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Abbreviations

		GAVI	Global Alliance for Vaccines and Immunization
ACE	Adverse Childhood Experience	нснѕ	Hospital and Community Health Service
AFRO	World Health Organisation African Region	HE	Higher Education
AIDS	Acquired Immunodeficiency Syndrome	HESA	Higher Education Statistics Agency
BMI	Body Mass Index	HIV	Human Immunodeficiency Virus
ВР	Blood Pressure	HPV	Human Papillomavirus
BSOL ICS	Birmingham and Solihull Integrated Care System	IDF	International Diabetes Federation
CEDAW	United Nations Committee on the Elimination of	IMD	Index of Multiple Deprivation
	Discrimination against Women	loD	Indices of Deprivation
CIA	Central Intelligence Agency	LGBTQ+	Lesbian, gay, bisexual, trans, queer, and other
COPD	Chronic Obstructive Pulmonary Disease		minority sexual orientations and gender identities
COVID-19	SARS-CoV-2	LMICs	Low and Middle-income Countries
СРА	Care Programme Approach	LTHC	Long-term Health Condition
CVD	Cardiovascular Disease	MBRRACE-UK	Mothers and Babies: Reducing Risk through Audits
DALY	Disability-adjusted Life Years		and Confidential Enquiries across the UK
eFI	Electronic Frailty Index	MDR	Multi Drug Resistant
EAPA-SA	Employee Assistance Professionals Association of South Africa	MHCLG	Ministry of Housing, Communities & Local Government
ETS	Enhanced Tuberculosis Surveillance	MSOA	Middle-layer Super Output Area

ACE

FGS

Adverse Childhood Experience

Female Genital Schistosomiasis

ACE	Adverse Childhood Experience	ACE	Adverse Childhood Experience
NCD	Non-communicable Disease	YLL	Years of Life Lost
NEET	Not in Employment, Education or Training		
NHS	National Health Service		
NICE	National Institute for Health and Care Excellence		
OECD	Organisation for Economic Co-operation and Development		
OHID	Office for Health Improvement and Disparities		
ONS	Office for National Statistics		
PHE	Public Health England		
SANHANES	South African National Health and Nutrition Examination Survey		
SES	Socioeconomic Status		
STI	Sexually Transmitted Infection		
ТВ	Tuberculosis		
TFR	Total Fertility Rate		
UHI	Urban Heat Island		
UKHSA	UK Health Security Agency		
UNICEF	United Nationals Children's Fund		
WHF	World Heart Federation		
WHO	World Health Organisation		

Community Evidence Summaries

As part of Birmingham City Council (BCC), Public Health Division's work to understand the diverse communities of Birmingham, we have developed a series of evidence summaries called the Community Health Profiles. These will help raise awareness of the unique health needs and enable health services to be more relevant and effective in meeting the requirements of each community group.

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 South African Community Health Profile identifies and summarises the national and local evidence concerning the health, lifestyle behaviours and wider determinants of health that affect the South African community. Although the focus of this report was health inequalities among the South African community in Birmingham, the limited available information on health inequalities has resulted in data being used from the UK and internationally where available.

This report covers health topics throughout the life course from maternity to ageing and dying well and includes chronic health conditions such as diabetes and cardiovascular disease (CVD). The report also covers protect and detect topics such as screening and vaccinations, as well as other themes such as knowledge and understanding of health issues affecting the South African 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. The picture is complex not only between different intersectional identities within the South African community, 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 data and the current gaps in our knowledge and understanding.

South African Community in the UK

According to the 2021 census, 217,180 people in England and Wales were born in South Africa, making it the fourteenth most common country of birth. There has been a 14% increase in the South African-born population in England and Wales since 2011, where 191,023 people living in England and Wales were born in South Africa. The census also identified that in 2021, there were 1,629 South African-born residents in Birmingham, a slight increase from 1,465 (0.1% of total population) in the 2011 Census, an 11% increase over the decade period. The largest South African-born populations in Birmingham can be found in Edgbaston North and Selly Oak (n=50) middle-layer super output areas (MSOAs). The next most populated areas are Edgbaston South and University (n=41) and Central (n=40) (Office for National Statistics (ONS), 2023).

With regard to demographics, there was a large percentage of South Africans living in the West Midlands aged 20 to 44 (54%) compared with the total population averages for the West Midland (32%) and England and Wales (33%). Additionally, 87% of South African-born residents in the UK identify as White (ONS),2023). This contrasts with the ethnic demographics of South Africa, where 80% of the population identify as Black ethnicity (Africa.com, 2019).

Among South African-born populations living in England and Wales, 7,489 (3.5%) spoke Afrikaans as their main language, and 89% of South Africans cited England (and Welsh in Wales) as their main language; while of the remaining 4.5% whose main language is not English, 4.4% can speak English very well or well, 0.1% cannot speak English well and 0.0% cannot speak English at all (ONS, 2023). Again, language of South African-born residents in England and Wales does not closely mirror that of South Africa. The main languages recorded in the 2011 South African Census included Zulu

(spoken as a first language by 23% of South African households), Xhosa (16%), Afrikaans (14%) and English (9.6%).

The key health inequalities identified within this South African Community Health Profile include:

Getting the Best Start in Life

- There is limited data on maternal mortality rates among South Africans in the UK. The maternal mortality rate in South Africa in 2020 was 127 per 100,000, much higher than the UK at 10 per 100,000. HIV-related infections was reported as the leading cause of maternal mortality in South Africa, accounting for 12% of all maternal deaths (World Health Organisation (WHO), 2020).
- There is limited data on infant mortality rates of South Africans in the UK. Rates of infant mortality in 2021 in South Africans were reported at 26 deaths per 1,000 live births, compared with the England and Wales average of 3.7 deaths per 1,000 live births (WHO, 2023a and ONS, 2017).
- There is limited data on dental decay among South African children in the UK. In a systematic review, 52% of 5-year-olds in South Africa were identified as having Early Childhood Caries (ECC). In 2019, 23% of 5year-old children in England were reported to experience dental decay (Kimmie-Dhansay *et al.*, 2022 and Public Health England (PHE) 2020a).

Mental Wellness and Balance

• There is limited data for the 'mental wellness and balance' section for South Africans in the UK.

