Digital. Health Survey for England (64)

2.3.3 Food Insecurity

A study based on semi-structured interviews with residents from deprived and ethnically diverse wards in Luton, some of whom self-identified as being Polish highlighted a wide range of inter-relating psychological and sociocultural factors underpinning beliefs and practices in providing children with a healthy diet. (94) Parents, whilst aware of the importance of providing children with a healthy diet, faced challenges such as lack of time and balancing competing responsibilities, which were clear barriers to providing children with a healthy diet. Limited access to and affordability of healthy food and the overexposure of cheap, convenient, and unhealthy processed foods made it increasingly difficult for parents to provide a healthy diet for their growing families. Household food practices were also found to be situated within the wider context of sociocultural and religious norms around cooking and eating, along with cultural identity and upbringing.

2.4 Active at Every Age and Ability

Key Findings:

- A 2019 study found that cultural differences were identified as personal factors that influence participation in sport for Central and Eastern European migrants, as poor linguistic skills can increase alienation and reduce attendance in sporting activities and sports clubs.
- A 2021 report from people living in England found that 'Other White Background' ethnic group had the second-lowest prevalence of musculoskeletal conditions (7.8%) when compared with all ethnic groups, including the White British population (21%).
- In Birmingham from 2020 to 2021, the White Other population had higher rates of physical activity (65% were classified as active and 24% were fairly active and 11% were classified as inactive), than the White British population with 63%, 26% and 11%, respectively.
- Evidence from the Active Lives Survey 2020 indicates that nationally White Other adults are most likely to participate in sport in the last 28 days by activities such as walking for leisure, running or track and field athletics, attending fitness classes, and cycling for travel.

2.4.1 Physical Activity

UK Chief Medical Officers' physical activity guidelines suggest that adults should complete a minimum of 150 minutes of physical activity per week at moderate intensity or 75 minutes of physical activity per week at vigorous intensity.(95) Moderate activity is defined as anything that raises the heart rate, such as brisk walking or cycling. Vigorous activity is high intensity exercise, such as running.

The Active Lives Survey 2020 to 21 measured activity levels in England and provided analysis by ethnic group. Overall, the report noted that 61% of the general population was physically active (150+ minutes per week), and an additional 11% were fairly active (between 30 and 149 minutes per week).(12) The White Other population had higher rates of physical activity: 65% were classified as active, and 24% were fairly active, and 11% were classified as inactive. This was compared with 63%, 26% and 11%, respectively, for the White British population.

The Active Lives Survey also provides data on ethnicity by region. In Birmingham from 2020 to 21, 65% of the White Other population were classified as active and 26% as inactive, compared with 60% and 26% of the White British population, respectively.(96)

There are some disparities in the physical activity rates within the White Other population accounting for additional demographic factors such as gender, socioeconomic status and long-term health condition (LTHC) or disability. Of White Adults with a disability or LTHC, in the year 2020 to 2021, 68% were active at least twice in the last 28 days.(97)

Table 47: Proportion of the White Other population who are physically active by gender, socioeconomic status and disability or LTHC: England, 2020

White Other Demographic	Percentage who are Physically Active (%)
Gender: Male	63
Gender: Female	60
Socioeconomic Status: High social grade	73
Socioeconomic Status: Low social grade	52
Health Status: Disability or LTHC	45
Health Status: No Disability or LTHC	66

Source: Sport England. Active Lives Survey (12)

2.4.1.1 Physical Inactivity Rates

Physical inactive and sedentary behaviours involve an individual participating in little movement or activity and spending periods of time in a sitting, reclining or in a lying posture during waking hours. Adults who are physically inactive and spend large periods of time sedentary are at an increased risk of all-cause and cardiovascular mortality and increase cancer risk. Similar effects are seen in children (98)

Data is available on rates of physical inactivity (less than 30 minutes per week) from the Active Lives Survey. In 2020, 24% of the White Other population were physically inactive, compared with 26% of the White British population. Within the inactive populations, the White Other community had lower participation in any type of physical activity in the past 28 days compared with the White British population (Table 48).(12)

Table 48: Physical activity participation amongst those who are notphysically active by ethnic group: England, 2020

Activity in the last 28 days	White Other (%)	White British (%)
No activity	56	59
Light intensity only	38	36

Source: Sport England. Active Lives Survey (12)

Data on inactivity is also available for Birmingham. In Birmingham from 2020 to 2021, 26% of White Other adults were inactive, compared with 27% of the White British population.(12)

2.4.1.2 Participation in Sport

Evidence from the Active Lives Survey indicates that White Other adults are most likely to participate in sport in the last 28 days by activities such as walking for leisure, running or track and field athletics, fitness classes and cycling for travel.

Table 49: Levels of participation in different sports & activities in WhiteOther adults: England, 2020

Sport	White Other population engaged with activity (%)
Walking for leisure	46
Running or track and field athletics	18
Fitness Class	16
Cycling for Travel	10
Swimming	5
Football	3

Source: Sport England. Active Lives Survey (97)

The Chief Medical Officers also provide guidance on muscle strengthening activities. Adults are recommended to complete activities which "focus on improving or maintaining muscle strength, balance and flexibility twice per week(95). Nationally, in 2020, 47% of White Other adults took part in two or more sessions of muscle strengthening activities per week compared with 43% of White British adults.(96)

2.4.1.3 Barriers and Facilitators to Physical Activity

The Active Lives Adult Survey 2020 to 2021 reported perceptions on physical activity by ethnicity utilising the following phrases "I find sport and exercise enjoyable and satisfying", "It's important to me to do sport and exercise regularly" and "I feel that I have the ability to be physically active". The findings to these responses are summarised in **Table 50**.

Table 50: Perceptions regarding physical activity by ethnic group and'Agree or Strongly agree' response categories: England, 2020

Statement	Ethnic Group	Agree or Strongly Agree (%)
I find sport and exercise enjoyable and satisfying	White Other	78
I find sport and exercise enjoyable and satisfying	White British	70
It's important to me to do sport and exercise regularly	White Other	78
It's important to me to do sport and exercise regularly	White British	75
I feel that I have the ability to be physically active	White Other	88
I feel that I have the ability to be physically active	White British	82

Source: Sport England. Active Lives Survey (96)

A 2019 study by Anderson and colleagues explored the utilisation of sports for integration amongst Central and Eastern European migrants. Nineteen sport experts with substantial experience from Central and Eastern European countries, specifically Poland, Czechia, Hungary, Ukraine, Slovakia, and Romania. Cultural differences were identified as the most prominent barrier to sport participation for Central and Eastern European migrants, as poor linguistic skills can increase alienation and reduce attendance in sporting activities and sports clubs.(99)

These findings are aligned with those reported in a 2019 systematic review on the influence of sports integration and exclusion amongst migrant groups. The review explored the relationship between participation in

sports and physical activity and how participation can foster the integration of culturally and linguistically diverse (CALD) migrants. The term CALD was used to define those that live in a country where the dominant culture and language are different from their country of origin and acknowledges that both markers of race and ethnicity can influence the integration outcomes of migrants. The review concluded that migrants' cultural capital could be an asset and a source of exclusion from sports participation. Sport and physical activity are sites where migrant-specific cultural capital is (re)produced, where new forms of cultural capital that are valued in the destination society are generated, and where cultural capital is negotiated concerning the dominant culture.(100)

2.4.1.4 Country Specific Data

Based on WHO data from 2014, the following prevalence of physical activity could be gathered 64% of adults in the EU in 2014 reported engaging in at least 120 minutes of physical activity every week. This figure was 58% in Bulgaria, 60% in Czechia, 60% in Estonia, 60% in Latvia. However, this was a lot lower in Romania (38%). and a lot higher in Slovenia (75%). Among adolescents, about one in six 15-year-olds reported doing at least 60 minutes of moderate physical activity each day in 2018, with boys (24%) scoring much higher than girls (11%).

Table 51: Percentage of death attributable to low physical activity inCentral and Eastern European EU Countries, EU and UK (2020)

Country	Percentage of deaths attributable to low physical activity in Central and Eastern European EU Countries (2020) %
Latvia	4
Lithuania	4
Czechia	3
Croatia	2
Estonia	2
Hungary	2
Bulgaria	2
Poland	2
Romania	2
Slovenia	1
EU	2

Source: European Commission, 2021 (13)

Note: The overall number of deaths related to these risk factors is lower than the sum of each one taken individually, because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable intake, and high sugarsweetened beverages consumption.

2.4.2 Mobility

Mobility can be impacted by various musculoskeletal (MSK) conditions that affect the joints, bones, muscles, and spine. Those with MSK conditions may experience pain, joint stiffness and limited mobility when participating in physical activity.

Prevalence of long-term MSK conditions is available from a 2021 report by Versus Arthritis and NHS Fingertips. Between 11% and 17% of the England population reported a long-lasting MSK. The Other White Background ethnic group had the second-lowest prevalence of MSK (7.8%), when compared with all ethnic groups, including the White British population (21%).(101)

2.5 Living, Working and Learning Well

Key Findings

- There is very limited data on health-specific conditions for the working and learning Central and Eastern European community in the UK and Birmingham
- According to the 2021 Census, those born in EU2 countries (Romania and Bulgaria) had the lowest percentage employed in professional occupations (9.1%) (England and Wales data).
- For EU2-born adults, the most common reason for unemployment was looking after family or home, at 5.0%, for UK-born adults this was 4.0% (2021 Census, England and Wales).
- The percentage of unemployed usual residents aged 16 years and over by passport held in EU2 and EU8 is over 4%, this compares to 3% for those holding a British passport (2021 Census, England and Wales).
- EU2-born adults have the highest prevalence of employment (82%) followed by EU8 (78%), compared with 55% of the UK-born population (2021 Census, England and Wales).
- Central and Eastern European-born migrants are more likely than UK-born population to hold a higher education qualification (2021 Census, England and Wales).

• 35% of Polish- and 33% of Romanian-born residents in the UK hold a higher education certificate. This compares to 31% of the UK-born population (2021 Census, England and Wales).

2.5.1 Education, Qualification, Skills and Training

2.5.1.1 Not in Education, Employment or Training

Education and employment status have been considered indicators of future health outcomes. Being not in employment, education, or training (NEET) has been linked to poorer health status, due to the increased likelihood of unemployment, lower wages and/or lower quality of employment later in life. .(102)

There is no current NEET data for the Central and Eastern European or Other White ethic group, but national and regional-level statistics exist. In 2021, the national rate of NEET for 16 to 17-year-olds was 4.7%; in Birmingham, it was 6.6%.(101) The number of young people NEET increases when analysing the 16 to 24 age group. Data from the annual population survey shows that in the 3 years from 2017 to 2019, an average of 12% of young people aged 16 to 24 in the UK were NEET. There are also gendered differences observed in NEET rates, with men typically having lower rates across ethnic groups.(102)

2.5.1.2 Higher and Further Education

Table 52 shows that a larger proportion of first-generation migrants from Poland (35%) and Romania (33%) have a higher education qualification than people born in the UK (31%).

Table 52: Residents with higher education qualifications, by country ofbirth ordered: England and Wales, 2021

Country of Birth	Residents with higher education qualifications (%)
Poland	35
Romania	33
UK	31

Source: Office for National Statistics, 2023 (103)

The latest data from Higher Education Statistics Agency (HESA), the UKbased body which collects education-related data, has found that there were 6,455 students from Poland, 8,350 from Romania, 3,165 from Bulgaria, 2,995 from Russia, 2,525 from Lithuania, 1,805 from Czech Republic, and 1,610 from Hungary in higher education institutions in England in the academic year 2021 to 2022.(104)

Furthermore, there were 525 students from Poland, 770 from Romania, 265 from Bulgaria, 140 from Russia, 335 from Lithuania, 205 from Czech Republic, and 185 from Hungary in higher education institutions in the West Midlands in the academic year 2021 to 2022. (104)

2.5.1.3 Highest Level of Qualification

According to the Department for Education, 81% of students went into education, apprenticeships, or employment for at least 2 terms after reaching the end of 16 to 18 study (including A levels) in July 2017; 78% of White Other students were in education, apprenticeships, or employment, compared with 82% for White British ethnic group; 12% of White Other students were in no sustained education or employment, compared with 13% for White British ethnic group.(103)

Table 53 shows that a larger proportion of first-generation migrants from Central and Eastern European (22%) had no qualifications compared with people born in the UK (18%). However, the UK-born population had larger proportions of people whose highest level of qualification was level 1, 2 or 3 than Central and Eastern European population (43% and 28%, respectively), and the Central and Eastern European-born population (37%) had a larger proportion of people with Level 4 qualifications e.g., degree compared with UK-born (31%). This might suggest that the Central and Eastern European-born population are generally more highly educated.

Similarly, the White Other (48%) population had a larger proportion of people with Level 4 qualifications compared with the White British (26%) population. The White British population had higher percentages of people with no qualifications and Level 1, 2 and 3 qualifications
Table 53: Highest Level of Qualification by country of birth and ethnicity:England and Wales, 2021

Highest Level of Qualification	Country of Birth: Central and Eastern Europe (%)	Country of Birth: UK (%)	Ethnic group: Other White (%)	Ethnic group: White British (%)
No qualifications	22	18	15	18
Level 1 and entry level qualifications	9	10	7	10
Level 2 qualifications	8	15	7	14
Apprenticeship	6	6	5	6
Level 3 qualifications	12	19	13	18
Level 4 qualifications				
or above	37	31	48	30
Other	7	2	6	2

Source: Office for National Statistics, Census 2021 (103)

2.5.1.4 Highest Level of Qualification amongst migrants

Migrants are less likely to report qualifications below higher education level as their highest qualification, with 44% of those born outside of the UK reporting they have a level 4 or above qualifications, compared with 31% of those born in the UK (Table 54).

Table 54:	Central	and	Eastern	Europe	Migrants	who	have	а	higher
education qualification: England and Wales, 2021									

Country of Birth	Population living in England and Wales	Higher education qualification obtained (%)
Union of Soviet Socialist Republics not otherwise specified	1,600	78
Russia	51,895	72
Belarus	6,170	66
Slovenia	3,380	64
Azerbaijan	3,205	63
Armenia	2,350	62
Ukraine	36,725	59
Serbia	11,095	56
Georgia	4,675	54
Bosnia and Herzegovina	7,710	53
Croatia	12,315	52
Estonia	9,475	51
Czechoslovakia not otherwise specified	740	50
Yugoslavia not otherwise specified	2,070	50
Montenegro	1,045	46
North Macedonia	6,860	46
Hungary	89,255	40
Moldova	48,515	39
Bulgaria	137,190	39
Czechia	42,165	38
Lithuania	153,490	35

Country of Birth	Population living in England and Wales	Higher education qualification obtained (%)
Poland	698,915	35
Romania	491,105	33
Slovakia	66,255	32
Latvia	80,985	30
Козоvо	30,290	30
Albania	65,705	28
UK Average	-	31

Source: Office for National Statistics, Census 2021 (105)

2.5.2 Employment and Economic Activity

2.5.2.1 Employment

Data on employment and unemployment rates by ethnic group are available from the Labour Force Survey (LFS) and the 2021 Census. The data from the 2021 Census typically shows higher rates of unemployment. As the Census was conducted during the coronavirus pandemic it is assumed that some furloughed people likely reported that they were out of work rather than in employment when completing the survey. Additionally, there were differences in methods for data collection which led to different estimates.(106)

Overall, 27.8 million adults (57%) aged 16 years and over were in employment, and the percentage of adults in employment varied by country of birth and by passport held. Those who were born within member states of the EU had the highest percentage of adults in employment at 71%, compared with 58% of those born outside the EU, and

56% of those born in the UK. Within the EU-born population, EU2 countries (Romania and Bulgaria) had the highest percentage in employment (80%), with those born in "other EU countries" (Malta, Croatia, and Cyprus) having the lowest (48%).

As shown below in **Table 55**, EU2-born adults have the highest percentage of people in employment.

Table 55: Percentage of usual residents aged 16 years and over inemployment by country of birth, England and Wales, Census 2021

Category	In Employment (%)
EU2	80
EU8	78
United Kingdom	55

Source: Office for National Statistics, Census 2021 (105)

2.5.2.2 Unemployment

A similar pattern of employment was seen when looking at the passports held, with 73% of those holding an EU passport being employed, with British passport holders at 60%, non-EU passport holders at 58%; those who do not hold a passport had the lowest percentage in employment at 28%. As seen in **Table 56**, the percentage of unemployed usual residents aged 16 years and over by passport held in EU2 and EU8 is over 4%, compared with 3% for those holding a British passport.

Table 56: Percentage of unemployed usual residents aged 16 years andover by passport held, England and Wales, Census 2021

Category	Unemployed (%)
EU2	4.5
EU8	4.3
United	3.1
Kingdom	

Source: Office For National Statistics, Census 2021 (105)

Table 57 shows that, for those not in employment, a larger proportion of people born in Central and Eastern Europe (31%) have worked in the last 12 months compared with people born in the UK (12%). Furthermore, a larger proportion of the UK-born population (65%) have not worked in the last 12 months compared with the Central and Eastern European-born population (37%). However, a larger proportion of the Central and Eastern European-born European-born population (32%) have never worked compared with UK-born (23%) individuals. Data about the White Other and White British populations reflect this pattern.