- In 2021, 36% of South Africans reported feelings of distress or were struggling on the mental health wellbeing scale, the highest of 34 countries analysed (EAPA-SA, 2022).
- Worldwide, 27% of women and girls aged 15 and older have experienced physical or sexual intimate partner violence; in South Africa between 33% and 50% have experienced this (United Nations Committee on the Elimination of Discrimination against Women (CEDAW), 2021; Oram *et al.*, 2022).

Healthy and Affordable Food

- There is limited information on obesity among South Africans in the UK. Women in South Africa were found to have much higher rates of obesity (41%) than women in the UK (20%). The reverse trend was observed for men; 11% of South African and 20% of UK men were obese in 2016 and 2014 respectively (World Obesity Federation, 2023a).
- There is limited data on food insecurity among South Africans in the UK. Findings from a 2021 cross-sectional survey (n=3,402) found that 20% of adults within South Africa were food insecure, with social vulnerability increasing the risk of food insecurity (Mtintsilana *et al.,* 2022). This compares with 16% of households in the West Midlands that were food insecure (Birmingham City Council, 2023a).

Active at Every Age and Ability

• There is limited data on physical inactivity rates among South Africans in the UK. Physical inactivity rates in South Africa were reported as 29%

in men and 47% in women. This compares with 32% of males and 40% of females in the UK who were physically inactive. This suggests rates of physical inactivity among South African women particularly are high (WHO, 2022c).

Living, Working and Learning Well

- The 2021 Census showed that a much higher percentage of the South African-born population lived in socially rented properties from the council or local authority (37%) than the England and Wales average (8.3%) (ONS, 2023).
- A South African study (n=6,442) which draws upon the South African Demographic Health Survey 2016, found prevalence of pre-diabetes and diabetes within the sample population to be 67% and 22% respectively (Grundlingh *et al.*, 2022).
- Prevalence of hypertension, according to the most recent national and regional surveys in South Africa, was around 35% to 49% of adults, with at least one third unaware of their hypertensive status (Ware *et al.*, 2019).

Protect and Detect

- There is limited findings for South Africans in the UK relating to protect and detect topics.
- Rates of cancer screening within South Africa are low, with 6% of females aged 50 to 69 having received a breast examination or mammography versus 75% of all women in the UK. Of women aged 20 to 69, 17% of South Africans have received a cervical cancer screen, versus 70% of women of the same age in the UK (PHE, 2017).

- In South Africa, 37% of women had received their first dose, and 34% their second dose of the HPV vaccine in 2017 (82% and 67% respectively for England in 2022) (HPV Information Centre, 2023).
- South Africa has the highest HIV prevalence in the world, approximately 13% of the population lives with HIV; compared with 0.16% of the UK population (Galappaththi-Arachchige *et al.,* 2018 and Stanford, 2022).
- South Africa has a high prevalence of TB (40 to 499 cases per 100,000 people), compared with the England average (7.8 per 100,000 people in 2021).

Ageing Well and Dying Well

- There is limited data on life expectancy for South Africans in the UK. In South Africa life expectancy at birth in 2021 was estimated at 59.3 years for men and 64.6 years for women (South African Government, 2023).
- There is limited data on dementia for South Africans in the UK. Community-based epidemiological studies from South Africa suggest a dementia prevalence of between 7.9% and 11%. This is compared with 4% prevalence in England (Akinyemi *et al.,* 2021 and The Office for Health Improvement and Disparities (OHID), 2022).

Contributing to a Green and Sustainable Future

 Approximately 15% of the South African-born population resided in the top 15 most polluted Birmingham MSOAs in 2021, compared with 5.4% of the White British population (Ministry of Housing, Communities & Local Government (MHCLG), 2019 and ONS, 2023).

• South Africans who live in the centre of the city are most at risk of rising heat temperatures, such as MSOAs: Central, Digbeth, and Five Ways North (Tomlinson *et al.*, 2013).

Methodology

An exploratory search was undertaken by Hawkmoth Consultancy LTD using a range of databases including National Data Sources, NOMIS (ONS), and PubMed to identify relevant information on the South African community in the UK. Keyword search terms and subject headings relevant to the themes were identified. All references used within this profile are outlined in the References section.

As an initial exploratory search, the following avenues were examined:

a. National data sources

NOMIS data: Data has been extracted by nationality from the <u>2011 and</u> <u>2021 Census</u> rounds; data from the 2011 census has 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.

National Public Health (Public Health Profiles) and other government data sources (ons.gov.uk and gov.uk): Data has been extracted where relevant South African community-level information was available.

National voluntary and community sector reports: These have been identified through Google Scholar and national websites, specifically where relevant data for the South African community living in Birmingham was available.

b. Academic Database Search

In addition, a <u>PubMed search</u> was performed. All searches contained the keywords "South African" as well as words that were specific to the topic theme. Examples of these are included in the Search Strategy (Appendix 1: Search Strategy).

c. Grey Literature

Where information sources had not been identified through a or b, further searching through Google and Google Scholar using topic specific search terms were carried out. Resources that were 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 deemed to be comparable or relevant to the population of interest.

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 papers were identified from reference lists using this approach, where these additional resources enhanced the knowledge base. Generally, searches were limited to literature from the last 20 years, however information from up to 25 to 30 years was included if the initial search results were limited.

Results retrieved from the initial searches were reviewed by the author against the search strategy (Appendix 1: Search Strategy). The team used a 'concept table' to frame the theme and identify keywords for searches. 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: Exclusion and Inclusion Criteria).

e. Caveats and Limitations

The South African Community Health Profile is limited by the data sources available. In some instances, data on the South African community living in Birmingham is absent or only focuses on a sub-section of the community. When using the 2021 Census, the country of birth has often been selected to identify the South African population, most typically using the 60-category dataset. This approach is more likely to capture more data than using data by national identity and captures the variety of different cultures and ethnic groups that migrate from South Africa. National identity has been included at times as a comparator and in instances where capturing information on second and third-generation migrants is helpful (such as within age group).

In addition, data from the 2021 Census included in the report reflects the data that were available from the dataset at that time and may have been updated by the ONS.

In *sections 2.5.3* and *2.8*, in the absence of much data on deprivation and green and sustainable futures respectively, ward-level deprivation and environmental data have been used to make assumptions about the

experiences of people living in that area; this information should be interpreted with caution.

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.

Below, is a brief overview of some key statistical terms to aid in interpretation of the findings.

Odds ratio (OR): Indicates the likelihood of an outcome or event occurring in one group compared with another. An OR of greater than one means there is an increased likelihood compared with the reference group; an OR of less than one means there is a decreased likelihood. Adjusted ratios (AOR) accounts for other predictor variables in a model, such as sociodemographic factors.

Coefficient of Determination (R^2): Presented as a number between 0 and 1 and measures how well a statistical model can predict an outcome. An R^2 of 0.5 would indicate that approximately half of the observed variation can be explained by the model's input.

Confidence interval (CI): Indicates the level of uncertainty around an estimate (e.g., a percentage or an OR) taken from a sample of a population. 95% CIs are calculated so that if samples were repeatedly taken from the same population, 95% of the time the true value would lie between the upper and lower bound of the CI. If the CIs surrounding two estimates

overlap, there is no statistically significant difference between these estimates.

A p value, or probability value, measures the probability that an observed difference could have occurred by random chance. The smaller the p value, the less likely the finding was due to chance. Often a p value threshold is set at 5%, so only p values of less than 0.05 indicate statistical significance.

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

South Africa is the southernmost country on the African continent (Figure 1), with an estimated population of more than 60 million in 2023 (Britannica, 2023a). South Africa borders Namibia, Botswana, Zimbabwe, and Swaziland. The country Lesotho lies within South Africa and is completely surrounded by South Africa. South Africa is one of the most racially mixed countries within Africa with 80% of the population being of Black ethnicity (Africa.com, 2019).

Fossil remains within South Africa suggest that species lived in the country around 3 million years ago, including Homo habilis, Homo erectus, and Homo sapiens (Africa.com, 2019). South Africa has a historic tribal community. The San tribal community are the oldest inhabitants of South Africa, having lived there for around 20,000 years (Siyabona Africa, 2023). By the time that Europeans reached South Africa in the 15th Century, the main tribes present were the Xhosa and the Zulu, having previously been home to Bantu-speaking people and Khoisans (the original Indigenous people of Southern Africa). Portuguese explorer Vasco da Gama first reached South Africa at the Natal Coast in 1487, followed by the Dutch East India Company in 1652, and then by Great Britain in 1795. Though briefly acceded to the Dutch Batavian Republic, it was re-occupied by the British in 1806 and remained in the British Empire until the territory became self-governing in 1872 (Britannica, 2023b). In addition, in 1820, around 5,000

British settlers arrived in South Africa, the largest settler scheme undertaken in the whole of the colonial era (Cock and Wells, 2020).

Figure 1: Map of Southern Africa, with South Africa located in the southernmost section of the continent, 2022



Source: Marks (2022)

1.1.2 The Apartheid

The next section contains information about the apartheid, and the effects that it has had on healthcare within South Africa. This may be difficult for some readers.

Apartheid, introduced in 1948, was a policy of racial segregation which was enforced in South Africa governed by the White-minority population. The country's National Party (1948 to 1994) extended the racial segregation policies, and these were named *apartheid* (Afrikaans: apartness). The apartheid policy acts dictated where South Africans, on the basis of their racial classification, could live and work, the type of education they could receive, whether they could vote, who they could associate with, and the segregated public facilities they could use (Moyo, 2021).

The apartheid caused large disparities in health between Black and White populations in South Africa. In 1981 for example, there was 1 physician for every 330 White people, but only 1 for every 91,000 Black people (Kon and Lackan, 2008). The authors also cite the differences in life expectancy between ethnic populations. In 1980, the life expectancy of Black people was 55 years, 58 for "Coloured"^{*} people, 65 for Asian-ethnic people and 70 for White people. The incidence of TB in 1985 was highest in "Coloured" people (429 per 100,000) compared with Black people (211 per 100,000), Asian-ethnic people (80 per 100,000), and White people (18 per 100,000).

From 1990 to 1991, President F.W. de Klerk repealed most of the social legislation that provided the legal basis for apartheid (Britannica, 2022). In addition, an all-race national election in 1994 led to a coalition government with a Black majority headed by the country's first Black president, renowned anti-apartheid activist President Nelson Mandela. These

developments marked the end of the legislated apartheid in South Africa. Despite the end of the apartheid, differences between ethnic groups in healthcare remain. For example, on average, Black people die 10 years before any other ethnic group (Nordling, 2022).

1.1.3 Sports and Culture

Providing an overview of South African culture may aid in increasing cultural competency and awareness, and result in the planning of more relevant health interventions.

1.1.3.1 Culture

Various sectors in the UK have had the presence of notable South Africans. These include the British political sphere, Peter Hain, a British politician who served as Secretary of State for Northern Ireland, and in the literary world: renowned author J.R.R. Tolkien, writer of The Lord of the Rings Trilogy and The Hobbit. South Africa has been referred to as the Rainbow Nation, made up of many different cultures and religions (SA History, 2023). The fusion of cultures within South Africa is embodied within music, dance, and food, allowing communities of many diverse backgrounds the opportunity to celebrate their culture (Britannica, 2023c).

1.1.3.2 Festivals

The South African community in the UK organises festival days with braai barbecue as an important part of the gatherings. It is worth noting, Saffa Events (Saffa is a colloquial term for people from South Africa; the term

^{*} Classified as those in South African who self-identify as multiple ethnic groups

uses the abbreviated form of South Africa: "SAF") organises communityrelated events via Facebook across the UK.

South Africa observes a few notable dates, which include Human Rights Day (21 March), Good Friday (April), Freedom Day (27 April), Workers' Day (1 May), Heritage Day (24 and 25 September), and the Day of Reconciliation (16 December). As these are public holidays in South Africa, it is unlikely these are observed by the community in the UK, though some of these public holidays do align with similar public holidays in the UK (Government of South Africa, 2022).

1.2 Migration Patterns

1.2.1 Global Migration Patterns

The United Nations' International Migrant Stock provides an estimate of the number (or "stock") of international migrants disaggregated by age, sex and country or area of origin based on national statistics. These are based on population censuses, population registers and nationally representative surveys. According to data from 2020, almost 915,000 South African citizens left the country (United Nations, 2020).

Given Britain's historical ties with South Africa, it is unsurprising that the UK has been the most common destination for the majority of South Africans (

Table 1). In 2020, it was estimated that 247,300 South Africans were livingin the UK, followed by Australia (199,700) and the United States (117,300).