Table 57: Employment history of people not in employment by country ofbirth and ethnicity: England and Wales, 2021

Employment History	Country of birth: Central and Eastern Europe (%)	Country of birth: UK (%)	Ethnicity: Other White (%)	Ethnicity: White British (%)
Not in employment: Worked in the last 12 months	31	12	26	11
Not in employment: Not worked in the last 12 months	37	65	46	68
Not in employment: Never worked	31	23	27	21

Source: Office For National Statistics, Census 2021 (105)

2.5.2.3 Economically Active

The 2021 Census found that 62% of residents of the White Other ethnic group were employed, compared with 60% of the overall population in England and Wales. Furthermore, the White Other ethnic group was also higher in the self-employed and in the unemployment categories. This is shown below in **Table 58**.

Table 58: Economic activity status by ethnic group, of those aged 16 to 64years: England and Wales, 2021

Ethnic Group	Employee (%)	Self-Employed (%)	Economically Active: Unemployed (%)	Economically Inactive (%)
Other White	62	16	5	17
White British	62	11	4	23
England and Wales average	60	11	4	25

Source: Office for National Statistics, Census 2021 (107)

2.5.2.4 Economically Inactive

Nearly one in two (49%) adults born in "other EU countries" (Malta, Cyprus, and Croatia) were economically inactive, adults born in the EU2 (Romania and Bulgaria) had the smallest percentage of people inactive (15%). This compares to 40% of UK-born adults who were economically inactive. This is shown in

Table 59.

Table 59: Reasons for not working or not seeking work or being availableto work (economic inactivity), by ethnic group of those aged 16 to 64 years:England and Wales, 2021

Ethnic Group	Student (%)	Looking after home or family (%)	Long- term sick or disabled (%)	Retired (%)	Other (%)
Other White	5	4	5	4	3
White British	6	5	5	4	3
England and Wales average	7	6	5	3	4

Source: Office for National Statistics, Census 2021 (107)

Those who identified within the White Other ethnic group were less likely to be economically inactive when compared with all other ethnic groups.

Economically inactive people could provide a reason for their inactivity. For most groups, the most common reason was retirement. For those born in other EU countries, this was 32% of all adults, and 24% for UK-born adults. The group with the smallest percentage of people retired was EU2, which had 1.6% of all adults retired. The reason for this can be attributed to different age structures between groups.

For EU2-born adults, the most common reason for inactivity was looking after family or home (5.0%), which was similar also for UK-born adults (4.0%).(108)

Table 60 shows that in 2021 69% of the Central and Eastern European-born population were economically active and employed, compared with 43% of the UK-born population. There were similar levels of economically active people unemployed but seeking work and economically inactive students. However, there were significantly more retired people born in the UK (19%) than those born in Central and Eastern Europe (2.4%). This reflects the Central and Eastern European-born population generally being younger and having a larger percentage of working-age people than the UK-born population.

Table 60: Economic Activity Status by Country of Birth: England and Wales,2021

	Central and Eastern	
Economic Activity Status	Europe (%)	UK (%)
Does not apply	7	20
Economically active (excluding full-	74	54
time students): In employment		
Economically active (excluding full-	4	3
time students): Unemployed: Seeking		
work or waiting to start a job already		
obtained: Available to start working		
within 2 weeks		
Economically active and a full-time	3	1
student: In employment		
Economically active and a full-time	0.6	0.5
student: Unemployed: Seeking work or		
waiting to start a job already obtained:		
Available to start working within 2		
weeks		
Economically inactive: Retired	3	24
Economically inactive: Student	4	5
Economically Inactive: Looking after	5	4
home or family		
Economically inactive: Long-term sick	1	5
or disabled		
Economically inactive: Other	4	3

Source: Office For National Statistics, Census 2021 (107)

2.5.2.5 Occupation

The professional occupation group includes jobs such as doctors, nurses, solicitors, and teachers. Those born in EU2 countries (Romania and Bulgaria) had the lowest percentage employed (9.1%), making up 0.8% of those working in these occupations. Among UK-born adults, 20% were employed in professional occupations and 77% of all those working in professional occupations. (107)

The broad occupational group with the largest non-UK-born workforce was elementary occupations (31%), which is a broad category of occupations that often includes routine and manual labour roles. Those born in the EU8 were the largest part of this occupation group at 7.8% of all elementary occupations' workers. (107)

For the EU2 and the EU8, elementary occupations (e.g., cleaners, shelf fillers and bar staff) were the most common, respectively, accounting for 28% and 25% of occupations.

Of those who worked as sales and retail assistants, 18% were not born in the UK, EU8 makes up 2.5% of this total.

Of adults born in EU2 (Romania and Bulgaria), 18% were employed in construction and of those born in non-EU European countries, 15% worked in this sector. EU2 countries made up 3.7% of all those employed in construction, with EU8 countries making a larger part of the non-UK-born workforce (3.8%).

Those born in EU8 countries made up the largest part of the non-UK-born workforce, at 16% of all employed in the manufacture of food products.(108)

The NHS workforce survey from 2022 identified that most staff in England are British, with around 220 thousand out of 1.4 million staff (16%) reporting a non-British nationality - this amounts to 1 in 6 NHS staff with a known nationality. Polish was the 6th most common nationality for NHS staff (10,836 people), followed by Romanian, which ranked 10th (5,519 people).

Table 61 shows that a larger proportion of the Central and Eastern European-born population (25%) work in elementary occupations compared with the UK-born population (9.1%). Similarly, 16% of the Central and Eastern European-born population are process, plant and machine operatives compared with 6.3% of the UK-born population, and 14% of the Central and Eastern European-born population work in skilled trade occupations compared with 11% of the UK-born population. Furthermore, the UK-born population are more likely to work in professional, managerial, directorial, official, and associate professional and technical occupations than the Central and Eastern European-born population. (107)

The White Other and White British ethnic groups generally follow these same patterns. However, the White Other population is more likely to work in a professional occupation and less likely to work in skilled trade occupations than the White British population.

Table 61: Current occupation by Country of Birth and ethnicity: Englandand Wales, 2021

Occupation	Central and Eastern European- Born (%)	UK- Born (%)	Other White (%)	White British
Managers, directors and senior officials	8	13	11	13
Professional occupations	11	19	20	19
Associate professional and technical occupations	7	14	11	14
Administrative and secretarial occupations	6	10	7	10
Skilled trades occupations	14	10	10	11
Caring, leisure and other service occupations	8	8	8	10
Sales and customer service occupations	5	8	5	8
Process, plant and machine operatives	16	6	11	6
Elementary occupations	25	9	18	9

Source: Office For National Statistics, Census 2021 (107)

2.5.2.6 Seasonal Workers

There are 467,000 people in the UK's agricultural workforce. A significant proportion of this, at least 55,000, are seasonal or casual labour. Farmers rely overwhelmingly on workers coming from abroad to fill these seasonal

roles. A visa scheme for migrant farm workers was in place in some form between 1945 and 2014. Participants were typically students from European countries. (109)

Since 2008, the Seasonal Agricultural Workers Scheme (SAWS) was restricted to Romanian and Bulgarian citizens until it was scrapped altogether in 2014. The Government considered that EU workers could meet demand and allowed to come to the UK without visas, particularly from Eastern European countries.

Following reports of labour shortages and concerns about the effect of ending EU free movement, a new Seasonal Worker Pilot scheme was announced in 2018. The new Seasonal Worker scheme launched in March 2019 initially had a quota of 2,500 places per year. The quota has increased every year since 2019. In 2022, there were 38,000 visas available (plus another 2,000 for poultry workers).

It has been evidenced that Seasonal Worker visa holders may be more vulnerable and open to exploitation than other workers. There are barriers to participation in this scheme, including permit costs, accommodation, and travel.(110) Whilst the UK government has noted there is no evidence of modern slavery in the seasonal workers, the UK Labour Market Enforcement Strategy 2019 to 2020 reported that agriculture is at the highest risk of modern slavery in the UK.(109)

Research has shown that migrant workers rely on their sponsors who brought them to the UK, as high visa costs often leave migrants vulnerable to exploitation.

2.5.3 Deprivation

2.5.3.1 Index of Multiple Deprivation

The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England and is calculated using outputs from seven Indices of Deprivation (IoD) domains. These include income, employment, crime, barriers to housing and services and living environment. An IMD decile output of 1 demonstrates a neighbourhood which is in the 10% most deprived in the country.(111)

People from the White British, White Irish and White Other ethnic groups were the least likely out of all ethnic groups to live in the most incomedeprived 10% of neighbourhoods; 8.2% of people from the White Other ethnic group lived in the most deprived 10% of neighbourhoods (198,309 people), compared with 9.1% (3.8 million) of White British.(111)

This is expanded upon about income-deprived neighbourhoods. People from the White Other ethnic group were the least likely to live in the most income-deprived 10% neighbourhoods (8.7%); this figure matches that of the White British ethnic group. Furthermore, 6.9% of the White Other ethnic group live in the most employment-deprived 10% neighbourhoods, this compares to 9.6% for the White British population.

Table 62: Percentage of people living in the most deprived 10% ofneighbourhoods, by type of deprivation and ethnicity, England and Wales,2021

Ethnicity	Education, training, and skills (%)	Health, deprivation, and disability (%)	Crime (%)	Barriers to housing and services (%)	Living environment (%)
White Other	8	7	13	17	14
White British	10	10	9	8	9
England Average	10	10	10	11	10

Source: Ministry of Housing, Communities & Local Government (111)

The White Other population is less likely to live in the most deprived 10% of neighbourhoods by Education, Training and Skills, and Health and Disability than the White British population and general English population. However, they are more likely to live in the most deprived 10% of neighbourhoods for Crime; Barriers to Housing and Services; and Living Environment.

Table 63: Dimensions of Household Deprivation by Ethnic Group,Birmingham, Census 2021

	White Other (%	White British (%
Household Deprivation	Yes)	Yes)
Education Dimension	18	21
Employment Dimension	13	17
Health and Disability Dimension	19	40
Housing Dimension	18	11

Source: Office For National Statistics, Census 2021 (6)

Table 64: Dimensions of Household Deprivation by Country of Birth:England and Wales, Census 2021

Household Deprivation	Central and Eastern European (% Yes)	UK (% Yes)
Education Dimension	21	15
Employment Dimension	12	12
Health and Disability Dimension	16	34
Housing Dimension	24	9

Source: Office For National Statistics, Census 2021 (6)

The White British population in Birmingham and UK-born population in England and Wales are more likely to be deprived in the employment dimension and health and disability dimension compared with the White Other and Central and Eastern European-born populations, respectively. This likely reflects the older age of these demographics. Whilst the White Other population are slightly less likely to be deprived in the education dimension, the opposite is the case for the Central and Eastern Europeanborn population. Both the White Other population and Central and Eastern European-born population are more likely to be deprived in the housing dimension than their respective counterparts.

2.5.3.2 State Support

On average, 51% of families in the UK received a type of state support, such as the State Pension or Child Benefit, in the 3 years to March 2021. White Other ethnic group families were found to receive less state support when compared with other ethnic groups.

The percentage of families receiving non-income related benefits for the White Other ethnic group was 23% for Child Benefit, this compares to 17% for the White British ethnic group and 18% in England. Furthermore, families from the White Other ethnic group were the least likely (8%) to receive income-related benefits.

Table 65: Percentage of families receiving state support, by ethnicity andtype of support, England and Wales, 2021

Ethnicity	Any state support (%)	Any tax credits (%)	Any income related benefit (%)	Any non-income related benefit (%)
White Other	37	6	11	35
White British	54	5	16	51
England	51	6	16	48

Source: Department for Work and Pensions (112)

2.5.4 Housing

Homeownership, rent and overcrowding vary hugely between ethnic groups. This does not include communal establishments, such as university halls of residence or care homes.

The 2021 Census tells us if people lived in a home that is owned outright, owned with a mortgage or loan, or if they lived in a rented home. If rented, the census tells us if that was socially rented housing (such as from a council or housing association), private rent, or if they were living rent-free (for example, in a home owned by a family member or friend). Ethnicity is individual; thus, the focus is on the percentage of people rather than the percentage of rented or owned properties.

A 2012 ethnographic study examined the everyday experiences of welfare provision among EU migrants living in Glasgow. The study focused on Czech and Slovak nationals who came to the UK after 2004. This study highlighted a heightened sense of insecurity in their everyday lives, which arises from the increasingly common experiences of rejections of their benefits applications and payment delays.

2.5.4.1 Tenure

People from minority ethnic groups are over-represented in the private rented sector, the housing sector most associated with a range of poor conditions (113). A third of minority ethnic households lived in privately rented accommodation in 2013 to 14 compared with 18% of households in the white population (as defined by ethnicity of the household head).(113)

A more detailed analysis using 2021 Census data found that private renting was highest among Other White (51%) and Arab (49%) populations and

lowest among Black Caribbean and White British populations (both 15%).(114)

Table 66: Tenure by Country of Birth, England and Wales, 2021

Tenure	Central and Eastern European Country of Birth (%)	UK Country of Birth (%)
	112,337	14,383,106
Owned: Owns outright	(6)	(29)
Owned: Owns with a mortgage or	433,483	18,205,395
loan or shared ownership	(22)	(37)
	230,580	
Rented: Social rented	(11)	8,205,014 (17)
	1,222,183	
Private rented or lives rent free	(61)	7,969,721 (16)
Total	1,998,583	48,763,236

Source: Office For National Statistics, Census 2021

For Central and Eastern European-born people in the UK 61% live in private rented accommodation or live rent-free, compared with 16% of the UK-born population; 5.6% of the Central and Eastern European-born population own their house outright compared with 30% of the UK-born population; 22% of the Central and Eastern European-born population own their house with a mortgage, loan or shared ownership compared with 37% of the UK-born population. (114)

Tenure	White Other	White British
	(%)	(%)
Owned: Owns outright	3,332 (8)	137,095 (29)
Owned: Owns with a mortgage or loan		
or shared ownership	9,823 (22)	152,424 (32)
Rented: Social rented	3,970 (9)	97,831 (20)
Private rented or lives rent free	27,615 (62)	90,021 (19)
	44,740	477,371

Table 67: Tenure by Ethnic Group: Birmingham, 2021

Source: Office For National Statistics, Census 2021

In Birmingham, 62% of White Other ethnic group live in private rented accommodation or live rent-free, compared with 19% of White British population; 7.5% of the White Other population own their house outright compared with 29% of the White British population; 22% of the White Other population own their house with a mortgage, loan or shared ownership compared with 32% of the White British population.

2.5.4.2 Overcrowding

Households are classified as overcrowded if there are more people in the households than the recommended number of bedrooms, according to ONS suggestions. According to the 2021 census, an occupancy rating of -1 or less is an indication that a household is overcrowded. 15% of the White Other ethnic group in Birmingham live in overcrowded housing compared with 7.3% of the White British ethnic group. This is shown in **Table 68**.

Table 68: Occupancy Rating by Ethnic Group: Birmingham, 2021

Occupancy Rating	White: Other	White:
	White	British
	(%)	(%)
Occupancy rating of bedrooms: 0 or	37,962	442,404
more	(85%)	(93%)
Occupancy rating of bedrooms: -1 or	6,778	34,967
less	(15%)	(7%)
Total	44,740	477,371

Source: Office For National Statistics, Census 2021 (114)

Table 69: Occupancy Rating by Country of Birth: England and Wales, 2021

Occupancy Rating	Central and	UK born
	Eastern	
	European born	
Occupancy rating of bedrooms: 0 or		
more	1,613,840 (81)	45,600,258 (93)
Occupancy rating of bedrooms: -1 or	384,745	3,162,982
less	(19)	(6)
Total	1,998,585	48,763,240

Source: Office for National Statistics, Census 2021 (114)

Similarly, 19% of Central and Eastern European-born population in England and Wales live in overcrowded housing compared with 6.5% of the UKborn population (**Table 69**).

2.5.5 Physical Health

2.5.5.1 General Health

Health Survey for England 2011 to 2019 highlights the differences between groups in the prevalence of health conditions and health-related behaviours for different age profiles of ethnic groups (Table 70).

Table 70: Self-assessed general health by ethnic group, England and Wales,2019

Self-assessed general health (Observed)	Other White backgrounds %	White British %
Good or very good	86	75
Fair	10	18
Bad or very bad	4	8

Source: NHS Digital, Health Survey For England (64)

The HSE recorded self-assessed general health by ethnic group, men and women from the 'Other White Background' ethnic group were the most likely to report their health as 'good or very good' (87% and 85% respectively), this the second highest amongst all ethnic groups except Chinese (89% and 90% respectively). This is shown in **Table 71**.

Table 71: Age-standardised self-assessed general health by ethnic groupand sex: England, 2011 to 2019

Ethnicity and Gender	Health: Good or very good (%)	Health: Fair (%)	Health: Bad or very bad (%)
Other White background women	79	14	7
Other White background men	80	14	7
White British women	74	18	8
White British men All Adults (White	76	17	7
British)			
All Adults (Other White Background)	79	14	7

Source: NHS Digital. Health Survey for England (64)

Table 72 shows that the Central and Eastern European-born population has a larger proportion of people reporting very good (53%) and good health (38%) compared with the UK population (48% and 33%, respectively). The UK-born population has a larger percentage of people reporting bad (4.2%) and very bad health (1.3%) compared with the Central and Eastern European-born population (1.8% and 0.4%, respectively). This likely reflects the younger age of the Central and Eastern European-born population. The White Other and White British ethnic groups follow a similar pattern; however, in contrast, the White Other ethnic group has a lower percentage of people with good health than the White British ethnic group.(64)

Table 72: Self-assessed general health by country of birth and ethnicity:England and Wales, 2021

Self- assessed general health	Central and Eastern European Country of Birth (%)	UK Country of Birth (%)	Other White (%)	White British (%)	
Very good	1,184,114 (53)	23,868,790	2,098,424	20,404,757	
health		(48)	(57)	(46)	
Good health	843,110 (38)	16,480,558	1,228,069	15,136,348	
		(33)	(33)	(34)	
Fair health	150,606 (7)	6,515,479	255,969	6,212,914	
		(13)	(7)	(14)	
Bad health	39,462	2,095,344	67,445 (2)	2,012,285	
	(1)	(4)		(4)	
Very bad	9,594	619,399	18,090	588,734	
health	(0.4)	(1)	(0.4)	(1)	
Total	2,226,886	49,579,570	3,667,997	44,355,038	

Source: Office For National Statistics, Census 2021 (64)

2.5.5.2 Quality of Life

There is no data on the quality of life within the Central and Eastern European population in the UK.