Table 1: Migrants from South Africa: Globally, 2020

Country of Destination Number of Emigrants United Kingdom 247,300 Australia 199,700 United States 117,300 New Zealand 73,800 Canada 48,100 20,400 Germany Mozambique 20,200 Zimbabwe 19,700 Netherlands 17,500 Eswatini 12.700

Source: United Nations (2020)

1.2.2 Migration to the UK

According to the 2021 Census, for people born in countries outside of the UK, South Africa is the fourteenth most common; in 2011 it was the eighth most common (

Figure 2, **Appendix 3.1**. Figure 2: Top non-UK countries of birth: England and Wales, 2011 and 2021). The number of South Africanborn people in the 2011 Census was 191,023 which rose to 217,180 in 2021 (14% increase).

Figure 2: Top non-UK countries of birth: England and Wales, 2011 and 2021



Figure 3: Year of arrival of South African-born UK residents: England and Wales, before 1981 to 2021

72.599 70.000 66,358 60,000 50,000 41,230 40,000 30,000 21,734 20,000 13,697 10,000 0 Arrived Arrived 1981 Arrived 1991 Arrived 2001 Arrived 2011 Before 1981 to 1990 to 2010 to 2000 to 2021

Source: ONS (2023)

Figure 3 (Appendix 3.2. Figure 3: Year of arrival of South Africanborn UK residents: England and Wales, before 1981 to 2021 for full data table) shows that based on the 2021 Census data, the most common years of arrival for South African-born residents living in England and Wales was between the years 2011 to 2021 (72,599 people). 66,358 arrived between the years 2001 to 2010, while 41,230 arrived between 1991 to 2000.

Source: ONS (2023)

Table 2 shows the percentage of South African-born people living in regions in England and Wales, shown as a percentage of the total South African-born people living in England and Wales. The highest region of South African-born people was in the South East of England (30%), then London (22%), East of England (12%), and the South West (11%). Of the 10 regions, the West Midlands has the seventh highest percentage of people born in South Africa, with 5.1% of the total South African population living there.

Table 2: Highest percentage of South-African born people living in regions:England and Wales, 2021

Regions	Percentage of total South African population
South East	30
London	22
East of England	12
South West	11
North West	6.0
East Midlands	5.4
West Midlands	5.1
Yorkshire and The Humber	4.1
Wales	2.6
North East	1.9

Source: ONS (2023)

The distribution of the South African-born population can also be visualised by the census map visualisation tool (Figure 4).





Source: ONS (2023)

1.2.3 Migration to the West Midlands

Data are by year of arrival. The 2011 Census shows that the most recent years of arrival mirrored similar patterns of migration to England and Wales. The highest years were between 2001 to 2011 (4,123 people), followed by 1991 to 2000 (2364 people) (Figure 5, Appendix 3.3. Figure 5: Year of arrival of South African-born UK residents: West Midlands, before 1981 to 2011 for full data table).

Figure 5: Year of arrival of South African-born UK residents: West Midlands, before 1981 to 2011



Source: ONS (2011) (CT0562)

1.2.4 Migration to Birmingham

Birmingham has a small South African community, according to Census 2021, there are 1,629 South African-born residents in the city of Birmingham. This is an 11% increase from 1,465 (0.1% of total population) noted in the 2011 Census. This is a similar percentage increase compared with the population growth seen in England and Wales between 2011 to 2021, which saw a 9.4% increase.

Table 3 shows the top 10 most populated MSOAs for South African-born populations in Birmingham from the Census 2021. Edgbaston North and Selly Oak MSOAs have the highest number of South African-born people living in them, with 50 living in each MSOA. The next most populated areas are Edgbaston South and University (41) and Central (40). All remaining MSOAs are well spread out around the city, which would suggest that South African-born people do not tend to live in one specific area of Birmingham.

Table 3: Top 10 MSOAs of South African-born populations: Birmingham,2021

MSOA in Birmingham	Total South African-born populations
Edgbaston North	50
Selly Oak	50
Edgbaston South & University	41
Central	40
Ladywood - Summer Hill	38
Reddicap Heath	34
Shenley Lane	32
Harborne East	31
California	31
Attwood Green & Park Central	29

Source: ONS (2023) (60 category dataset)

All MSOA areas can be identified with use of the online Census 2021 tool

1.3 Language

1.3.1 International

South Africa is a culturally diverse nation, which is reflected in the many languages spoken across the country. The main languages recorded in the 2011 South African Census were Zulu (spoken as a first language by 23% of South African households), Afrikaans (14%), Xhosa (16%), English (9.6%), Pedi (9.1%), Tswana (8%), Sotho (7.6%), Swati (7.6%), Tsonga (4.5%), Venda (2.4%), and Ndebele (2.1%) (Stats SA, 2011; Mabin, 2023). These hold an official status under the country's 1996 constitution.

It is worth noting that the Black African population in the country is divided into four linguistic categories (Britannica, 2023d): Nguni (including Swati which is mainly spoken by the Swazi people), Ndebele, Xhosa, and Zulu. Other languages spoken include Sotho-Tswana, Tsonga (Shangaan) and Venda.

In contrast, White South Africans represent two main linguistic groups. While Afrikaans is spoken by more than half, mainly by descendants of Dutch, French and German settlers, English is spoken by descendants of British colonists (36% of the White ethnic group speak English as a first language in South Africa (Stats SA, 2011).

1.3.2 National

According to the 2021 Census, Afrikaans has seen a decline in England and Wales. In 2011 among the total usual resident population aged three years and over, 11,247 recorded Afrikaans as their main language. However, this has sharply declined in 2021 when only 7,489 noted Afrikaans as their main language.

Aside from Afrikaans and English, there is no other official "South African language" as an option to include as a main language in Census data; 7,955 South Africans listed 'African Languages' as their main language but is unclear other than Afrikaans what this data includes. It is therefore challenging to understand if there are South African communities living in England and Wales who speak native tribal languages common within South Africa.

English proficiency has been reported to be excellent amongst South African-born people living in England and Wales (Table 4). 95% of the

population's main language is English, while of the remaining 4.5% whose main language is not English, 4.4% can speak English very well or well, 0.1% cannot speak English well and 0.0% cannot speak English at all.

Table 4: Proficiency in English language amongst South African-bornpeople: England and Wales, 2021

Proficiency in English language	Percentage	
Main language is English (English or Welsh in Wales)	95	
Main language is not English (English or Welsh in Wales): Can speak English very well or well	4.4	
Main language is not English (English or Welsh in Wales): Cannot speak English well	0.1	
Main language is not English (English or Welsh in Wales): Cannot speak English	0.0	

Source: ONS (2023)

Does not apply was not included within calculations as this may have included populations who cannot have a main language (such as infants).

1.3.3 Local

According to Census 2021, there are 58 residents in Birmingham that have noted Afrikaans as their main language, accounting for 0.01% of the total population. This is similar to the 2011 Census, which found a total of 45 Afrikaans speakers in Birmingham; around half of these residents were based in Edgbaston (n= 8), Selly Oak (n= 7) and Sutton Coldfield (n= 7) constituencies. Unsurprisingly, this mirrors the data on the MSOAs with the greatest proportion of South African-born residents.

1.4 Religion

The 2021 Census does not currently allow datasets to be created for country of birth (60 category dataset) and religion by region. According to the 2021 Census data, the majority of South African-born people living in England and Wales identify as Christian, with 58% identifying as being Christian (Figure 6, see Appendix 3.4. Figure 6: Religions of South African-born people, England and Wales, 2021 for full data table). Additionally, 30% of the population answered no religion, while rates of Buddhists, Hindus, Jewish people, and Muslims were similar.



Figure 6: Religions of South African-born people: England and Wales, 2021

Source: ONS (2023)

1.5 Demographics

1.5.1 Ethnicity

South Africa is one of the most racially mixed countries within Africa (Africa.com, 2019) with an estimated 80% of the population being Black African in 2021 (Central Intelligence Agency (CIA), 2023). Other ethnic groups categorised within South Africa include "Coloured" (members of multiracial ethnic communities in Southern Africa) (8.8%), White (7.8%), and Indian or Asian (2.6%). Around three-quarters of South Africans are Black Africans, which includes people from the four main tribes: Zulu,

Xhosa, Sotho, and Tswana. A smaller proportion of the population is of European or of South Asian descent.

According to the Census 2021 86% of South African-born residents in the UK identify as White (Figure 7, see Appendix 3.5. Figure 7: Proportion (%) of ethnic groups among South African-born UK residents: England and Wales, 2021 for full data table). 5.0% identified in Black-ethnic categories, followed by all Mixed (4.2%), Asian (3.6%), and 1.6% Other ethnicities.

Figure 7: Proportion (%) of ethnic groups among South African-born UK residents: England and Wales, 2021



Source: ONS (2023)

1.5.2 Age Profile

As shown in **Figure 8**, there is a relatively even distribution of age and gender (male and female) within South African-born populations living in the West Midlands (see **Appendix 3.6.** Figure 8: Population pyramid, gender and age group of South African-born populations: West Midlands, 2021 for full data table. There is a marked higher percentage of females aged 80 or over (2.9%) compared with males (1.4%). However, strong conclusions cannot be drawn that South African females live longer than South African males in the West Midlands, as this may be due to males being more likely to move back to South Africa at that age.

Figure 8: Population pyramid, gender and age group of South African-born populations: West Midlands, 2021



% Males % Females

Source: ONS (2023)

Figure 9 shows the age groups of the South African-born population living in the West Midlands compared with the West Midlands average (see **Appendix 3.7.** Figure 9: Populations of South African-born people by age: West Midlands, 2021 for full data table. Overall, the West

Midlands has a larger percentage of people within younger age categories. For example, there are 5.6% people in the West Midlands aged 0 to 4, compared with 0.8% of the South-African born population. There are larger percentages of people born in South Africa in working age groups (aged between 20 and 44), than West Midlands averages. It may therefore be expected that economic activity rates are highest amongst South Africanborn people, from age alone (*see section 2.5.2.1*).

Figure 9: Populations of South African-born people by age: West Midlands, 2021



🛯 % SA 🛛 🔳 %WM

Source: ONS (2023)

Identifying South Africans as those who are born in South Africa may exclude younger South Africans who were not born in South Africa. In the interest of this, it is worth exploring the age groups of those that identified their nationality as South African. The 2021 Census custom dataset does not allow this at regional level, so this has been completed for England and Wales (Figure 10, see Appendix 3.8. Figure 10: Populations of those

with a South African nationality by age: England and Wales, 2021 for full data table).

On average, there is a higher percentage of those who are in younger age groups in England and Wales. Age categories 0 to 4, 5 to 9, and 10 to 14 all have higher percentages of people compared with those who identify with a South African nationality. As with those born in South Africa compared with West Midlands averages, there are higher percentages of those with South African nationality in age categories between 20 to 45, compared with England and Wales averages. There are also significantly lower percentages of people in older age groups in people with a South African nationality. Overall, these data support the conclusion that South Africans in the West Midlands are more likely to be of working age and less likely to be children, adolescents, or older adults, especially as the age demographic in the West Midlands is younger than England and Wales averages (ONS, 2023).

Figure 10: Populations of those with a South African nationality by age: England and Wales, 2021



% England and Wales SA identity %

Source: ONS (2023)

1.5.3 Sexual Orientation

The 2021 Census custom dataset does not have a variable for sexual orientation within their analysis. There is therefore a lack of available data

on the sexual orientation of the South African-born population in the UK. Insight from Stonewall, a UK-based charity that advocates for the freedom, equity, and potential of all lesbian, gay, bi, trans, queer, questioning and ace (LGBTQ+) people, provides some useful insight. Stonewall's Global Workplace Equality Index, a benchmarking tool for global LGBT workplace equality, has classified South Africa as a Zone 1 country. This means sexual acts between people of the same sex are legal and clear national employment protections exist for lesbian, gay, and bi people (Stonewall, 2018).

The South African Constitution protects the rights to freedom of expression, association, and assembly under Sections 16 to 18. A report from Stonewall (2018) found that mainstream South African media often tends to only focus on one part of the LGBT community: the flamboyant gay man. It has also noted that while there is not a strong and organised anti-LGBT voice, there is an absence of positive role models for young people within South Africa, for example, in sport.

1.5.4 National Identity

The Census 2021 revealed a general increase in the percentage of the population who specified only a non-UK identity. However, this was not the case for the South African community. Those who identified as only having a South African identity declined from 59,357 in the 2011 Census to 43,321 in 2021. This also meant South Africa dropped from 21st (2011) to 30th (2021) rank of the top non-UK only national identities of usual residents in England and Wales (**Table 5**). A possible reason for this decline is that as the community have integrated into British society, there may be an increase in the numbers that self-identify as British or British South African rather than 'only-South African.'