2.5.5.3 Diabetes

Diabetes UK data from 2021 suggests that more than 4.9 million adults in the UK were living with diabetes, and 850,000 were undiagnosed. Type 2 diabetes contributes to around 90% of all cases of diabetes.(115)

There is currently limited data on the prevalence of Diabetes within the Central and Eastern European population in the UK.

Diabetes UK has translated their resources on diabetes information into different languages and formats. These also include Polish-translated video materials covering newly diagnosed diabetes, what diabetes is and how to measure one's waist and check blood sugar, and Romanian-translated materials covering diabetes and foot care.(116)

2.5.5.4 Hypertension

Hypertension, also known as high or raised blood pressure, significantly increases the risk of heart, brain, kidney and other diseases. Blood pressure readings are composed of two numbers, the top number (systolic pressure) and the bottom number (diastolic pressure). Hypertension is defined as a blood pressure more than or equal to 140/90 mmHg (or receiving antihypertensive drug treatment), and improving hypertension control, including among those at high risk (<130 mmHg systolic BP), is key to reducing deaths and preventing CVD-related events.

High blood pressure remains a serious problem in Central and Eastern European countries, most notably Slovenia, Lithuania, and Croatia. The highest average blood pressures in the world in 2015 were 138 mmHg (systolic) recorded among Slovenian men.(117) It is estimated that Birmingham has around 12% of its registered population on the hypertension register, which compares to 14% nationally across the UK.

Table 73: Age standardised prevalence of hypertension in adults aged 16or older by ethnic group: England, 2011 to 2019

Hypertension	Other White Backgrounds (%)	White British (%)
Normotensive untreated	86	72
Hypertensive controlled	3	10
Hypertensive uncontrolled	2	6
Hypertensive untreated	9	13
All with hypertension	14	28

Source: NHS Digital. Health Survey for England (64)

2.5.5.5 Cardiovascular Diseases

Cardiovascular disease (CVD) is the leading cause of death nationally, causing 24% of all deaths within the general population in England and Wales in 2019. CVD is the collective term for diseases affecting the circulatory system, such as the heart, arteries and blood vessels. Diabetes increases the risk of CVD almost two-fold.

There is limited data on the prevalence of CVD by ethnic group, and proportions of deaths caused by CVD.

Regional specific data shows that death rates from both ischaemic heart disease (IHD) and stroke are generally higher in Central and Eastern Europe

than in Northern, Southern and Western Europe, in addition evidence shows that CVD mortality is now falling in most European countries, including Central and Eastern European.(118)

2.5.5.6 Cancer

Cancer is an illness where abnormal cells in the human body divide in an uncontrolled way with some cancers eventually spreading into other tissues across the body. There are more than 200 different types of cancer, and 1 in 2 people in the UK will get cancer in their lifetime.

There is currently limited data on cancer within the Central and Eastern European populations in the UK.

Macmillan cancer support offers translations of cancer information and support in Polish, Russian, and Ukrainian, covering various topics such as types of cancer, what to do if diagnosed with cancer, treatment for cancer, living with cancer, and end-of-life, which can offer tailored support and guidance.

Country-specific data offers an insight into the lifetime risk of cancer diagnosis by sex, showing that six Central and Eastern European countries have the highest rates (Table 74).

Table 74: Lifetime risk of a cancer diagnosis in Central and Europeancountries, by sex, 2020

Country	Male (%)	Female (%)
Hungary	39	30
Latvia	36	25
Slovakia	34	24
Czechia	33	24

Country Male (%) Female (%) Moldova 31 21 29 20 Bulgaria Romania 27 19 27 20 Ukraine Bosnia Herzegovina 26 20 Montenegro 24 21 Albania 20 14

Source: Cancer Atlas, Europe (119)

2.5.6 Living with a Physical Disability

According to the HSE, 33% of the 'Other White Background' population have no longstanding condition, compared with 42% of the White British population.

Table 75 shows that most of Central and Eastern European-born population are not disabled under the Equalities Act and have no long-term conditions (91%), compared with 76% of the UK born population. The Central and Eastern European-born population has also smaller proportions of people who are disabled, where day-to-day activities are limited a lot or a little, and people who are not disabled but have long-term conditions that are not life-limiting. Again, this likely reflects the younger age of the Central and Eastern European population.

Table 75: Disability by Country of Birth and ethnicity: England and Wales,2021

Disability	Country of Birth: Central and Eastern Europe (%)	Country of Birth: UK (%)	Other White (%)	White British (%)
Disabled: Day- to-day activities limited a lot	50,412 (2)	4,459,770 (7)	104,575 (3)	3,753,621 (9)
Disabled: Day- to-day activities limited a little	86,825 (4)	5,985,017 (10)	194,053 (5)	5,058,265 (11)
Not disabled: Has long-term physical or mental health condition but day-to-day activities are not limited	63,147 (3)	4,062,570 (7)	163,703 (4)	3,440,283 (8)
Not disabled: No long-term physical or mental health conditions	2,026,501 (91)	45,090,187 (75)	3,205,665 (87)	32,102,869 (72)

Source: Office For National Statistics, Census 2021 (6)

Table 76: Age standardised prevalence of longstanding and limitinglongstanding conditions among adults aged 16 and older, by ethnic group:England, 2012 to 2018

Condition	Other White Background (%)	White British (%)
Any longstanding condition	33	42
One longstanding condition	17	23
Two or more longstanding conditions	16	20
Any limiting longstanding conditions	20	25

Source: NHS Digital. Health Survey for England (64)

2.5.7 Lived Experience

2.5.7.1 Modern Slavery

Modern slavery is a serious organised crime, with severe consequences for the physical and mental health of victims, and so has public health implications. A qualitative study with Albanian female survivors of sex slavery in the UK identified four primary themes: barriers to access, negotiating access, health needs and care received and overall experience of primary care. Participants all reported unsuccessful attempts to access a General Practitioner (GP) in the West Midlands of England.(120) All reported being turned away by practice receptionists or administrators on numerous occasions and were prevented from registering or felt that practice receptionists and administrators used techniques to delay their

registration. For example, providing registration documents and general information but not allowing participants to complete them on the premises, not helping participants to understand what was required to register, and warning participants that they would have to wait a considerable amount of time, in some cases over 3 months to access a GP or practice nurse and so should seek an alternative GP who could see them more quickly.

Six participants reported visiting numerous practices within their local area before successfully accessing a GP. At the time of this research, one participant had still not been able to register with a GP in the West Midlands. Of the seven participants, three had moved from asylum accommodation in London to asylum accommodation in the West Midlands of England and so had previously been seen by a GP in London or admitted to hospital and diagnosed with several long-term conditions. Having successfully registered with a GP, four participants reported having to ask to see an alternative GP within a multi-GP practice because of extended delays between booking and appointment or because they believed they were not being properly treated. Of these four, all of their requests were initially refused.

2.6 Protect and Detect

Key Findings:

- A 2020 systematic review showed that trust in healthcare was partially shaped by different expectations of health services and a lack of understanding of how the English primary healthcare (PHC) system works.
- A 2012 study of people in North-East Scotland found that barriers to providing optimal care to EU8 migrants include communication (information gathering and giving); confidentiality when using family/friends as translators; the impact of patient healthcare expectations on communication and the length of the consultation; and frustration with the process of the consultation.
- Of people living in East London from 2009 to 2010, considerable disparities in dental caries existed with White Eastern European and White Other having a higher decay-missing-filled index.
- A migrant health guide in 2014 showed that nationally there were high and moderate prevalence rates (5%-10% of adult prevalence) of chronic hepatitis B amongst the Central and Eastern European community, compared with 0.3% for the UK population.
- Eastern European immigrant women underutilise breast cancer screening largely because of insufficient knowledge about early detection, as found in a 2013 systematic review of UK studies.

- White Other population had higher rates on Chlamydia (519.7 per 100,000), Gonorrhoea (341.3 per 100,000), Herpes (65.56) and Syphilis (61) when compared with White British population and the England average. Furthermore, the overall diagnoses rate for White Other population (1282.7) was more than three times that of the White British population (373.9) and double the England average (551).
- Need for services to address the unique needs of Polish (and potentially other migrant) women including, additional social stigma, social attitudes toward women within minority communities surrounding substance use and challenges to engaging with treatment.

2.6.1 Cancer Screening

Cancer is one of the major causes of death in the UK, with more than 1 in 4 deaths registered in 2019.(121) Diagnosis at an early stage of cancer development can improve survival chances, and health interventions, such as screening programmes, are an important part of efforts to reduce cancer mortality.

2.6.1.1 Cervical Cancer Screening

Cervical screening helps identify pre-cancerous cell changes in the cervix. These changes can be treated, preventing cancer from developing.(122) Cervical screening is believed to save up to 5,000 lives a year in the UK. Cervical screening is offered to all women and people with a cervix every 3

years for those aged 25 to 49, and every 5 years from the ages of 50 to 64. (122)

A 2020 study aimed to understand the experience of cervical screening participation and non-participation of women from minority ethnic populations in Scotland. Fifty qualitative in-depth interviews were undertaken with women from four broad ethnic minority groups: South Asian, Eastern European, Chinese, and Black African and Caribbean. White Scottish women were interviewed for comparison. Screening was universally reported as being unpleasant but important, and many of the experiences described in this study were common regardless of ethnicity, such as difficulties managing competing priorities. Across the minority ethnic groups, women who had migrated as adults described some key experiences that were different to those raised in the UK. This included their routes to awareness of screening, going abroad for screening, not having started sexual activity at screening age, and difficulties with the immodesty of screening regardless of the health care professional's gender. The theoretical option of self-screening was only preferred by a few women, however, these participants also described specific difficult interactions with NHS staff, including racism, and body-shaming.(123)

Another 2020 study in the UK aimed to explore the attitudes and behaviours of Eastern European women in relation to cervical cancer screening. A mixed methods study using quantitative surveys and in-depth semi-structured qualitative interviews was conducted between April 2015 and December 2016. In total, 331 surveys and 46 interviews were completed. Native English women had greater knowledge that a smear test is a screening test for pre-cancerous cervical cells (90%), whereas migrant Eastern European women believed that it was conducted as part of a full gynaecological examination (46%) and that the screen was annual (18%). This study concluded that the views and attitudes expressed by the migrant Eastern European women in this study suggest that they are not fully participating in cervical screening in England and for targeted education at the point of contact with healthcare services in England is needed to increase cervical screening participation among these women.(124)

2.6.1.2 Breast Cancer Screening

Breast screening prevents approximately 1,300 women from dying of breast cancer every year in the UK. Uptake of breast cancer screening is defined as the proportion of women invited who attend from screening within 6 months of their invitation.(122, 125) In the UK breast cancer screening is offered to women aged 50 to 70 years to detect early signed of breast cancer. Women aged over 70 can self-refer as well.

A systematic review conducted in 2013 of UK studies indicated that Eastern European immigrant women underutilise breast cancer screening largely because of insufficient knowledge about early detection. The second reason for not screening for breast cancer was the perceived external locus of control regarding decision making in health matters. Eastern European women's inadequate engagement in prevention is troublesome as it points to susceptibility not only to cancer but also to other serious conditions for which personal action and responsibility are critical. The implementation of culturally tailored breast cancer screening programs is needed.(126)

2.6.1.3 Testicular Cancer

Poland has a similar incidence of testicular cancer compared with the UK but reports higher mortality. A study aimed to retrospectively identify differences in the clinical and pathological features of testicular cancer in Polish men (n=15) compared with non-Polish controls (n=32) in Lothian,

over a ten-year period found no differences in the distribution of cell tumours between the Polish and non-Polish cohort. The mortality rate in the Polish cohort was higher than the control cohort and the overall tenyear mortality in the centre. This study concluded that although the findings described are not statistically significant, they are suggestive of poorer outcomes in Polish men with testicular cancer.(127)

2.6.1.4 Prostate Cancer

There is currently no national screening programme for prostate cancer in the UK, partly because the screening is not accurate enough to detect all cases of prostate cancer that require treatment. Therefore, there is limited data on prostate cancer screening uptake within the Central and Eastern European community.

2.6.1.5 Screening Information

In the UK, people from non-white and non-English speaking communities have a poorer experience with cancer care than those of a white ethnicity. The National Cancer Patient Experience Survey has shown this trend over the past three years.(128) Respondents lament not receiving all information needed on cancer tests and understandable information about the results. In West Berkshire, a project group was formed to address these limitations with representatives from an acute hospital, a community commissioning group, a cancer charity, a regional cancer alliance and the facilitator of a community group (the 'Cancer Champions'). The project took a well evaluated leaflet on tests in English and translated it into three languages, Nepalese, Urdu and Polish, the largest non-English speaking communities in West Berkshire. All communities believed the leaflet in their own language was more useful than the one in English and some

believed that a format with more pictures and simplified text would be better. All believed that a short film on cancer tests would have been useful.(129)

2.6.2 Vaccination Programmes

2.6.2.1 COVID-19 Vaccine

The highest proportion of people aged 18 years and over who were unvaccinated in October 2022 was highest for those identifying as Black Caribbean (40%), followed by those identifying as White Other (26%). A full breakdown of the number of vaccines administered within this time frame can be seen in

Table 77.(130)

Table 77: Age standardised COVID-19 vaccinations administered to adultsaged 50 years and over, by self-reported ethnic group: England, December2020 to December 2021

Ethnic Group	Received no vaccinations (%)	Received one vaccination (%)	Received two vaccinations (%)	Received three vaccinations (%)
White British	4	0.9	18	76
White Other	14	1.4	19	64

Source: Office for National Statistics, 2021 (130)

2.6.2.2 Other Routine Vaccinations

In Edinburgh, Scotland, lower influenza vaccine uptake has been observed in primary school children in the Polish community. To address this disparity, the Polish-language version of the NHS Health Scotland influenza information pamphlet was updated and distributed in 2018 to all identified Polish pupils attending three pilot schools. The impact of a revised pamphlet was evaluated by examining changes in vaccine uptake in these schools compared with a control group. A questionnaire was issued to all Polish parents in the pilot schools to explore their opinions about the pamphlet and preferred sources of immunisation information. On average, uptake was 7.4% higher in the three schools where the Polish-language pamphlet was distributed (29%) than in control schools (21%). Based on the feedback collected through the questionnaire, 37% of respondents felt better informed about the influenza vaccine following the pamphlet. The respondents reported that the most influential factor of vaccination is previous experience. Healthcare professionals were ranked lower in importance. Parents who refused consent were more likely to find

information from social media, friends and family, and Polish websites compared with those who consented. Findings suggest that issuing new Polish health literature was associated with a large increase in consent form return rate and a modest increase in uptake of the influenza vaccine by Polish pupils in the pilot schools. Social media and Polish websites had a greater influence over Polish parents' decision to immunise than UK healthcare staff and health authority information. Intensive efforts are needed to encourage parents to use official information sources where national health services and independent expert groups can promulgate more accurate pro-vaccination messages. The role of social media for migrant communities requires careful consideration, especially for vaccine programmes not delivered in their country of birth.(131)

2.6.2.3 Vaccine Hesitancy

A study investigated the background to low uptake of nasal influenza vaccination in Polish pupils in Edinburgh, Scotland. In autumn 2018, one week after their child's nasal flu vaccination sessions, 365 Polish parents received a questionnaire exploring influences on their vaccination choices. The questionnaire included 10 vaccine-hesitancy questions recommended by the WHO SAGE Working Group on Vaccine Hesitancy. Of the 128 questionnaires returned, 43% reported being vaccinated, 42% refused, and 24% did not consent to the study. Responses highlighted concerns about side effects, new vaccines and the accuracy of professional advice and information sources. Complacency was expressed about vaccination against diseases that are not common. Vaccine refusers were consistently more negative about all aspects of vaccination and more likely to answer 'I don't know'. Almost half of the refusers were uncertain about the quality of health information they received. Polish migrants in Scotland had beliefs about vaccination and modify these as they acculturate to the UK system.

They also continue to be influenced by developments and opinions, norms, and values from their home country, as well as diaspora-targeting media. The study concluded that interventions need to build confidence and encourage immunisation, which should lead to improved vaccine uptake among ethnic population groups.(132)

In another study conducted in Lothian and Scotland, low vaccine uptake has been reported among migrants, notably in the Polish group since 2004. A qualitative study using focus groups with 13 Polish women about the childhood vaccination programme in Lothian, focused on influenza and Human Papillomavirus (HPV) vaccinations. Key emergent themes for vaccination were: trust in the national vaccination policy; trust in the vaccination providers (health professionals); trust in the individual vaccines; balancing the risk of disease; and language and communication. Polish migrants indicated that social norms, beliefs and behaviours shape how they navigate the UK health system and its vaccination programme. While not confident in the Scottish primary care model and its generalist practitioners, the participants liked the ethos of informed consent in Scotland and compared this favourably with the compulsory vaccination policy in Poland. There was a belief that vaccines in Scotland were of higher quality than Poland and with fewer adverse effects. Respondents reported returning to Poland for specialist clinical appointments and diagnostic testing. They regularly accessed Polish clinical expertise and their opinions about health are influenced by Polish friends and family. They reported having difficulties finding official UK Government and health authority vaccination materials and often accessed Polish media, online resources, and information. Also, they were familiar with anti-vaccination activities in Poland. Consequently, there were important unmet information needs for

this group of parents who may not be making truly informed choices about vaccination.(133)

The Other White Background (including Eastern European groups) also had a higher chance of not being willing to be vaccinated, this is shown in **Table 78**.

Table 78: Willingness to take any vaccine in the UK Household LongitudinalStudy by ethnic group, England and Wales, 2020

Willingness	White Other (%)	White British (%)
Unlikely or Very Unlikely	26	15
Likely or Very Likely	73	84

Source: Scientific Advisory group for Emergencies (16)

Despite the sizeable population of those from Central and Eastern Europe in the UK, there is limited evidence about vaccination uptake in these communities.(134) A barrier within health research within the Central and Eastern European communities in the UK is the lack of a systematic way to identify Central and Eastern European individuals in health-related datasets. Where vaccination uptake has been explored by ethnicity, a largely broad ethnic categories of 'White: Other' is used, not specific nationalities or county of birth.

An exploration of the attitudes and behaviours among Polish and Romanian communities, and related access to primary healthcare services found obstacles to vaccination amongst the two community groups were influenced by multiple interconnected factors.(135)

Factors influencing vaccine uptake, delivery and primary healthcare access were identified to be:

- Challenges to navigating the health system
- Transnational use of health services
- Language and literacy
- Expectations of vaccination delivery
- Vaccine acceptance
- Vaccine accessibility
- Trust

Factors affecting vaccine uptake, delivery and Primary Health Care Service Access include, language barriers, perceptions about vaccine safety and importance, and expectations around vaccination services and Primary Health Care Services (PHCS).

Research also highlighted that migrants may prefer to access health care services in their home country, due to negative perceptions of the English PHCS access, and greater confidence and familiarity within their home countries doctors and health care system.(135, 136)

Polish participants discussed that, in Poland, vaccines are administered by doctors, while in England, this role is performed by nurses. Some Polish participants were concerned that nurses in England might not be qualified for this role.

Several participants voiced higher apprehension around 'newer' vaccines considered not to have been in use for enough time to be considered safe. Both measles, mumps, and rubella (MMR) and the influenza vaccines were either considered unimportant or generated concerns. Influenza was the main vaccine that community members reported refusing, as the perception was that this vaccine was unnecessary or not as important as other vaccines, with influenza being considered less serious compared with other vaccine-preventable diseases.

2.6.3 Sexual Health

The World Health Organization (WHO) states that 'sexual health-related issues are wide-ranging, and encompass sexual expression, relationships and pleasure.(137) They also include negative conditions such as sexually transmitted infections (STIs)'. The UK Health Security Agency (UKHSA) provided information on the rates of STI diagnoses by ethnicity in 2021.

The White Other population had higher rates of Chlamydia (519 per 100,000), Gonorrhoea (341.3 per 100,000), Herpes (65 per 100,000) and Syphilis (61 per 100,000) when compared with the White British population and the England average, this is shown in **Table 79**). Furthermore, the overall diagnoses rate for the White Other population (1282.7 per 100,000) was more than three times that of the White British population (373.9 per 100,000) and double the England average (551 per 100,000).

Table 79: Rate of STI diagnosis (per 100,000 population), by ethnic group

STI	White Other (per 100,000)	White British (per 100,000)	England Average (per 100,000)
Chlamudia	519		
Chlamydia	213	185	282
Gonorrhoea	341	55	90
Herpes	65	33	38
Syphilis	61	8	13
Genital Warts	108	41	50
Overall	1282	373	551
Diagnoses			

Source: UK Health Security Agency (138)

2.6.3.1 HIV

A 2012 study aimed to examine human immunodeficiency virus (HIV) infection among men who have sex with men (MSM) from different ethnic and migrant groups living in Britain. The study recruited a diverse national sample of MSM through websites, in sexual health clinics, bars, clubs, and other venues. Men completed an online survey that included questions on HIV testing, HIV status, and sexual behaviour. Out of the 991 ethnic minority MSM recruited, 207 were born in Central or Eastern Europe, 136 in South or Central America; 11,944 White British men were included in the analysis. Self-reported HIV seropositivity was low for men of South Asian, Chinese, and 'other Asian' ethnicity (range, 0.0% to 5.8%) and for men born in Central and Eastern European countries (4.5%). There were no significant differences between these groups in high-risk sexual behaviour. There were marked differences in self-reported HIV seropositivity between ethnic minorities, key migrants, and White British MSM, but not in highrisk sexual behaviour. This highlighted the importance of health promotion targeting MSM from all ethnic and migrant groups in Britain .(139)

2.6.3.2 Sexual Behaviour

A 2017 study aimed to compare the rates of high-risk sexual behaviours of Polish migrants in the UK before and after immigration. Among the 408 respondents (57% women), with a median age of 32 years, a higher proportion admitted having unprotected sexual contact with a casual partner while in the UK than in Poland; more engaged in sex after the use of recreational drugs and alcohol. Being a male was associated with an increase of unprotected sex, sex after the use of alcohol, and having multiple partners. Being single, having resided briefly in the UK, and having low self-esteem were significant predictors of unprotected sex; 20% of the respondents admitted to having been tested for HIV while in Poland, compared with 50% while in the UK - this was valid for both genders; 1.2% reported being HIV positive. The study concluded that migration enhances vulnerability to STIs, especially for single male migrants with low self-esteem, staying in the UK for less than two years. The results point to strengthening strategies which help reduce high risk sexual behaviour among Polish migrants, and to introduce interventions to promote an awareness of HIV status.(140)

2.6.3.3 Sex workers

A 2012 study aiming to assess the sexual health needs of sex workers visiting Genitourinary Medicine Clinics, recruited a sample of 2,305 individuals, with 65% being migrants. Of the migrants, 35% were from Eastern Europe (60% were Romanian) and South America (93% were Brazilian). Migrant sex workers were shown to have a higher prevalence than UK-born women to be seen in London clinics, and to have a sexual health screen (67% vs 83%) or HIV test (67% vs 82%). Migrants were less likely to be diagnosed with chlamydia (4.4% vs 7.3%) or gonorrhoea (1.0% vs 1.5%) but more likely to have genital warts (2.4% vs 1.0%) or genital herpes (1.8% vs 1.3%). The study concluded that STI rates among female sex workers were low, particularly among migrants. Lower rates of HIV testing among migrants should be analysed further(141).

2.6.3.4 Asylum Seekers and Newly-arrived migrants

Asylum seekers and refugees are not sexually different to other populations. The sexual health issues that asylum seekers and refugees may face are not unique to people who seek asylum – nearly all are also experienced by British citizens.

However, many factors make asylum seekers and refugees more vulnerable and prone to poor health, including poor sexual health. These include:

- Experiences of persecution, oppression and flight
- Inadequate healthcare in the country of origin
- Insecurity, poverty and powerlessness in the UK
- Loss of community and being in an unfamiliar environment

Sexual issues may form part of the application for asylum, for example:

- Homophobic persecution
- Female genital mutilation (FGM)
- Trafficking for sexual exploitation
- Sexual torture, rape or sexual violence.(142)

2.6.4 Other Infectious Diseases

2.6.4.1 Hepatitis B

Hepatitis B (HBV) is a vaccine-preventable liver infection which is spread through blood, semen and vaginal fluids. If left untreated, chronic infection can cause liver cancer and cirrhosis. Prevalence of HBV in the UK is typically low, with a carriage rate of 0.1% to 0.5%.(143). In the UK, the prevalence of chronic hepatitis B infection is estimated to be 0.3%, or approximately 180,000 people.

The is currently no data on Hepatitis B for the Central and Eastern European community in the UK.

Country level data shows that areas with high and intermediate prevalence rates (5% to 10% of adult prevalence) of chronic hepatitis B include

southern parts of Central and Eastern Europe. In any given year, the majority (over 95%) of people with new chronic hepatitis B infections in the UK are migrants who acquired their infection in their country of birth during early childhood.(14)

It was noted that the existing variations in vaccines and scheduling between national programmes led to uncertainties such as confusion surrounding the hepatitis B vaccine, which has been widely available throughout Europe but recently introduced in the UK.(144)

2.6.4.2 Tuberculosis

Tuberculosis (TB) is a serious infectious disease and is currently one of the key priorities of the UK Health Security Agency (UKHSA). The disease is characterised by the growth of nodules (tubercles) in the tissues, especially the lungs. While there are signs of a decreasing trend in new TB cases, the UK still has higher rates than most European countries. The highest disease rates are found predominantly in those born outside the UK.

Research has found that the reactivation of latent infections acquired outside the UK accounts for much of the disease burden. However, there is also evidence that transmission within communities in the UK may be an increasing challenge.(145)

People from Romania accounted for 4.3% of all TB cases in 2020; compared with Poland (1.2%) and Lithuania (1.0%).(146) People born in the UK accounted for 27% of TB cases. *Note: due to the COVID-19 pandemic in 2020, data from this period may not represent the true burden of the disease.*

2.6.4.3 Measles

Several measles outbreaks in England occurred during 2017 to 2018, particularly affecting the Romanian and Romanian Roma communities.

Between January and December 2018, there were 966 laboratoryconfirmed measles cases in England, increasing from 259 in 2017.(147) Recent outbreaks in England were linked to the travel of under-vaccinated people to measles-endemic countries, with the subsequent transmission among communities with poor vaccination coverage; several European outbreaks have been linked to travel within Eastern Europe, including Romania.(148)

A 2020 study explored the effectiveness of responses to this outbreak and efforts to promote vaccination uptake within the Romanian and Romanian Roma communities in Birmingham, Leeds, and Liverpool. Semi-structured in-depth interviews were conducted with 33 providers involved in vaccination delivery and outbreak management.(147) Success factors included: the ability to identify the communities, provider knowledge and understanding of the communities, the coordination of response efforts and partnership working, having links to communities and approaches to community engagement, and having fewer resource constraints. The success factors are further expanded below.

Identifying underserved communities:

- It was essential for providers to be able to correctly identify the communities affected by the outbreaks to optimise their responses.
- With vaccination coverage data only available at the local authority, clinical commissioning group (CCG) and GP level, it was challenging for providers to identify 'pockets' of lower uptake within the population,

leaving under-vaccinated communities at risk of vaccine-preventable diseases.

 Providers found that communities affected during the outbreaks were not necessarily registered with a GP or attending school, and therefore they were not captured in GP or school-level data. Instead, engagement with other sources of information was essential to identify communities at risk of under-vaccination.

Knowledge and understanding of the communities:

- Within each city, several providers reported that as the outbreaks unfolded, they knew very little about the Roma and Romanian communities affected. In many instances, providers had not distinguished between Roma and Romanian and the terms were sometimes used interchangeably.
- Poor understanding of communities and factors affecting vaccination impeded effective strategies to manage the outbreaks. Understanding the communities was crucial to effective outbreak management.

2.6.5 Oral Health

A 2016 study explored ethnic inequalities in dental caries among adults due to socioeconomic position in explaining those inequalities. The East London Oral Health Inequality (ELOHI) Study used data about 2,013 adults aged 16 to 65 years from a random sample of adults and children living in East London in 2009 to 2010. Participants completed a questionnaire and were clinically examined for dental caries at home. Dental caries was measured using the number of decayed, missing and filled teeth or decay-missingfilled index and ethnic inequalities in dental caries was assessed in negative binomial regression models before and after adjustment for demographic

(sex and age groups) and socioeconomic position measures (education and socioeconomic classification). White Eastern European and White Other had a higher decay. In contrast, all Asian (Pakistani, Indian, Bangladeshi, and Other) and all Black (African, Caribbean and Other) ethnic groups had lower decay-missing-filled index than White British. This study showed considerable disparities in dental caries between and within the major ethnic categories, independent of demographics and socioeconomic position.(149)

2.6.6 Barriers to using UK health services

2.6.6.1 Transnational use of health services

Polish and Romanian service users often directly access specialist pay-forservices, bypassing GPs. Furthermore, the transnational use of health care services in Poland and Romania was used to avoid relying on PHCS in England to gain direct access to secondary care. (149)

Some families reported they would travel to Poland or Romania before or in the weeks following the birth of a new-born to see family and receive health care. Some families vaccinated their children during these visits due to the timing of their travel. (149)

There are challenges to this occurrence as vaccinating children in more than one country can cause disruption and confusion in the UK immunisation schedule, with health care workers facing challenges determining which vaccines have been administered to the child, with many returning to England with undocumented vaccination histories. It was reported that families prefer accessing certain vaccinations in Poland, as this was influenced by cost and policy level influences.(135)

2.6.6.2 Language and Literacy

The use of medical terminology and jargon, and the inability of health services to provide translation was found to be a significant barrier amongst those from Polish and Romanian communities.

To overcome language barriers, several health care workers reported using online translation tools to aid communication and more formal structures of communication such as telephone or face-to-face interpreting services were difficult to organise and felt disconnected and often created greater uncertainties surrounding healthcare messaging.

Members from the Polish and Romanian communities reported that they were not offered, or directed towards, vaccination and broader health information in their native language, and recommendation from community members and healthcare workers were to provide vaccination information in different languages, however there was recognition that cost could be a barrier.(150)

2.6.6.3 Trust towards Health Authorities, Industry, and Health Care Workers

Polish and Romanian community members discussed trust in relation to health authorities, the pharmaceutical industry and health care workers. Trust in healthcare was partially shaped by different expectations of health services and a lack of understanding of how the English PHC system works, with some community members particularly sceptical about the quality of healthcare in England. (150)

Lack of trust in PHCS was a driving factor for people opting to access emergency services in England and for seeking care in Poland and Romania

or private Polish doctors in England. To promote trust in health services, it was considered crucial for healthcare workers to explain the system to service users.

With some communities, the Polish and Romanian communities, healthcare workers reported that engagement was more effective using outreach strategies (e.g., door knocking, approaching community groups) rather than trying to encourage health service attendance.

To develop trust in vaccines, it was considered important for community members to be able to access credible information. (150)

2.6.6.4 Community Pharmacy

Global migration trends mean community pharmacists increasingly encounter patients with a variety of first languages. A 2012 study explored community pharmacists' perceptions of communication barriers during the provision of care to EU8 migrants. Qualitative face-to-face interview study of purposively sampled community pharmacists in North-East Scotland. Fourteen participants identified a number of barriers to providing optimal care to migrants including:

- Communication (information gathering and giving);
- Confidentiality when using family or friends as translators;
- Healthcare expectations on communication and the length of the consultation; and
- Frustration with the process of the consultation.

This study called for additional research to use objective outcome measures, such as consultation recordings, to measure the impact of these

perceived barriers on pharmacist-patient consultations. Language and cultural barriers impact on the quality of pharmacist-patient communication and thus may have patient safety and pharmacist training implications.(15)

2.6.6.5 General Practice

A 2022 study aimed to explore UK Central and Eastern European community members' use of and perceptions about UK general practices. Comparatively low levels of GP registration were described, with ability, desire, and need to engage with GP services shaped by the interconnected nature of individual community members' cultural and sociodemographic factors. Difficulties overcoming access and in-consultation barriers were common, with health expectations frequently unmet. Distrust and dissatisfaction with GPs often persisted, promoting alternative healthseeking approaches including transnational healthcare. Marginalised UK-Central and Eastern European community subgroups including Roma, trafficked and homeless individuals had particularly poor GP engagement and outcomes.

2.7 Ageing Well and Dying Well

Key Findings:

- Data on life expectancy for the White Other ethnic group in the UK is not available as ethnicity is not recorded at death registration.
- Data on mortality by leading cause by ethnicity does not disaggregate White Other ethnic group.
- There is currently no data available on the dementia within the Central and Eastern European population in the UK.

2.7.1 Life Expectancy and Healthy Life Expectancy

2.7.1.1 Mortality

Data on mortality by leading cause by ethnicity does not disaggregate White Other ethnic group. Data for this population is summarised in the 'White' ethnic group, which also includes White British, White Irish, Gypsy and Irish Travellers, so may not be an accurate reflection of the Central and Eastern European population. However, some Central and Eastern Europeans may also identify under the 'Other' ethnic group. (151)

In 2017 to 2019, for males in all ethnic groups except Black Caribbean, the leading cause of death was heart disease. The mortality rate for heart disease was 157.9 per 100,000 in the White ethnic group compared with the lowest rate among the 'Other' ethnic group (103.4 per 100,000). After heart disease, the leading causes of death among men in the 'White' ethnic

group were dementia (121.6 per 100,000) and respiratory diseases (73.8 per 100,000).(151)

For women in this same period, the leading causes of death were dementia and heart disease. Dementia was the leading cause of death for women in the 'White' ethnic group, at 142 per 100,000. After dementia, the leading causes of death among women in the 'White' ethnic group were heart and cerebrovascular disease.(151)

In Central and Eastern European countries, overall life expectancy differs. Data from the OECD provides an in-depth look into the health of EU Central and Eastern European countries, this is shown in Table 80.