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Table 5: 'South African only' national identity among usual residents:England and Wales, 2011 and 2021

National Identity	2011	2021	2011	2021
	number (%)	number (%)	(rank)	(rank)
South African only identity	59,357 (0.1)	43,321 (0.1)	21	30

Source: ONS (2023)

2. Community Profile

2.1 Getting the Best Start in Life

Key findings

- The total fertility rate (TFR) in 2011 for mothers born in South Africa in England and Wales (1.79) was slightly higher than for UK-born mothers (1.5) (ONS, 2022).
- There is limited data on maternal mortality rates among South Africans in the UK. The maternal mortality rate in South Africa in 2020 was 127 per 100,000, much higher than the UK at 10 per 100,000. HIV-related infections was reported as the leading cause of maternal mortality in South Africa, accounting for 12% of all maternal deaths (WHO, 2020).
- There is limited data on infant mortality rates of South Africans in the UK. Rates of infant mortality in 2021 in South African were reported at 26 deaths per 1,000 live births, compared with the England and Wales average of 3.7 deaths per 1,000 live births (WHO, 2023a and ONS, 2017).
- South Africa was the 14th most for non-UK-born mothers in 2021, accounting for 0.4% of all live births (ONS, 2023).

- There is limited data on overweight and obesity prevalence among South African children in the UK. In 2016, 29% of girls and 20% of boys in South Africa were overweight, while 13% of girls and 9.8% of boys were obese (Global Nutrition Report, 2023).
- There is limited data on dental decay among South African children in the UK. In a systematic review, 52% of 5-year-olds in South Africa were identified as having Early Childhood Caries (ECC). In 2019, 23% of 5-year-old children in England were reported to experience dental decay (Kimmie-Dhansay *et al.,* 2022 and PHE 2020a).

PHE (2017) suggested that it is important to make sure upon entry to the UK, South African communities are:

- Aware of how the NHS works
- Aware of their entitlements to healthcare and screening (including maternity care)
- Supported to ensure that children and young people are correctly screened and up to date with national immunisation schedules.

This is particularly important to South African mothers who may be more at risk (e.g., those with anaemia, vitamin deficiency, and mothers with Human Immunodeficiency Virus (HIV)).

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" (Birmingham City Council, 2021).

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. However, in 2021 it was reported that non-UK born women overall still have higher TFRs (2.0) than UK-born women (1.5) in England and Wales (ONS, 2022).

The ONS holds data on TFR by country of birth in 2011, but not in 2021. As revealed in **Table 6**, in 2011, South Africa-born mothers had a low TFR compared with other African-born mothers. The TFR of South African-born mothers in 2011 was 1.79, which was lower than Zimbabwean, Kenyan, Ghanian, Nigerian, Democratic Republic of Congolese, and Somalian-born women. Of all African countries included, only mothers born in Botswana and Seychelles had lower TFRs. This would indicate that South African-born mothers are less likely to give birth compared with many other African-born mothers, but still are more likely compared with England and Wales averages for UK-born women (1.5).

Table 6: TFRs for African-born mothers: England and Wales, 2011(minimum of 1,000 live births)

Country of birth of mother		Number of births in 2011 in England and Wales
Somalia	4.19	5,654

Country of birth of mother	TFR	Number of births in 2011 in England
	2011	and Wales
The Democratic Republic of	4.16	1,103
Congo		
Nigeria	3.32	7,476
Ghana	3.24	3,328
Kenya	1.89	1,402
Zimbabwe	1.83	2,837
South Africa	1.79	4,430

Source: ONS (2011) and Aspinall and Chinouya (2016)

The low TFR among South African mothers (1.79) may reflect the low fertility rates in South Africa. Research has found that South Africa's experience in the fertility transition (detailed and bulleted below) is among the most advanced in Africa and its fertility rate is significantly lower than that of other countries in Southern and East Africa. Some key historical points noted by Swartz (2003):

- In 1963, the apartheid government provided substantial funding for private and public family planning services and offered free contraceptives.
- In 1974, the South African government launched the National Family Planning Programme, a family planning service to control birth rates.
- By 1983, over half the eligible women in the country were practicing contraception and by the end of the decade about 61% of women were using some form of contraceptive.
- In South Africa, the contraceptive prevalence rate was 58% in 2016; approximately 76% of women in UK use contraception, according to 2020 research (Stats SA, 2017; French *et al.*, 2020).

This indicates that South African women have good general awareness of family planning and have trust in modern contraceptive methods to achieve their goals of either spacing or limiting the number of children they intend to have. Considering this it may be assumed that South African women in the UK also have high awareness and likely have high usage of contraceptives, which helps explain the low TFR among the community in the UK (Table 6).

2.1.2 Maternal health

2.1.2.1 Maternal mortality

There is limited data and information about maternal health of the British South African community. However, the Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE-UK) Maternal Report 2021 (Oxford Population Health, 2023) sheds some light on the linkages between deprivation and maternal mortality. The report has found there to be statistically significant differences in the maternal mortality rates between women living in the most deprived areas and those living in the least deprived areas, with women living in the most deprived areas continuing to have the highest maternal mortality rates (Oxford Population Health, 2023).

The MBRRACE-UK Report found that nearly a quarter of women who died from 2015 to 2017 (23%) were born outside the UK; 42% of these women were not UK citizens. Overall, 10% of the women who died were not UK citizens. Women who died who were born abroad and who were not UK citizens had arrived in the UK a median of 3.5 years before they died (range 3 months to 18 years). Of the women born abroad, 40% were from Africa (mainly South Africa, Nigeria, and Eritrea), 30% from Asia (mainly Pakistan,

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India, and China) and 17% from Eastern Europe (mostly from the Czech Republic and Romania), with the remainder from other parts of Europe, the Americas, and the Caribbean. Overall, the MBRRACE-UK Report found no statistically significant difference in maternal death rate between women born in the UK and those born outside the UK from 2015 to 2017.