Table 80: Life expectancy at birth for Central and Eastern Europeancountries and EU, 2020

Country	Average Life Expectancy at birth (2020) (Years)
Slovenia	80.6
Estonia	78.6
Czechia	78.3
Croatia	77.8
Poland	76.6
Lithuania	76.5
Hungary	75.7
Latvia	75.7
Romania	75.6
Bulgaria	73.6
EU Average	80.1

Source: European Commission, 2021 (13)

Life expectancy at birth in the UK in 2018 to 2020 was 79.0 years for males and 82.9 years for females; this represents a fall of 7.0 weeks for males and almost no change for females (a slight increase of 0.5 weeks) from the latest non-overlapping period of 2015 to 2017.(152)

Data on life expectancy for the White Other ethnic group in the UK is not available as ethnicity is not recorded at death registration.

2.7.2 Dementia

Dementia is a progressive neurological condition. It occurs when the brain is damaged by diseases (such as Alzheimer's disease) or by a series of strokes. The symptoms of dementia can include memory loss and difficulties with thinking, problem-solving, language and physical function.

Dementia and Alzheimer's disease represented 13% of all death registrations in England and Wales among the general population (n=200,111) between the period of 2017 to 2019. There is currently no data available on dementia within the Central and Eastern European population in the UK.

Research suggests that people from an ethnic minority community are less likely to receive a dementia diagnosis. Memory services reported providing diagnostic assessments for Indian, Bangladeshi, Caribbean, Somali, Polish, Romanian, Arab, Chinese, Greek, Irish, and many other ethnic minority communities. However, of the services that reported diagnostic differences between communities, 71% said ethnic minorities tended to reach assessment at a more advanced stage of their condition.(153)

To support Birmingham residents living with dementia, the Birmingham, and Solihull Integrated Care System (BSOL ICS) have launched a Dementia

Strategy for 2023 to 2028. The Strategy aims to enable all people with dementia and those who care for them, to have the best possible health and social care support through their dementia journey.(154) This will be achieved through 4 key priorities:

- **1.** Information which focuses on prevention of dementia, early intervention and support.
- 2. Access to a timely diagnosis with support before and after.
- **3.** Supporting people with dementia, their loved ones, carers, and communities to prevent crisis.
- 4. Improving the quality of personalised care and support planning for people with dementia, including planning for the end of life.(154)

2.7.2.1 Cultural Perceptions, Stigma and Taboo Related to Dementia

The stigma around dementia can contribute to low awareness in some communities. Cultural perceptions of dementia vary between communities. Dementia is often seen in the context of a culture's broader beliefs and values. This can sometimes impact awareness of it as a medical condition, limiting the extent to which some communities can identify symptoms and contact services. It has been reported that amongst Eastern European communities, the understanding of dementia can sometimes relate to experiences of persecution.(153)

2.7.3 Frailty

The NHS defines frailty as "the group of older people who are at highest risk of adverse outcomes such as falls, disability, admission to hospital, or the need for long term care." (155)

There is currently no data on frailty for the Central and Eastern European population in the UK.

Osteoporosis is a skeletal disease which is characterised by low bone mineral density or the occurrence of a fragility fracture. The International Osteoporosis Foundation reported that overall prevalence of osteoporosis for people aged 50+ in Central and Eastern European Countries is highest in Lithuania (5.8%), Latvia (5.8%) Romania (5.6%), Hungary (5.5%) and Poland (4.8%).(156) In both countries, osteoporosis is more common in women due to decreases in oestrogen production at the menopause which can accelerate bone loss.(157) Furthermore, low calcium and vitamin D intake have been associated with osteoporosis risk due to these vitamins contributing significantly towards bone health.(158)

2.7.4 Loneliness and Isolation

According to statistics from the ONS, in 2016 to 2017, 5% of adults in England reported feeling lonely 'often' or 'always'.(159) National data for loneliness by ethnic group is not readily available.

2.7.5 Care Homes and Domiciliary Care

From March 2021 to February 2022, there were an estimated 360,792 care home residents in England; however, data on care home residents by ethnic groups is not available.(160) Data from the Government does however provide an overview of the number of White Other adults receiving long term adult social care support. In 2021, 15,890 adults received long-term support, and this figure encapsulates those in nursing, residential, community or prison support.(161)

2.7.6 End-of-life and Palliative Care

Palliative care, encompassing end-of-life care, is an approach that aims to provide optimal quality of life to people with life-limiting incurable diseases and their families. There is currently no specific information on the number of Central and Eastern European people in end-of-life care.
2.8 Contributing to a Green and Sustainable Future

Key Findings:

- Gravelly Hill ward contains the highest proportion of White Other residents (9.3%); this ward is classified as an area of the city with the least environmental justice (0.41) for citizens.
- It is estimated that 51% of the White Other community in Birmingham do not have access to good quality green spaces, compared with 11% of the White British population.
- Approximately 22% of the White Other community live in the 15 most polluted MSOAs in Birmingham, compared with 5.4% of the White British population.
- The White Other population in Birmingham is likely vulnerable to the Urban Heat Island effect due to high concentrations of the population living in central areas of the city.

The Environmental Justice map combines 5 indicators, namely, the index of Years of Life Lost (YLL), Urban Heat Island effect (UHI), the Indices of Multiple Deprivation (IMD), Public green spaces access and flood risk. The indicators are combined and scaled in a range of 0 to 1, with 0 being the more preferred and 1 being the least. The wards in Birmingham vary from scores of 0.12 in Sutton Roughley to 0.43 in Balsall Heath West.(17) The index mean value by ward can be mapped onto 2021 census data for ward population by 'Other White' ethnic group (Table 81).

Table 81: Environmental Justice Map mean index score for wards withlargest 'Other White' communities: Birmingham, 2014

Ward	Index Mean	Other White Population of Ward
	Value	(%)
Balsall Heath	0.43	2
West		
Castle Vale	0.43	2
Nechells	0.42	2
Aston	0.42	3
Newtown	0.41	5
Gravelly Hill	0.41	9
Lozells	0.40	4

Source: Birmingham City Council, 2022 and ONS, 2023 (17)

Balsall Health West and Castle Vale are classified as city areas with the least environmental justice for citizens living there. Access to green spaces is lowest, the areas are urban heat islands, at risk of flooding, have high levels of deprivation and people have worse health and well-being. This raises concerns for the large proportions of the Birmingham Other White population living in these wards.(17)

2.8.1 Access to Green Spaces

Green spaces are "any area of vegetated land, urban or rural; this includes both public and private spaces". Examples of green spaces include parks, gardens, playing fields, wood and other natural areas.(162) Access to green spaces can contribute to many health and wellbeing benefits such as stress reduction, crime reduction, increased physical health, and reduced urban heat island effect.(163, 164) Birmingham has been named one of the greenest cities in Europe, with over 600 publicly accessible green and blue spaces across the city. Among Birmingham residents, 60% of Birmingham residents visit green spaces every week, with 72% visiting the green space closest to their homes. However, there is an observed inequality in access to good quality green spaces across the city.(165)

Birmingham's parks and green spaces are our most used leisure and recreation facilities in the city, with estimates suggesting over 58 millionperson visits per year. Nearly six out of ten (60%) of Birmingham residents visit green space once a week, with a further 18% visiting at least monthly.

The environmental justice map defines access to green space as "within 1,000m and at least 2 hectares in size".(17) ONS data for 2020 provides insight into the average combined size of parks or public gardens and playing fields within a 1,000m radius of residents by MSOA. Encouragingly, all MSOAs in Birmingham have at least 2 hectares of combined green space within 1,000 metres; however, these two hectares may be split into smaller parks and playing fields. However, this dataset does not indicate the size of the next nearest green space, which may meet the requirements listed above. (151)

2.8.2 Air Pollution

Air pollution is a major public health risk. A review by the WHO concluded that ambient (outdoor) air pollution can reduce life expectancy and cause premature deaths. In 2019, it was estimated that 37% of premature deaths caused by air pollution globally were due to increased incidence of ischaemic heart disease and stroke, 18% from COPD, 23% from acute lower respiratory infections and 11% from respiratory tract cancers.(166) The effects of air pollution disproportionately affect vulnerable communities

such as children, pregnant people, older adults, and those with pre-existing conditions.(167)

It is estimated that in Birmingham 900 deaths annually are linked to air pollution.(168) Additionally, OHID Public Health data estimates that in 2021, 6.2% of mortalities in Birmingham were attributable to particulate air pollution. This is compared with 5.5% nationally.(101)

Based on 2019 data from the IMD, the concentration of four main air pollutants (nitrogen oxide, benzene, sulphur dioxide and particulate matter) were estimated. The overall pollution levels were calculated and given an associated score. A higher score indicates a higher level of air pollution; across England, scores range from 0.32 to 1.90. In Birmingham, these scores ranged from 0.91 to 1.59. **Table 82** maps the 15 most polluted MSOAs in Birmingham and the corresponding Other White population.

Table 82: Average air pollution of four main air pollutants by MSOA:Birmingham, 2020

MSOA	Pollution Score	Other White Population (%)
Central	1.55	15
North Central and Dartmouth	1.52	5
Circus		
Nechells	1.51	2
Digbeth	1.49	11
Aston Park	1.48	3
Brookvale	1.47	10
Five Ways North	1.46	6
Ladywood – Summer Hill	1.45	13
Middlemore	1.45	5
Washwood Heath	1.45	1
Lozells East	1.42	2
Hockley & Jewellery Quarter	1.41	4
Attwood Green & Park Central	1.41	12
Saltley West	1.41	2
Perry Beeches East	1.41	3

Source: Ministry of Housing, Communities & Local Government (18)

From this dataset, it can be estimated that 21.9% of the Other White community in Birmingham live in the 15 most polluted MSOAs.(18) This is in comparison to approximately 5.4% of the White British population in Birmingham.

2.8.3 Urban Heat Island Effect

The Urban Heat Island (UHI) effect refers to areas of high building density, usually the cores of the cities, where temperatures are typically higher than the outer areas of the city. In Birmingham, for example, Sutton Park was recorded as having a surface temperature almost 8 degrees cooler than the city centre during a heatwave. During periods of extended high temperatures, such as heatwave conditions, the UHI can cause excess deaths of citizens in these areas. Some groups are more vulnerable to the UHI effect, including older adults, those with LTHCs, people living in high-rise buildings and in high density areas.(169)

A study from 2011 produced spatially assessed heat-health risk map for Birmingham (Figure 3). By correlating this data to Census data, it can be understood that there are high populations of the White Other ethnic group located in the 'very high' risk areas e.g., Central, Digbeth, and Five Ways North.(35) Therefore, the Other White population in Birmingham may be vulnerable to the UHI effect.

Figure 3: Spatially assessed heat-health risk: Birmingham, 2011



Source: Tomlinson et al., Royal Meteorological Society (169)

3. Closing the Gaps

There are many limitations to understanding the health inequalities the Central and Eastern European community face, with many reports and data sources such as census, NHS digital data and DfE data etc. grouping the Central and Eastern European community within various ethnic categories such as 'White Other, 'Other White' or 'Other Ethnic Groups'. The lack of definitive data attuned to the diversity of the Central and Eastern European community in the UK limits public health surveillance of health inequalities and targeted interventions to this. The inconsistencies in ethnicity data collection make it difficult to form clear conclusions about the health and wellbeing of the Central and Eastern European community.

The research included within the Community Health Profile have noted the intersectionality of inequalities the Central and Eastern European community face both in their native countries and the UK and Birmingham. These are associated with poorer health outcomes, and must be responding to.

To effectively tackle inequalities the Central and Eastern European community may experience, it is important to acknowledge the complexity and diversity of the term Central and Eastern European and to work to decrease discrimination and access to service to accurately map the Central and Eastern European population experiences with health and wellbeing and how their health interacts with other aspects of their identify e.g., age, disability, sexual orientation and faith.

4. Conclusion

This Community Health Profile presents the breadth of health inequalities affecting the Central and Eastern European community. At the heart of some of these inequalities are the impacts of discrimination and racism which impact on health behaviours, access to services and health outcomes. Sadly, much of the evidence demonstrates persistent inequalities, and the impact of wider societal and environmental determinants of health.

It is important to acknowledge that there are also positives highlighted within this report, including good educational and employment outcomes, and low rates of obesity. Evidence suggested that the Central and Eastern European community have many more positive behaviours than other ethnic groups. However, these assets are overshadowed by the negative inequalities, including high rates of poor mental health, high levels exposure to air pollution, greater prevalence of communicable diseases and poor access to many healthcare services.

This report has described the status of health and wellbeing and highlighted the inequalities experienced by the Central and Eastern European community within the UK and Birmingham. These inequalities include the lack of definitive primary data sources for the Central and Eastern European community in the UK. This extends to very limited data on health-specific conditions for the Central and Eastern European community in the UK and Birmingham. The lack of data for the Central and Eastern European community makes it challenging to focus on health inequalities and identify the underlying causes to these disparities. The disparities reflected within this Community Health Profile are not new and reflect longstanding structural and systemic inequalities the Central and Eastern European community face in not only across the UK, but locally in Birmingham. The effort of this Community Health Profile is to highlight this, focus on addressing health inequalities, and create an enabling an environment in which continuous improvement can be made to reduce the health inequality gap the Central and Eastern European community face in Birmingham.

This Community Health Profile aims to support the council, communities, and partners to better understand health and wellbeing and the health inequalities affecting the Central and Eastern European community. The multiple factors that have been identified by the report can inform the design and implementation of work to address inequalities and improve health and wellbeing across the city.

5. Appendices

Appendix 1: Search Strategy

Арр	pendix 1: Search Strategy	
Med	lline Search:	
#	Searches	Results
1	United Kingdom/	243928
2	United Kingdom.ab,ti.	44721
3	UK.ab,ti.	133077
4	Britain.ab,ti.	16581
5	England.ab,ti.	57972
6	England/	92826
7	West Midlands.ab,ti.	1558
8	Birmingham.ab,ti.	5788
9	Coventry.ab,ti.	511
10	Dudley.ab,ti.	428
11	Sandwell.ab,ti.	75
12	Solihull.ab,ti.	86
13	Walsall.ab,ti.	69
14	Wolverhampton.ab,ti.	177
15	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14	462388
16	Central.ab,ti.	896288
17	Eastern.ab,ti.	92778
18	16 or 17	976783
19	"Europe*".ab,ti.	340704
20	18 and 19	32730
21	Estonia/	2602
22	Latvia/	1404

#	Searches	Results
23	Lithuania/	3187
24	Slovakia/	3355
25	Slovenia/	3029
26	Bulgaria/	6630
27	Romania/	10845
28	Hungary/	19483
29	Czech Republic/	8614
30	Poland/	52408
31	Baltic States/	1019
32	"Estonia*".ab,ti.	3816
33	"Latvia*".ab,ti.	2071
34	"Lithuania*".ab,ti.	4266
35	"Slovakia*".ab,ti.	4404
36	"Slovenia*".ab,ti.	5045
37	"Bulgaria*".ab,ti.	6443
38	"Romania*".ab,ti.	9192
39	"Hungar*".ab,ti.	17382
40	"Czech*".ab,ti.	18160
41	(Polish not "Nail*").ab,ti.	19352
42	"Slav*".ab,ti.	4438
43	"Baltic*".ab,ti.	5724
44	Poland.ab,ti.	28801
45	20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44	192057
46	15 and 45	5290
47	limit 46 to (english language and yr="2012 -Current")	2739

Embase Search:

#	Searches	Results
1	United Kingdom/	404014
2	United Kingdom.ab,ti.	58277
3	UK.ab,ti.	271606
4	Great Britain/	4696
5	Britain.ab,ti.	23770
6	England/	35951
7	England.ab,ti.	76786
8	West Midlands.ab,ti.	2443
9	Birmingham.ab,ti.	9442
10	Coventry.ab,ti.	825
11	Dudley.ab,ti.	626
12	Sandwell.ab,ti.	184
13	Solihull.ab,ti.	136
14	Walsall.ab,ti.	118
15	Wolverhampton.ab,ti.	352
16	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	656045
17	Central.ab,ti.	1222821
18	Eastern.ab,ti.	109187
19	17 or 18	1317075
20	"Europe*".ab,ti.	567290
21	19 and 20	48427
22	Estonia/	4475
23	Latvia/	2817
24	Lithuania/	4987
25	Slovakia/	6340
26	Slovenia/	6028
27	Bulgaria/	9283
28	Romania/	14684

#	Searches	Results
29	Hungary/	21682
30	Czech Republic/	15930
31	Poland/	54405
32	"Estonia*".ab,ti.	5259
33	"Latvia*".ab,ti.	3100
34	"Lithuania*".ab,ti.	5800
35	"Slovakia*".ab,ti.	6064
36	"Slovenia*".ab,ti.	7476
37	"Bulgaria*".ab,ti.	12148
38	"Romania*".ab,ti.	15181
39	"Hungar*".ab,ti.	27749
40	"Czech*".ab,ti.	28716
41	Poland.ab,ti.	38030
42	(Polish not "Nail*").ab,ti.	38174
43	"Slav*".ab,ti.	4949
44	"Baltic*".ab,ti.	6352
45	21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41	258649
	or 42 or 43 or 44	
46	16 and 45	9798
47	limit 46 to (english language and yr="2012 -Current")	6029

PsychInfo Search:

#	Searches	Results
1	United Kingdom.ab,ti.	11530
2	UK.ab,ti.	35590
3	Britain.ab,ti.	4596
4	England.ab,ti.	17937
5	West Midlands.ab,ti.	279
6	Birmingham.ab,ti.	778
7	Coventry.ab,ti.	79
8	Sandwell.ab,ti.	15
9	Dudley.ab,ti.	91
10	Solihull.ab,ti.	23
11	Walsall.ab,ti.	7
12	Wolverhampton.ab,ti.	30
13	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12	63915
14	Central.ab,ti.	134612
15	Eastern.ab,ti.	11775
16	14 or 15	144979
17	Europe*.ab,ti.	53114
18	16 and 17	5338
19	"Estonia*".ab,ti.	1210
20	"Latvia*".ab,ti.	352
21	"Lithuania*".ab,ti.	998
22	"Slovakia*".ab,ti.	570
23	"Slovenia*".ab,ti.	1178
24	"Bulgaria*".ab,ti.	810
25	"Romania*".ab,ti.	2165
26	"Hungar*".ab,ti.	3089
27	"Czech*".ab,ti.	2276
28	Poland.ab,ti.	3315

#	Searches	Results
29	(Polish not "nail*").ab,ti.	3525
30	"Slav*".ab,ti.	2666
31	"Baltic*".ab,ti.	217
32	18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31	23574
33	13 and 32	1462
34	limit 33 to (english language and yr="2012 -Current")	893
Web o	f Science Search:	

Web of Science Search:

#	Searches	Results
1:	(TS=(UK) OR TS=(United Kingdom) OR TS=(Britain) OR TS=(England) OR TS=(West Midlands) OR TS=(Birmingham) OR TS=(Coventry) OR TS=(Dudley) OR TS=(Sandwell) OR TS=(Solihull) OR TS=(Walsall) OR TS=(Wolverhampton))	587,253
2:	TS=(Central Europe*) OR TS=(Eastern Europe*) OR TS=(Estonia*) OR TS=(Latvia*) OR TS=(Lithuania*) OR TS=(Slovakia*) OR TS=(Slovenia*) OR TS=(Bulgaria*) OR TS=(Romania*) OR TS=(Hungar*) OR TS=(Czech*) OR TS=(Poland) OR TS=(Polish NOT Polishing NOT Polished NOT Nail NOT Shoe) OR TS=(Slav*) OR TS=(Baltic*)	584,080
3:	#1 AND #2	14,692
4:	#3 and 2022 or 2021 or 2020 or 2019 or 2018 or 2017 or 2016 or 2015 or 2014 or 2013 or 2012 (Publication Years) and English (Languages)	8,825

Other Search Terms

Topic Area	General Search Terms	Specific Search Terms
Getting the Best Start in Life	"Central and Eastern European" "young*" or "youth" or "child*" or "babies" or "infant*"	"Central and Eastern European" and "maternity care" or "obesity" or "measles" or "obesity" or "health check" or "maternal" or "breastfeeding" or "visits" or "rituals" or "bullying" or "fostering" or "care" or "social care" or "child poverty" or "educat*" or "school" or "dental" or "birth" or "fertility" or "vaccin*
Mental Wellness and Balance	"Central and Eastern European" and or "mental*" or "wellbeing" or "wellness" or "access" or "balance"	"Central and Eastern European" and "mental illness" or "depression" or "suicide" or "anxiety" or "eating disorder" and "prevalence" or "service" or "access" or "hospital admission" or "shame" or "stigma" or "stress" or "racial harassment" or "alcohol*" or "drinking*" or "abstention" or "substance misuse" or "substance abuse" or "addiction" or "tobacco" or "cannabis" or "cigarette" or "drugs*" or "smoking" or "discriminat*" or "hate crime" or "violence"
Healthy and Affordable Food	"Central and Eastern European" and "food" or "diet" or "obesity" or "meat" or "vegetarian" or "nutrition" or "vegan"	"Central and Eastern European" and "food*" or "dietary" or "obesity" or "overweight" or "BMI" or "weight" or "waist-height ratio" or "insecurity" or "poverty"
Active at Every Age and Ability	"Central and Eastern European" and "physical activity" or "activity" or "exercise" or "inactivity"	"Central and Eastern European" and "vigorous exercise" or "moderate exercise" or "walking" or "running" or "sports" or "cardiovascular" or "elderly exercise" or "health promotion" or "mobility" or "barrier*" or "facilitator*" or "musculoskeletal"
Living, Working and Learning Well	"Central and Eastern European" and "working" or "education" or "qualification" or "training" or "skill" or "housing" or "living" or "economic" or "health" or "illness" or "disability" or "long standing health" or "depriv*" or "poverty"	"Central and Eastern European" and "apprenticeships" or "level 1,2,3,4 qualification" or "degree" or "NEET" or "secondary school" or "primary school" or "full-time education" or "profession" or "career choice" or "household income" or "homeownership" or "bad health" or "learning disability" or "physical disability" or "neurodivergence" or "ADHD" or "autism" or "ASD" or "diabetes" or "cardiovascular disease" or "CVD" or "Chronic Obstructive Pulmonary Disease" or "COPD" or "Hypertension" or "cancer" or "quality of life" or "access"
Protect and Detect	"Central and Eastern European" and "protect" or "detect" or "screening" or "vaccin*" or "sexual health" or "infectious disease" or "oral health"	"Central and Eastern European" and "STI" or "sexually transmitted infection" or "sex education" or "transmission" or "sexual health services" or "genitourinary medicine" or "HIV" or "Hepatitis" or "Tuberculosis" or "TB" or "COVID-19" or "coronavirus" or "SARS- CoV-2" or "bowel" or "HPV" or "Human Papilloma Virus" or "dental"

Topic Area	General Search Terms	Specific Search Terms
Ageing Well and Dying Well	"Central and Eastern European" and "ageing" or "aging" or "dying" or "dementia" or "end of life" or "palliative" or "frailty" or "lon*" or "isolat*" or "care"	"Central and Eastern European" and "social networks" or "or "Alzheimer's" or "stigma" or "death" or "advance care planning" or "falls" or "balance" or "life expectancy" or "mortality"
Contributing to a Green and Sustainable Future	"Central and Eastern European" and "sustainability" or "green future" or "sustainable" or "environment"	"Central and Eastern European" and "recycling" or "environmentally friendly" or "tree planting" or "sustainable development" or "energy consumption" or "green space" or "blue space" or "white space" or "pollution" or "flood" or "climate" or "heat" or "heat stroke" or "urban"

Appendix 2: Exclusion and Inclusion Criteria

Age group	Language	Publication type	Availability	Time limit
Any	English Language	Pieces of peer reviewed and high-quality grey literature, academic or scientific literature, whether a journal or article, report or documents relating to the specified health and wider determinants issues amongst Central and Eastern Europeans in the UK. Publications exclusive to people from the Central and Eastern European community. Publications with at least 50% Central and Eastern European population sample representation.	All articles including DOI/HTML links (include articles behind paywalls). Graphs and figures reproduction depends on copyright – please ensure permission from journal/author granted.	Searches should be run restricting to articles published in the last 10 years, not including 2011 Census and 2001 Census. If trend data is presented in papers published from 2012 onwards, this can be used. Justification should be provided for using data from more than 10 years ago.

Appendix 3: Abbreviations

Appendix 5. At			
		MSK	Musculoskeletal
AHC	After Housing Costs	MSOA	Middle Super Output Area
BMI	Body Mass Index	MSM	Men who have Sex with Men
BHC	Before Housing Cost	NEET	Not in employment, education or training
СМО	Chief Medical Officer	NHS	National Health Service
COPD	Chronic Obstructive Pulmonary Disease	NICE	National Institute for Health and Care Excellence
COVID-19	Coronavirus Disease caused by SARS-CoV-2 virus	OHID	Office for Health Improvement and Disparities
CVD	cardiovascular disease	ONS	Office for National Statistics
DFLE	Disability-free Life Expectancy	OECD	Organisation for Economic Co-operation and
EU	European Union		Development
EU2	Accession two	PHCS	Primary Health Care Services
EU8	Accession eight	PHE	Public Health England
EYFS	Early Years Foundation Stage	STI	Sexually Transmitted Infection
FSM	Free School Meals	ТВ	Tuberculosis
GCSE	General Certificate of Education	TFR	Total Fertility Rate
GP	General Practioner	UN	United Nations
HBV	Hepatitis B	UHI	Urban Heat Island
HIV	Human Immunodeficiency Virus	WEMWBS	Warwick-Edinburgh Mental Wellbeing Scale
IMD	Index of Multiple Deprivation	WHO	World Health Organisation
loD	Indices of Deprivation		
LFS	Labour Force Survey		
LGBTQ+	The acronym for lesbian, gay, bisexual, trans,		
	queer, and other sexual orientations and gender		
	identities		
LTHC	Long-term Health Condition		
MBRRACE-UK	Mothers and Babies: Reducing Risk through		

HSE

Health Survey for England

Audits and Confidential Enquires across the UK

Appendix 4: Birmingham and National Central and Eastern European Organisation Contact Details

Organisation Name	Target Audience	Contact Information
Birmingham Public Health Communities Team	All Birmingham based communities	CommunitiesTeam@birmingham.gov.uk
Centrala	All Central and Eastern European	centrala@centrala-space.org.uk
Czech and Slovak Club	Czech and Slovak	birmingham@czskclub.co.uk
Nash Dom CIC	All Central and Eastern European	info@nashdomcic.org
Europeans Welfare Association CIC	All Central and Eastern European	info@ewacic.com
AKnoteikumi	Latvian	info@aknoteikumi.org

Appendix 5: Raw Data Tables

Appendix 5.1: Birmingham wards showing population distribution of residents born in Central and Eastern Europe: Birmingham, 2021

Birmingham Ward	Central and Eastern
	European Population
Stockland Green	2,115 (6.1%)
Ladywood	1,905 (5.5%)
Soho & Jewellery Quarter	1649 (4.8%)
North Edgbaston	1,479 (4.3%)
Erdington	1415 (4.1%)
Acocks Green	1068 (3.1%)
Handsworth Wood	986 (2.8%)
Holyhead	889 (2.5%)
Kingstanding	884 (2.5%)
Gravelly Hill	787 (2.2%)
Perry Barr	774 (2.2%)
Glebe Farm & Tile Cross	740 (2.1%)
Weoley & Selly Oak	716 (2%)
Quinton (Birmingham)	684 (1.9%)
Harborne	682(1.9%)
Aston (Birmingham)	631 (1.9%)
Edgbaston	614 (1.7%)
Perry Common	599 (1.7%)
Tyseley & Hay Mills	599 (1.7%)
Oscott	595 (1.7%)
Bordesley & Highgate	570 (1.6%)

Birmingham Ward	Central and Eastern
	European Population
Bournbrook & Selly Park	538 (1.5%)
Sparkbrook & Balsall Heath East	516 (1.5%)
Alum Rock	491 (1.4%)
Hall Green North	482 (1.4%)
Ward End	480 (1.4%)
Pype Hayes	461 (1.3%)
Sheldon	458 (1.3%)
Bromford & Hodge Hill	455 (1.3%)
Birchfield (Birmingham)	450 (1.3%)
Bartley Green	445 (1.3%)
Newtown (Birmingham)	441 (1.2%)
Moseley	428 (1.2%)
Sparkhill	406 (1.1%)
Nechells	401 (1.1%)
South Yardley	387 (1.1%)
Handsworth	381 (1.1%)
Garretts Green	350 (1%)
Shard End	323 (0.94%)
Billesley	322 (0.94%)
Heartlands	321 (0.93%)
Sutton Vesey	313 (0.91%)
Bournville & Cotteridge	312 (0.91%)
Longbridge & West Heath	307 (0.89%)

Birmingham Ward	Central and Eastern
	European Population
Allens Cross	305 (0.89%)
Brandwood & King's Heath	300 (0.87%)
Yardley West & Stechford	279 (0.81%)
Balsall Heath West	264 (0.77%)
Stirchley	257 (0.75%)
Lozells	222 (0.65%)
Bordesley Green	219 (0.64%)
Castle Vale	199 (0.58%)
Small Heath	199 (0.58%)
Sutton Reddicap	194 (0.56%)
King's Norton North	186 (0.54%)
King's Norton South	183 (0.53%)
Yardley East	173 (0.50%)
Sutton Walmley & Minworth	171 (0.50%)
Frankley Great Park	169 (0.49%)
Northfield (Birmingham)	165 (0.48%)
Sutton Trinity	151 (0.44%)
Druids Heath & Monyhull	145 (0.42%)
Highter's Heath	142 (0.41%)
Hall Green South	135 (0.39%)
Rubery & Rednal	103 (0.3%)
Sutton Roughley	95 (0.2%)

Birmingham Ward	Central and Eastern
	European Population
Sutton Wylde Green	86 (0.2%)
Sutton Four Oaks	83 (0.24%)
Sutton Mere Green	70 (0.24%)
All Central and Eastern European	34344

Source: Office for National Statistics, Census 2021

Appendix 5.2: Age Profile of the Central and Eastern European born population: England and Wales, 2021

Age	Central and Eastern European born (%)	UK (%)
15 and under	7	19
16 to 24	11	11
25 to 34	28	14
35 to 49	39	19
50 to 64	11	19
65 and over	3	19

6. Acknowledgments

Authors:

Rhys Boyer, Senior Officer, Birmingham City Council Alex Robinson, Public Health Officer, Birmingham City Council Emily Machin, Public Health Graduate, Birmingham City Council Contributors:

Dr Justin Varney, Director of Public Health, Birmingham City Council Helen Harrison, Assistant Director of Public Health Birmingham City Council Ricky Bhandal, Service Lead, Birmingham City Council Cristina Osborne, Public Health Registrar, Birmingham City Council Joseph Merriman, Senior Officer, Birmingham City Council Alice Spearing, Senior Officer, Birmingham City Council Sara Croxford, Public Health Registrar, Birmingham City Council Jordan Francis, Public Health Officer, Birmingham City Council Shazia Ahmed, Public Health Officer, Birmingham City Council Yusuf Shafi, Public Health Student Intern, Birmingham City Council

7. References

1. Mackela P. Eastern Europeans in Britain: Successfully Integrated Citizens or Alienated Migrants? A Case Study of the Lithuanian Migrant Community in London. Undergraduate Journal of Politics and International Relations. 2018.

2. McDowell L. Workers, migrants, aliens or citizens? State constructions and discourses of identity among post-war European labour migrants in Britain. Political Geography. 2003;22(8):863-86.

3. Parutis V. "Economic Migrants" or "Middling Transnationals"? East European Migrants' Experiences of Work in the UK. International Migration. 2014;52(1):36-55.

4. Office for National Statistics. International migration, England and Wales: Census 2021 2022 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/populationand migration/internationalmigration/bulletins/internationalmigrationenglan dandwales/census2021.

5. Midland Polish Community Association. In War & Peace: Collected Memories of Birmingham's Poles 2011 [cited 2023 November 21]. Available from: <u>https://www.birmingham.ac.uk/Documents/college-</u> <u>social-sciences/social-policy/IASS/collected-memories-of-birmingham-</u> <u>poles.pdf</u>.

6.Office for National Statistics. Create a custom dataset 2023 [cited2023November21].Availablefrom:https://www.ons.gov.uk/datasets/create.

7. MBRRACE-UK. Saving Lives, Improving Mothers' Care 2021: Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19 2021 [cited 2023 November 21]. Available from: https://www.birthcompanions.org.uk/resources/mbrrace-uk-saving-livesimproving-mothers-care-2021.

8. Department for Education. *Find and explore data in the National Pupil Database* n.d. [cited 2023 November 21]. Available from: <u>https://www.find-npd-data.education.gov.uk/</u>.

9. Weishaar HB. Consequences of international migration: a qualitative study on stress among Polish migrant workers in Scotland. Public Health. 2008;122(11):1250-6.

10. NHS Digital. Use of NHS mental health, learning disability and autism services 2022 [cited 2023 November 21]. Available from: https://www.ethnicity-facts-figures.service.gov.uk/health/mental-health/adults-using-nhs-funded-mental-health-and-learning-disability-services/latest#data-sources.

11. Ngwena J. Black and minority ethnic groups (BME) suicide, admission with suicide or self-harm: an inner city study. Journal of Public Health. 2014;22(2):155-63.

12. Sport England. Active Lives Adult Survey November 2020-21 Report 2022 [cited 2023 November 21]. Available from: https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fspublic/2022-

04/Active%20Lives%20Adult%20Survey%20November%2020-

21%20Report.pdf?VersionId=nPU_v3jFjwG8o_xnv62FcKOdEiVmRWCb.

13. European Commission. *Country Health Profiles* 2021 [cited 2023 November 21]. Available from: <u>https://health.ec.europa.eu/state-health-</u>eu/country-health-profiles en.

14. Office for Health Improvement and Disparities. Hepatitis B: migrant health guide 2014 [updated 2021 September 14; cited 2023

November 21]. Available from: <u>https://www.gov.uk/guidance/hepatitis-b-migrant-health-guide</u>.

15. Cleland JA, Watson MC, Walker L, Denison A, Vanes N, Moffat M. Community pharmacists' perceptions of barriers to communication with migrants. International Journal of Pharmacy Practice. 2012;20(3):148-54.

16. Scientific Advisory Group for Emergencies. Factors influencing COVID-19 vaccine uptake among minority ethnic groups, 17 December 2020 2021 [cited 2023 November 21]. Available from: https://www.gov.uk/government/publications/factors-influencing-covid-19-vaccine-uptake-among-minority-ethnic-groups-17-december-2020.