It is worthwhile to note that in 2020 South Africa had one of the lowest rates of maternal mortality in Africa at 127 per 100,000, but rates are still much higher than the UK at 10 per 100,000 (WHO, 2020). The three leading causes of maternal mortality in South Africa are HIV-related infections (12% of maternal deaths), obstetric haemorrhage (excessive bleeding during pregnancy), and hypertensive disorders of pregnancy. According to the Department of Statistics South Africa (2020), most of the causes of maternal mortality in South Africa are preventable. The biggest challenge comes from late booking, with only 47% of women in South Africa attending antenatal care visits during the first trimester in 2016. However, this has increased from 28% in 1998. This emphasises the point noted by PHE (2017), ensuring that South Africas are well aware of entitlements to healthcare when living in the UK.

2.1.2.2 Antenatal care

A 2017 study on maternity care for immigrant women provides useful insight into the barriers faced by minority communities (Higgingbottom *et al.,* 2017). It notes 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. 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 South African women who have recently migrated to the UK and/or have limited English language skills and knowledge about Britain's healthcare services (NICE, 2010). As English proficiency is generally good amongst South Africans, the priority may be to ensure that promotion and knowledge of healthcare services and entitlements during pregnancy are the priority areas for South African mothers, as PHE (2017) suggests.

2.1.3 Infant mortality, stillbirths, and live births

2.1.3.1 Infant mortality and stillbirths

There is limited information on infant mortality and stillbirths among South African-born mothers in the UK. Research on infant mortality and stillbirths in South Africa showed that in 2021, the neonatal mortality rate was 11 per 1,000 births, infant mortality rate was 26 per 1,000 births, and under-five mortality rate was 33 per 1,000 births (WHO, 2023a). For comparison, ONS (2021d) data for England and Wales showed that in 2021 the neonatal mortality rate was 2.7 deaths per 1,000 live births, infant mortality rate was 3.7 deaths per 1,000 live births. The under-5 mortality rate in 2015 across the UK was 4.5 per 1,000 live births (ONS, 2017).

Infant mortality by all causes from 2019 to 2021 was much higher in Birmingham (7.0 per 1,000) than across England (3.9 per 1,000). However, it is unclear how local trends will affect infant mortality rates among the South African population in Birmingham (OHID, 2022a).

2.1.3.2 Live births

South Africa is one of the most common countries of birth for non-UK-born mothers, with South African mothers accounting for 0.4% of all live births in England and Wales in 2021 (ONS, 2023). Though it has seen a steady decline in the overall ranking, dropping from the 10th most common country of birth for non-UK-born mothers in 2012 to the 14th most common in 2021. Previously South African mothers accounted for 0.6% of all live births in 2012, which dropped to 0.5% in 2015 and 2018 (**Table 7**). This is partially due to other countries gaining prominence, for example Albania

has jumped from 41st to 10th most common country of birth for non-UKborn mothers.

Country of birth of mother	% all live births 2012	Rank 2012	% all live births 2015	Rank 2015	% all live births 2018	Rank 2018	% all live births	Rank 2021
							2021	
Pakistan	2.6	2	2.5	2	2.4	2	2.5	2
Romania	0.6	9	1.3	4	2.3	3	2.5	1
Poland	2.9	1	3.3	1	2.9	1	2.1	4
India	2	3	2	3	1.9	4	2.4	3
Bangladesh	1.1	4	1.1	5	1.1	5	1.1	5
Nigeria	1.1	5	1	6	0.9	6	0.9	6
Lithuania	0.6	8	0.7	7	0.7	7	0.6	8
Germany	0.7	7	0.7	8	0.6	8	0.6	7
Somalia	0.7	6	0.7	9	0.6	9	0.5	11
United States of America	0.5	14	0.5	11	0.5	10	0.6	9
South Africa	0.6	10	0.5	10	0.5	11	0.4	14
China	0.6	11	0.5	12	0.4	15	0.3	26
Albania	0.1	41	0.3	28	0.4	21	0.5	10

Table 7: The most common countries of birth for non-UK-born mothers and percentage of all live births: England and Wales, 2012 to 2021

Source: ONS (2023)

Data sorted by percentage of all live births 2021

2.1.4 Demographics

As a proportion of their total population, there is a lower percentage of South African-born children aged 0 to 15, compared with England and Wales averages. When defining South Africans as those born in South Africa, the 2021 Census revealed that there were 12,936 South Africanborn children aged 0 to 15 living in England and Wales (6.0% of the total South African-born population) (ONS, 2023). For context, 19% of the England and Wales average was aged 15 and under. In the West Midlands, there were 905 South African-born children aged 0 to 15 (10% of the South African-born population). When defining South Africans as those that identify as a South African national identity, 10% of the population was aged 0 to 15. These are both lower than the average in the West Midlands, where 19% of the population were aged 0 to 15.

2.1.5 Childhood Vaccinations and Screening Programmes

There is no data or information from published research related to uptake of childhood vaccinations and screening programmes within the South African diaspora in the UK. The rates of neonates who are protected against neonatal tetanus at birth in South Africa was shown to be 90% in the year 2020 (WHO, 2023a), 85% had rotavirus vaccines at 1-years old, while 82% had received the measles-containing-vaccine second dose by the nationally recommended age in 2021. Coverage of pneumococcal conjugate vaccines and Hib immunisation among 1-year-olds was 87% and 86% respectively.

South Africans may not know of the immunisation programmes available to children living in the UK, so it is important to ensure that recent South

African migrants, especially children, are up to date with the UK immunisation schedule (PHE, 2017).

2.1.6 Childhood Mental Health

There is no available evidence of South African children's mental health and wellbeing for those living in the UK. However, research (n=200) from 2019 on South African children's language ability and mental health outcomes for children living in South Africa, has found clear evidence for a link between low language ability and depression in young people (St Clair *et al.*, 2019).

2.1.7 Childhood Obesity

In England measurements of childhood obesity are recorded at Reception (between 4 and 5 years of age) and Year 6 (between 10 and 11 years of age). There is no data on child obesity among children within the South African community in the UK.