17.Birmingham City Council. Environmental Justice 2022 [cited 2023November21].Availablefrom:https://naturallybirmingham.org/environmental-justice/.

 Ministry of Housing CLG. English indices of deprivation 2019 2019
 [cited 2023 November 21]. Available from: <u>https://www.gov.uk/government/statistics/english-indices-of-</u> deprivation-2019.

19. Institute. EU. Addressing Cultural, Ethnic & Religious Diversity Challenges in Europe 2011 [cited 2023 November 21]. Available from: <u>https://ec.europa.eu/migrant-integration/sites/default/files/2011-</u>06/docl 21233 187704397.pdf.

20. International Labour Organization. Where we work n.d. [cited 2023 November 21]. Available from: https://www.ilo.org/budapest/countries-covered/lang--en/index.htm.

21.United Nations. Regional groups of Member States n.d. [cited 2023November21].Availablefrom:https://www.un.org/dgacm/en/content/regional-groups.

22. Hype&Hyper. Czechia to host the Ice Hockey World Championship again in 2024 2023 [cited 2023 November 21]. Available from:

https://hypeandhyper.com/czechia-to-host-the-ice-hockey-worldchampionship-again-in-2024/.

23. FIBA Europe. FEDERATION FOCUS: LITHUANIA 2012 [cited 2023 November 21]. Available from: https://www.fibaeurope.com/cid 7b0E4jiIIfk6gZwtQpkB30.coid FDUc2F WRJ025tSADmRFV51.articleMode on.html.

24. Cohen AB, Wu MS, Miller J. Religion and Culture:Individualism and Collectivism in the East and West. Journal of Cross-Cultural Psychology. 2016;47(9):1236-49.

25. Marie Cure. Marie Curie the scientist n.d. [cited 2023 November
21]. Available from: <u>https://www.mariecurie.org.uk/who/our-history/marie-curie-the-scientist</u>.

26. Britannica. Frédéric Chopin 2023 [cited 2023 November 21]. Available from: <u>https://www.britannica.com/biography/Frederic-Chopin</u>.

27. Britannica. Nikola Tesla 2023 [cited 2023 November 21]. Available from: <u>https://www.britannica.com/biography/Nikola-Tesla</u>.

28. UNESCO. Cultural practices associated to the 1st of March 2017 [cited 2023 November 21]. Available from: https://ich.unesco.org/en/RL/cultural-practices-associated-to-the-1st-ofmarch-01287.

29. Central Intelligence Agency. The World Factbook 2023 [cited 2023 November 21]. Available from: <u>https://www.cia.gov/the-world-factbook/countries/</u>.

30. LG Inform. National Insurance Number registrations to overseas nationals - Annual in Peterborough 2023 [cited 2023 November 21]. Available from: <u>https://lginform.local.gov.uk/reports/lgastandard?mod-metric=58&mod-area=E06000031&mod-</u>

group=AllSingleTierAndCountyLaInCountry_England&modtype=namedComparisonGroup.

31. Department for Work & Pensions. NINo Registrations 2018/2019 n.d. [cited 2023 November 21]. Available from: <u>https://dwp-stats.maps.arcgis.com/apps/Viewer/index.html?appid=e449d3f2bd5e4e5</u> <u>5aebc6154f69de07a</u>.

32. Office for National Statistics. Language, England and Wales: Census 2021 2022 [cited 2203 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentit y/language/bulletins/languageenglandandwales/census2021.

33. Office for National Statistics. Ethnic group, England and Wales: Census 2021 2022 [cited 2023 November 21]. Available from: <u>https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentit</u> y/ethnicity/bulletins/ethnicgroupenglandandwales/census2021.

34. Office for National Statistics. Census Maps 2023 [cited 2023 November 21]. Available from: <u>https://www.ons.gov.uk/census/maps/</u>.

35.Office for National Statistics. Ethnic group (detailed) 2022 [cited2023November21].Availablefrom:https://www.ons.gov.uk/datasets/TS022/editions/2021/versions/2/filter-outputs/6897bb34-0935-4f2c-82fc-804087950018#get-data.

36.Birmingham City Council. 2020 Births in Birmingham 2021 [cited2023November21].Availablefrom:https://www.birmingham.gov.uk/downloads/file/21613/2019 to 2020births in birmingham.

38. Gorman DR, Katikireddi SV, Morris C, Chalmers JWT, Sim J, Szamotulska K, et al. Ethnic variation in maternity care: a comparison of

Polish and Scottish women delivering in Scotland 2004–2009. Public Health. 2014;128(3):262-7.

39. Gina Marie Awoko Higginbottom, Catrin Evans, Myfanwy Morgan, Kuldip Kaur Bharj, Jeanette Eldridge, Basharat Hussain. Interventions that improve maternity care for immigrant women in the UK: protocol for a narrative synthesis systematic review. BMJ Open. 2017;7(7):e016988.

40. National Institute for Health and Care Excellence. *Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors. Clinical guideline [CG110]* 2010 [cited 2023 November 21]. Available from: https://www.nice.org.uk/guidance/cg110.

41. Office for National Statistics. Births and infant mortality by
ethnicity in England and Wales: 2007 to 2019 2021 [cited 2023 November
21].21].Availablefrom:

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsoci alcare/childhealth/articles/birthsandinfantmortalitybyethnicityinenglanda ndwales/2007to2019.

42. The King's Fund. *The health of people from ethnic minority groups in England* 2023 [cited 2023 November 21]. Available from: https://www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england#footnote2 bikbxl1.

43. Public Health England. *Oral health survey of 5 year old children* 2017 2018 [updated 2019 January 2; cited 2023 November 21]. Available from: <u>https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2017</u>.

44. Office for National Statistics. *Child poverty and education outcomes by ethnicity* 2020 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/c ompendium/economicreview/february2020/childpovertyandeducationou tcomesbyethnicity#child-poverty-and-ethnicity.

45. Department for Work & Pensions. *Households below average income: an analysis of the income distribution FYE 1995 to FYE 2021* 2022 [cited 2023 November 21]. Available from: https://www.gov.uk/government/statistics/households-below-average-income-for-financial-years-ending-1995-to-2021/households-below-average-income-an-analysis-of-the-income-distribution-fye-1995-to-fye-2021#children-in-low-income-households.

46. Office for National Statistics. *Children looked after in England including adoptions* 2022 [cited 2023 November 21]. Available from: <u>https://explore-education-statistics.service.gov.uk/find-</u>

statistics/children-looked-after-in-england-including-adoptions.

47. Department for Education. *Key stage 4 performance* 2022 [cited 2023 November 21]. Available from: <u>https://explore-education-statistics.service.gov.uk/find-statistics/key-stage-4-performance-revised/2021-22.</u>

48. Demie F. *Educational attainment of Eastern European pupils in primary schools in England: Implications for policy and practice.* London Review of Education. 2019;17(2):158-77.

49. Dustmann C, Machin S, Schönberg U. Ethnicity and Educational Achievement in Compulsory Schooling*. The Economic Journal. 2010;120(546):F272-F97.

50. Office for National Statistics. *Living abroad: migration between Britain and the EU8* 2017 [cited 2023 November 21]. Available from: <u>https://www.ons.gov.uk/peoplepopulationandcommunity/populationand</u> <u>migration/internationalmigration/articles/livingabroad/migrationbetwee</u> <u>nbritainandtheeu8</u>.

51. Eurostat. *Key figures on Europe* Luxembourg: Publications Office of the European Union; 2015 [cited 2023 November 21]. Available from:

https://ec.europa.eu/eurostat/web/products-statistical-books/-/ks-ei-15-001.

52. Tereshchenko A. *New migration new challenges: Eastern European migrant pupils in English schools*: King's College London; 2014.

53. Hollingworth SM, Ayo. *Language Diversity and Attainment in English Secondary Schools: A Scoping Study*: London Metropolitan University; 2012.

54. Foundation JR. *Monitoring Poverty and Social Exclusion 2014* 2014 [cited 2023 November 21]. Available from: https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/MPSE-2014-FULL.pdf.

55. Demie F. English language proficiency and attainment of EAL (English as second language) pupils in England. Journal of Multilingual and Multicultural Development. 2018;39(7):641-53.

56. Demie F. English as an additional language and attainment in primary schools in England. Journal of Multilingual and Multicultural Development. 2018;39(3):210-23.

57. Rodriguez ML, Sales RA, Ryan L, D'Angelo A, editors. Polish pupils in London schools: opportunities and challenges2010.

58. The Economist. *East Europeans Immigration: New kids on the block*. 2017;424 (9049): 23.

59. Department for Education. *GCSE English and maths results* 2023 [cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/11-to-16-years-old/a-to-c-in-english-and-maths-gcse-attainment-for-children-aged-14-to-16-key-stage-4/latest#by-ethnicity.</u>

60. Gorard S, & See, B. Overcoming Disadvantage in Education. 1st ed. ed2013.

61. Department for Education. Schools, pupils and their characteristics 2023 [cited 2023 November 21]. Available from: <u>https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics</u>.

62. MIND UK. Mental health facts [cited 2023. Available from: https://www.mind.org.uk/information-support/types-of-mental-health-problems/statistics-and-facts-about-mental-health/how-common-are-mental-health-problems/.

63. NHS Digital. Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014. 2016 [cited 2023 November 20]. Available from: <u>https://digital.nhs.uk/data-andinformation/publications/statistical/adult-psychiatric-morbidity-</u> <u>survey/adult-psychiatric-morbidity-survey-survey-of-mental-health-and-</u> <u>wellbeing-england-2014</u>.

64. NHS Digital. Health Survey England Additional analyses, Ethnicity and Health, 2011-2019 Experimental statistics 2022 [cited 2023 November 20]. Available from: <u>https://digital.nhs.uk/data-andinformation/publications/statistical/health-survey-england-additionalanalyses/ethnicity-and-health-2011-2019-experimental-statistics#</u>.

65. Chojnacki S. *Psychological Wellbeing of Polish Migrants: What is the Role of the NHS*? : University of East London; 2020.

66. Selkirk M, Quayle E, Rothwell N. Influences on Polish migrants' responses to distress and decisions about whether to seek psychological help. Counselling Psychology Review. 2012;27(3):40-54.

67. O'Brien P, Tribe R. Exploring Polish migrants' adaptation to life in the UK: an interpretative phenomenological analysis. International Journal of Culture and Mental Health. 2014;7(4):439-51.

68. Gondek D, Kirkbride JB. Predictors of mental health help-seeking among polish people living the United Kingdom. BMC Health Serv Res. 2018;18(1):693.

69. Kozłowska O DD, Galasiński D. . *Migration, stress and mental health: an exploratory study of post-accession Polish immigrants to the United Kingdom*: University of Wolverhampton; 2008.

70. Chtereva EH. Becoming 'another brick in the wall': A thematic analysis of Central and Eastern European immigrants' experience of psychological distress and help-seeking. Counselling Psychology Review. 2016;32(3):24.

71. Rzepnikowska A. Racism and xenophobia experienced by Polish migrants in the UK before and after Brexit vote. Journal of Ethnic and Migration Studies. 2019;45(1):61-77.

72. Sime D, Tyrrell N, Käkelä E, Moskal M. Performing whiteness: Central and Eastern European young people's experiences of xenophobia and racialisation in the UK post-Brexit. Journal of Ethnic and Migration Studies. 2022;48(19):4527-46.

73. NHS Digital. *Detentions under the Mental Health Act* 2023 [cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-figures.service.gov.uk/health/mental-health/detentions-under-the-mental-health-act/latest.</u>

74. Peñuela OBE, Wan MW, Berry K, Edge D. Central and Eastern European migrants' experiences of mental health services in the UK: A qualitative study post-Brexit. Patient Educ Couns. 2023;107:107562.

75. Pleitgen K. *Polish Immigrants and Psychological Help: A Qualitative Exploration*: University of East London; 2018.

76. Public Health England. Public Health Outcomes Framework: Health Equity Report 2017 [cited 2023 November 21]. Available from:

https://assets.publishing.service.gov.uk/government/uploads/system/upl oads/attachment_data/file/733093/PHOF_Health_Equity_Report.pdf.

77. Gleeson H, Herring R, Bayley M. Exploring gendered differences among polish migrants in the UK in problematic drinking and pathways into and through alcohol treatment. J Ethn Subst Abuse. 2022;21(3):1120-40.

78. Dr Rachel Herring DHG, Mariana Bayley, *Exploring pathways* through and beyond alcohol treatment among Polish women and men in a London Borough 2019 [cited 2023 November 21]. Available from: https://alcoholchange.org.uk/publication/exploring-pathways-through-and-beyond-alcohol-treatment-among-polish-women-and-men-in-a-london-borough.

79. Michal P. Garapich. *The unwanted. Social and cultural determinants of homelessness and alcohol abuse among eastern European migrants in England*: University of Roehampton London; 2010.

80. Office for National Statistics. *Cigarette smoking among adults, Annual Population Survey* 2021 [updated 2023 August 8; cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-</u> figures.service.gov.uk/health/alcohol-smoking-and-drug-use/adultsmokers/latest#:~:text=13.9%25%20of%20adults%20in%20England%20s moked%20in%202019,%286.7%25%29%2C%20Asian%20%288.3%25%29 %20and%20Black%20%289.7%25%29%20ethnic%20groups.

81. Aspinall PJ, Mitton L. Smoking prevalence and the changing risk profiles in the UK ethnic and migrant minority populations: implications for stop smoking services. Public Health. 2014;128(3):297-306.

82. Office for National Statistics. *Percentage of adults aged 16 to 74 years who were victims of domestic abuse in the last year, by ethnic group: year ending March 2018 to year ending March 2020, CSEW* 2020 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustic e/adhocs/12677percentageofadultsaged16to74yearswhowerevictimsofd omesticabuseinthelastyearbyethnicgroupyearendingmarch2018toyearen dingmarch2020csew.

83. Zielinska-Pocwiardowska I, Anitha S, Rasell M, Kane R. Polish women's experiences of domestic violence and abuse in the United Kingdom. 2022.

84. Long J, Harvey, H., Wertans, E., Allen, R., Harper, K., Elliott, K. & Brennan, D. . *UK Femicides 2009-2018* 2020 [cited 2023 November 21]. Available from: <u>https://www.femicidecensus.org/wp-content/uploads/2020/11/Femicide-Census-10-year-report.pdf</u>.

85. Schumann S, Moore Y. The COVID-19 Outbreak as a Trigger Event for Sinophobic Hate Crimes in the United Kingdom. The British Journal of Criminology. 2023;63(2):367-83.

86. Moore H. *Shades of whiteness? English villagers, Eastern European migrants and the intersection of race and class in rural England*. Critical Race and Whiteness Studies. 2013;9(1).

87. Mariña Fernández-Reino. *Migrants and Discrimination in the UK* UK: COMPAS, University of Oxford,; 2020 [cited 2023 November 21]. 1st:[Available from: <u>https://migrationobservatory.ox.ac.uk/wp-content/uploads/2020/01/Briefing-Migrants-and-Discrimination-in-the-</u>UK.pdf.

88. European Union Agency for Fundamental Rights. *EU LGBT survey: European Union lesbian, gay, bisexual and transgender survey* 2013 [cited 2023 November 21]. Available from: https://fra.europa.eu/en/publication/2013/eu-lgbt-survey-europeanunion-lesbian-gay-bisexual-and-transgender-survey-results#publicationtab-0.

89. Sport England. *Healthy eating among adults, Active Lives Survey*: Department for Digital, Culture, Media and Sport; 2022 [updated 2023]

August 08; cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-figures.service.gov.uk/health/diet-and-</u>exercise/healthy-eating-of-5-a-day-among-

adults/latest#:~:text=54.8%25%20of%20adults%20aged%2016%20and%2

<u>Oover%20had,a%20day%20was%20lower%20than%20the%20national%2</u> Oaverage.

90. Rabikowska M. The ritualisation of food, home and national identity among Polish migrants in London. Social Identities. 2010;16(3):377-98.

91. Brown L, Paszkiewicz I. The role of food in the Polish migrant adjustment journey. Appetite. 2017;109:57-65.

92. Czarnecka B. *Perceptions of healthy eating and meanings of food amongst Polish immigrants in Luton – a qualitative study*: London South Bank University; 2019.

93. Food and Agriculture Organization of the United Nations. *Food-based dietary guidelines* n.d. [cited 2023 November 21]. Available from: https://www.fao.org/nutrition/education/food-dietary-

guidelines/regions/en/.

94. Cook EJ PF, Ali N, Penn-Jones CP, Ochieng B, Constantinou G, Randhawa G. 'They Are Kids, Let Them Eat': A Qualitative Investigation into the Parental Beliefs and Practices of Providing a Healthy Diet for Young Children among a Culturally Diverse and Deprived Population in the UK. International journal of environmental research and public health. 2021;18(24).

95. Department of Health & Social Care. UK Chief Medical Officers' Physical Activity Guidelines London2019 [cited 2023 November 21]. Available from:

https://assets.publishing.service.gov.uk/government/uploads/system/upl

<u>oads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf</u>.

96. Sport England. Active Lives Online 2023 [cited 2023 November 21]. Available from: <u>https://activelives.sportengland.org/</u>.

97. Sport England. Sport for all? Why ethnicity and culture matters in sport and physical activity 2020 [cited 2023 November 21]. Available from: https://www.sportengland.org/news/sport-for-all.

98. Department of Health and Social Care. UK Chief Medical Officers' Physical Activity Guidelines 2019 [Available from: https://assets.publishing.service.gov.uk/government/uploads/system/upl oads/attachment_data/file/832868/uk-chief-medical-officers-physicalactivity-guidelines.pdf.

99. Anderson A, Dixon MA, Oshiro KF, Wicker P, Cunningham GB, Heere B. Managerial perceptions of factors affecting the design and delivery of sport for health programs for refugee populations. Sport Management Review. 2019;22(1):80-95.

100. Smith R, Spaaij R, McDonald B. Migrant Integration and Cultural Capital in the Context of Sport and Physical Activity: a Systematic Review. Journal of International Migration and Integration. 2019;20(3):851-68.

101. Office for Health Improvement and Disparities. Public Health Profiles, © Crown copyright 2022 2022 [cited 2023 November 21]. Available from: <u>https://fingertips.phe.org.uk/</u>.

102. Office for National Statistics. Young people not in employment, education or training (NEET) 2021 [cited 2023 November 21]. Available from: https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/unemployment-and-economic-inactivity/young-people-not-in-employment-education-or-training-neet/latest.

103. Department for Education. Destinations of students after 16 to 18 study 2020 [updated 2021 March 04; cited 2023 November 21]. Available

from: <u>https://www.ethnicity-facts-figures.service.gov.uk/education-skills-</u> and-training/after-education/destinations-of-students-after-key-stage-5-<u>usually-aged-18-years/latest</u>.

104.Higher Education Statistics Agency. Table 11 - HE studentenrolments by domicile and region of HE provider 2014/15 to 2021/222023[Available from: https://www.hesa.ac.uk/data-and-analysis/students/table-11#notes.

105. Office for National Statistics. How qualification levels acrossEngland and Wales differ by country of birth 2023 [cited 2023 November21].Availablefrom:

https://www.ons.gov.uk/peoplepopulationandcommunity/educationandc hildcare/articles/howqualificationlevelsacrossenglandandwalesdifferbyco untryofbirth/2023-05-15.

106.Office for National Statistics. Comparing Census 2021 and LabourForce Survey estimates of the labour market, England and Wales: 13 March20232023[cited2023November21].Availablefrom:https://backup.ons.gov.uk/wp-

content/uploads/sites/3/2023/03/Comparing-Census-2021-and-Labour-Force-Survey-estimates-of-the-labour-market-England-and-Wales-13-March-

2023.pdf#:~:text=Census%202021%20estimated%20that%20there%20we re%201%20million,labour%20market%20status%20in%20the%20way%20 we%20expected.

107. Office for National Statistics. Ethnic group differences in health,
employment, education and housing shown in England and Wales' Census20212023[2023]. Availablefrom:https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentit
y/ethnicity/articles/ethnicgroupdifferencesinhealthemploymenteducatio
nandhousingshowninenglandandwalescensus2021/2023-03-15.

108. Office for National Statistics. Migration and the labour market, England and Wales: Census 2021 2023 [cited 2023 November 21]. Available from:

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/e mploymentandemployeetypes/articles/migrationandthelabourmarketeng landandwales/census2021#glossary.

109. Department for Business and Trade HO, Department for Business Energy & Industrial Strategy, Labour Market Enforcement Strategy 2019 to 2020 2019 [cited 2023 November 21]. Available from: https://www.gov.uk/government/publications/labour-marketenforcement-strategy-2019-to-2020.

110. House of Commons Library. Seasonal Worker visas and UK agriculture 2023 [cited 2023 November 21]. Available from: https://researchbriefings.files.parliament.uk/documents/CBP-9665/CBP-9665.pdf.

111. Ministry of Housing CLG. People living in deprived neighbourhoods 2020 [cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-</u>

ethnicity/demographics/people-living-in-deprived-

neighbourhoods/latest#main-facts-and-figures.

112. Department for Work & Pensions. State support 2022 [cited 2023 November 21]. Available from: <u>https://www.ethnicity-facts-</u> <u>figures.service.gov.uk/work-pay-and-benefits/benefits/state-</u> support/latest.

113. Ministry of Housing CLG. English housing survey 2013 to 2014: headline report 2015 [cited 2023 November 21]. Available from: https://www.gov.uk/government/statistics/english-housing-survey-2013to-2014-headline-report.

114. Finney NH, Bethan. How has the rise in private renting disproportionately affected some ethnic groups? Ethnic differences in housing tenure 1991-2001-2011: Joseph Rountree Foundation; 2013 [Available from: <u>https://research.manchester.ac.uk/en/publications/how-has-the-rise-in-private-renting-disproportionately-affected-s</u>.

115. Diabetes UK. how many people in the uk have diabetes? n.d. [cited 2023 November 21]. Available from: <u>https://www.diabetes.org.uk/about-us/about-the-charity/our-strategy/statistics</u>.

116. Diabetes UK. Diabetes information in different languages and formats n.d. [cited 2023 November 21]. Available from: https://www.diabetes.org.uk/diabetes-the-basics/information-in-different-languages.

117.Blood Pressure UK. Blood pressure around the world n.d. [cited2023November21].Availablefrom:https://www.bloodpressureuk.org/your-blood-pressure/understanding-your-blood-pressure/blood-pressure-around-the-

world/#:~:text=High%20blood%20pressure%20remains%20a%20serious% 20problem%20in,men%20in%20several%20central%20and%20eastern%2 0European%20countries.

118. Timmis A, Townsend N, Gale CP, Torbica A, Lettino M, Petersen SE, et al. European Society of Cardiology: Cardiovascular Disease Statistics 2019. Eur Heart J. 2020;41(1):12-85.

119. The Cancer Atlas. Europe 2019 [cited 2023 November 21]. Available from: https://canceratlas.cancer.org/the-burden/europe/.

120. Dando CJ, Brierley R, Saunders K, Mackenzie J-M. Health inequalities and health equity challenges for victims of modern slavery. Journal of Public Health. 2019;41(4):681-8.

121. Cancer Research UK. Cancer mortality statistics n.d. [cited 2023 November 21]. Available from: <u>https://www.cancerresearchuk.org/health-professional/cancer-statistics/mortality#heading-Zero.</u>

122. Marlow LA, Wardle J, Waller J. Understanding cervical screening non-attendance among ethnic minority women in England. Br J Cancer. 2015;113(5):833-9.

123. Nelson M, Patton A, Robb K, Weller D, Sheikh A, Ragupathy K, et al. Experiences of cervical screening participation and non-participation in women from minority ethnic populations in Scotland. Health Expect. 2021;24(4):1459-72.

124. Patel H, Sherman SM, Tincello D, Moss EL. Awareness of and attitudes towards cervical cancer prevention among migrant Eastern European women in England. Journal of Medical Screening. 2019;27(1):40-7.

125. Marmot MG, Altman DG, Cameron DA, Dewar JA, Thompson SG, Wilcox M. The benefits and harms of breast cancer screening: an independent review. Br J Cancer. 2013;108(11):2205-40.

126. Andreeva VA, Pokhrel P. Breast cancer screening utilization among Eastern European immigrant women worldwide: a systematic literature review and a focus on psychosocial barriers. Psycho-Oncology. 2013;22(12):2664-75.

127. Connelly JL, C. Bielecki, K. Pollok, K. Law, A. Gorman, D. O'Donnell, M. Testicular cancer in Polish men in NHS Lothian: a collaboration between histopathology and public health medicine aiming to improve migrant health. Virchows Archiv. 2020;477:1-390.

128. National Cancer Patient Experience Survey [cited 2022. Available from: <u>https://www.ncpes.co.uk/latest-national-results/</u>.

129. Foulkes MR, Hunt P, Orton S, Sharma N, Cox L. CN55 The testing times project: Collaboration in action. Annals of Oncology. 2022;33:S1369.

130. Office for National Statistics. Coronavirus (COVID-19) latest insights: Vaccines 2023 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsoci alcare/conditionsanddiseases/articles/coronaviruscovid19latestinsights/v accines.

131. Bielecki K, Craig J, Willocks LJ, Pollock KG, Gorman DR. Impact of an influenza information pamphlet on vaccination uptake among Polish pupils in Edinburgh, Scotland and the role of social media in parental decision making. BMC Public Health. 2020;20(1):1381.

132. Gorman DR, Bielecki K, Larson HJ, Willocks LJ, Craig J, Pollock KG. Comparing vaccination hesitancy in Polish migrant parents who accept or refuse nasal flu vaccination for their children. Vaccine. 2020;38(13):2795-9.

133. Gorman DR, Bielecki K, Willocks LJ, Pollock KG. A qualitative study of vaccination behaviour amongst female Polish migrants in Edinburgh, Scotland. Vaccine. 2019;37(20):2741-7.

134. Wagner KS, van Wijgerden JC, Andrews N, Goulden K, White JM. Childhood vaccination coverage by ethnicity within London between 2006/2007 and 2010/2011. Arch Dis Child. 2014;99(4):348-53.

135. Sadie B, Michael E, Mateusz Z, Mary R, Sandra M-J. 'I don't think anybody explained to me how it works': qualitative study exploring vaccination and primary health service access and uptake amongst Polish and Romanian communities in England. BMJ Open. 2019;9(7):e028228.

136. Sime D. 'I think that Polish doctors are better': newly arrived migrant children and their parents' experiences and views of health services in Scotland. Health Place. 2014;30:86-93.

137. World Health Organization. Sexual health n.d. [cited 2023 November 21]. Available from: <u>https://www.who.int/health-topics/sexual-health#tab=tab_1</u>. 138. UK Health Securiy Agency. Sexually transmitted infections (STIs): annual data tables 2010 [updated 2023 October 25; cited 2023 November 21]. Available from: <u>https://www.gov.uk/government/statistics/sexually-transmitted-infections-stis-annual-data-tables</u>.

139. Elford J, Doerner R, McKeown E, Nelson S, Anderson J, Low N. HIV Infection Among Ethnic Minority and Migrant Men Who Have Sex With Men in Britain. Sexually Transmitted Diseases. 2012;39(9).

140. Ganczak M, Czubińska G, Korzeń M, Szych Z. A Cross-Sectional Study on Selected Correlates of High risk Sexual Behavior in Polish Migrants Resident in the United Kingdom. International Journal of Environmental Research and Public Health [Internet]. 2017; 14(4). Available from: https://mdpi-res.com/d attachment/ijerph/ijerph-14-

00422/article deploy/ijerph-14-00422.pdf?version=1492175823.

141. Marsh K, Savage E, Ward H, Wetten S, McGrath L, Hughes G. P96 Characteristics and sexual health outcomes of sex workers seeking sexual health care in England. Sexually Transmitted Infections. 2012;88(Suppl 1):A42-A.

142. Birmingham City Council SMBC. Birmingham and Solihull Sexual Health Needs Assessment 2021 [cited 2023 November 21]. Available from: https://www.birmingham.gov.uk/info/50263/supporting_healthier_lives/ 2445/support for sexual and reproductive health.

143. Tash E, Cacciottolo T, Wright N, Dodds J, Griffiths M, Sen S. Hepatitis B prevalence in a multi-ethnic community in South England: a 3 year retrospective study. Public Health. 2014;128(8):764-5.

144. Ingrid T. UK adds hepatitis B to infant vaccination schedule. BMJ. 2017;358:j3357.

145. Public Health England. Local action on health inequalities:Understanding and reducing ethnic inequalities in health 2018 [cited 2023November21].Availablefrom:

https://assets.publishing.service.gov.uk/government/uploads/system/upl oads/attachment_data/file/730917/local_action_on_health_inequalities. pdf.

146.UK Health Securiy Agency. Tuberculosis in England 2021 [cited2023November21].Availablefrom:https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1064395/TB_annual-report-2021.pdf.

147. Bell S, Saliba V, Evans G, Flanagan S, Ghebrehewet S, McAuslane H, et al. Responding to measles outbreaks in underserved Roma and Romanian populations in England: the critical role of community understanding and engagement. Epidemiology & Infection. 2020;148:e138.

148. European Centre for Disease Prevention and Control. Ongoing outbreak of measles in Romania, risk of spread and epidemiological situation in EU/EEA countries. Stockholm: ECDC; 2017.

149. Delgado-Angulo EK, Bernabé E, Marcenes W. Ethnic inequalities in dental caries among adults in East London. Journal of Public Health. 2016;38(2):e55-e62.

150. Al Shamsi H, Almutairi AG, Al Mashrafi S, Al Kalbani T. Implications of Language Barriers for Healthcare: A Systematic Review. Oman Med J. 2020;35(2):e122.

151.Office For National Statistics. Mortality from leading causes of
death by ethnic group, England and Wales: 2012 to 2019 2021 [cited 2023.
AvailableAvailablefrom:

https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsa ndmarriages/deaths/articles/mortalityfromleadingcausesofdeathbyethnic groupenglandandwales/2012to2019.

152. Office For National Statisitics. National life tables – life expectancy in the UK: 2018 to 2020 2021 [cited 2023. Available from:

https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsa ndmarriages/lifeexpectancies/bulletins/nationallifetablesunitedkingdom/ 2018to2020.

153. Alzheimer's Society. Ethnic minority communities: Increasing access to a dementia diagnosis 2021 [cited 2023 November 21]. Available from: https://www.alzheimers.org.uk/sites/default/files/2021-09/ethinic minorities increasing access to diagnosis.pdf.

154. Birmingham and Solihull Integrated Care System. Birmingham and Solihull Dementia Strategy 2023-2028. 2023.

155. NHS England. Frailty – what it means and how to keep well over the winter months 2013 [cited 2023 November 21]. Available from: https://www.england.nhs.uk/blog/frailty/.

156. Osteoporosis I. Key Statistics for Europe n.d. [cited 2023 November
21]. Available from: <u>https://www.osteoporosis.foundation/facts-statistics/key-statistic-for-europe</u>.

157. National Institute for Health and Care Excellence. How common is it? 2023 [cited 2023 November 21]. Available from: https://cks.nice.org.uk/topics/osteoporosis-prevention-of-fragilityfractures/background-information/prevalence/.

158. Redmond J, Jarjou LMA, Zhou B, Prentice A, Schoenmakers I. Ethnic differences in calcium, phosphate and bone metabolism. Proceedings of the Nutrition Society. 2014;73(2):340-51.

159. Office for National Statistics. Loneliness - What characteristics and circumstances are associated with feeling lonely? 2018 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/lonelinesswhatcharacteristicsandcircumstancesareassociatedwithfee linglonely/2018-04-10.

160. Office for National Statistics. Care homes and estimating the selffunding population, England: 2021 to 2022 2022 [cited 2023 November 21]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsoci alcare/socialcare/articles/carehomesandestimatingtheselffundingpopulat ionengland/2021to2022.

161. NHS Digital. Adult social care – long term support 2022 [updated 2023 June 12; cited 2023 November 21]. Available from: https://www.ethnicity-facts-figures.service.gov.uk/health/social-

care/adult-social-care-long-term-support/latest#by-ethnicity-over-time.

162. Public Health England. Improving access to greenspace A new review for 2020 2020 [cited 2023 November 21]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/upl oads/attachment data/file/904439/Improving access to greenspace 20

20_review.pdf#:~:text=A%20network%20of%20multi-

functional%20green%20space%2C%20urban%20and,Any%20area%20of% 20vegetated%20land%2C%20urban%20or%20rural.

163. University of Delaware. Human Benefits of Green Space 2009 [cited 2023 November 21]. Available from: https://www.udel.edu/academics/colleges/canr/cooperativeextension/fact-sheets/human-benefits-of-green-spaces/.

164. Natural History Museum. City life: Why are green spaces important? n.d. [cited 2023 November 21]. Available from: https://www.nhm.ac.uk/discover/why-we-need-green-spaces-in-cities.html.

165. Birmingham City Council. Birmingham City of Nature Plan. 2022.

166. World Health Organization. Ambient (outdoor) air pollution 2022 [cited 2023 November 21]. Available from: <u>https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health</u>. 167. Birmingham City Council. Air Quality Action Plan Consultation Draft. 2020.

168. Birmingham City Council. Birmingham City Council Air Quality Action Plan 2020 [cited 2023 November 21]. Available from: https://birmingham.cmis.uk.com/Birmingham/Document.ashx?czJKcaeAi 5tUFL1DTL2UE4zNRBcoShgo=5d5fXL6kLGxCz%2BizXyUujzs%2BGvInUDDrs 3o2zuCi95v2reHHFqpAyA%3D%3D&rUzwRPf%2BZ3zd4E7Ikn8Lyw%3D%3 D=pwRE6AGJFLDNIh225F5QMaQWCtPHwdhUfCZ%2FLUQzgA2uL5jNRG4j dQ%3D%3D&mCTIbCubSFfXsDGW9IXnlg%3D%3D=hFflUdN3100%3D&kCx 1AnS9%2FpWZQ40DXFvdEw%3D%3D=hFflUdN3100%3D&uJovDxwdjMPo Yv%2BAJvYtyA%3D%3D=ctNJFf55vVA%3D&FgPIIEJYlotS%2BYGoBi5oIA%3 D%3D=NHdURQburHA%3D&d9Qij0ag1Pd993jsyOJqFvmyB7X0CSQK=ctNJ Ff55vVA%3D&WGewmoAfeNR9xqBux0r1Q8Za60IavYmz=ctNJFf55vVA%3D.

169. Tomlinson CJ, Prieto-Lopez T, Bassett R, Chapman L, Cai X-M, Thornes JE, et al. Showcasing urban heat island work in Birmingham – measuring, monitoring, modelling and more. Weather. 2013;68(2):44-9.