Data from the Global Nutrition Report (2023) has showed that 6.0% of boys and 3.4% of girls in South Africa were underweight in 2016. 29% of girls and 20% of boys were overweight, while 13% of girls and 9.8% of boys were obese. Rates Five years previously, in 2011, 22% of girls and 13% of boys were overweight, while 7.9% of girls and 5.1% of boys were obese. This is summarised in **Figure 11** and **Figure 12** (see **Appendix 3.9**. Figure 11: The percentage of South Africans aged 5 to 19 who are overweight, by gender: South Africa, 2010 to 2016 and **Appendix 3.10**. Figure 12: The percentage of South Africa, 2010 to 2016 for full who are obese, by gender: South Africa, 2010 to 2016 for full data tables.
Figure 11: The percentage of South Africans aged 5 to 19 who are overweight, by gender: South Africa, 2010 to 2016



Figure 12: The percentage of South Africans aged 5 to 19 who are obese, by gender: South Africa, 2010 to 2016



Source: Global Nutrition Report (2023)

2.1.8 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; prevalence was 23% in 2017 (PHE, 2020a).

There is a lack of available data on dental decay in South African children living in the UK. A systematic review by Kimmie-Dhansay *et al.,* (2022) investigated the prevalence of ECC in South Africa, using data from 1975 to 2014. Overall (n=29,477), 45% of children (95% CI 40% to 50%) had ECC. For 5-year-old children this increased to 52% (95% CI 37% to 67%).

Other research from South Africa has found the greatest need for the treatment of dental cares in South African children was for preventive services, restorations, and extractions (van Wyk and van Wyk, 2004). Research on the dental health of the UK-based community will help clarify whether the oral health needs are similar to those back home.

2.1.9 Child Poverty, Children in Care, Youth Justice

There is no data on child poverty, children in care or youth justice within the South African community.

2.1.10 School Readiness, Exclusions and Attainment

There is no data on school readiness, exclusion, or attainment of South African children in the UK.

2.2 Mental Wellness and Balance

Key findings

- There is limited data for the 'mental wellness and balance' section for South Africans in the UK.
- In 2021, 36% of South Africans reported feelings of distress or were struggling on the mental health wellbeing scale, the highest of 34 countries analysed (EAPA-SA, 2022).
- Alcohol consumption in South Africa in 2019 was 8.7L per person (aged 15+) year; higher than the world average (5.8L), but lower than the UK (11L) (WHO, 2023b). In 2015, alcohol was the fifth leading cause of death and disability in South Africa (Trangenstein *et al.,* 2018).
- Survey analysis (n=26,453) from South Africa revealed that among women, factors associated with increased drug use included Mixed (OR 5.2) and White (OR 6.4) ethnic group (compared with Black African) and harmful alcohol use (OR 3.1) were associated with increased drug use (Peltzer and Phaswana-Mafuya, 2018).
- Among men, drug use was associated with Mixed ethnic group (OR 1.9) (compared with Black African), harmful alcohol use (OR 2.3), being a victim of a violent crime (OR 1.7) and having two or more sexual partners (OR 1.8) (Peltzer and Phaswana-Mafuya, 2018).

- Worldwide, 27% of women and girls aged 15 and older have experienced physical or sexual intimate partner violence; in South Africa between 33% and 50% have experienced this (CEDAW, 2021; Oram *et al.*, 2022).
- 2.2.1 Mental Health

2.2.1.1 Prevalence

Mental health is an increasingly important 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 (MIND UK, 2020). The number of people with common mental health problems went up by 20% between 1993 and 2014, in both men and women.

The EAPA-SA (2022) cite findings from the Annual Mental State of the World Report 2021. South Africa ranks as one of the worst countries regarding mental health and wellbeing. The rate of those who reported that they felt distressed or struggling on the mental health wellbeing scale increased from 29% in 2020 to 36% in 2021; South African scored the lowest average score in the mental health wellbeing scale of all 34 countries analysed. Rates of mental health distress vary across all 9 provinces, with higher rates in the Northern Cape, Eastern Cape, Western Cape, Gauteng, and Mpumalanga.

2.2.1.2 Factors Influencing Mental Health

A 2021 national survey within South Africa completed by 3,402 respondents revealed ranges of probable anxiety[†] to be between 18% and 26%, while probable depression[‡] scores varied between 15% to 39% (Craig *et al.*, 2022). Probable anxiety and probable depression were influenced by a wide range of factors, including being retired, widowed, divorced, or separated, living in metropolitan areas, and only having a primary school education (**Table 8**). The likelihood of having probable depression and probable anxiety increased proportionately with an increase in the Adverse Childhood Experience (ACE) score. This indicates that those with ACEs are more likely to live with probable depression or anxiety.

⁺ Probable anxiety was defined as those that scored ≥10 on the Patient Health Questionnaire (PHQ-9) or the Generalised Anxiety Disorder-7 (GAD-7) **Table 8:** Factors contributing to increased odds of probable depressionand anxiety: South Africa, 2021

Sociodemographic	Probable Depression	Probable Anxiety (OR,
Variable	(OR, 95% CI)	95% CI)
Retired	1.04 (1.03 to 1.04)	0.64* (0.64 to 0.65)
Widowed, divorced or separated	1.4 (1.4 to 1.4)	1.2 (1.2 to 1.2)
Primary education only	1.3 (1.3 to 1.3)	1.3 (1.2 to 1.3)
NSC/short course education	1.4 (1.4 to 1.5)	1.4 (1.4 to 1.4)
White ethnic group	1.2 (1.2 to 1.2)	0.92* (0.92 to 0.92)
"Coloured" ethnic group	1.2 (1.2 to 1.2)	1.0 (1.0 to 1.0)
ACE (model 2)	1.2 (1.2 to 1.2)	1.2 (1.2 to 1.2)

Source: Craig et al., (2022)

Note: all findings were statistically significant (p<0.001)

* Not at increased odds of probable anxiety or depression

2.2.1.3 Mental Health Services

There is no information or data specifically on the mental health of the South African community in the UK. Looking at different ethnic groups that are typical of the South African community, may provide some insight. Research on mental health services in the UK have outlined different support programmes. One of these is the Care Programme Approach (CPA), which is a national system that sets out how mental health services

^{*} Probable depression was defined as those that scored ≥10 on the Patient Health Questionnaire (PHQ-9)

should help people with mental illnesses and complex needs (Aspinall and Chinouya, 2016).

According to NHS Choices, it is recommended that the person who needs CPA support is involved in the assessment of their own needs and in the development of the plan to meet those needs (Aspinall and Chinouya, 2016). It advises that the person should be informed about their different choices for care and support available to them, and they should be treated with dignity and respect. Of the 13,847 Black Africans in contact with services from 2013 to 2014 in England, 41% had CPA status; similar rates when compared with other Black and Black British subgroups (Black Caribbean, 40%; Other Black, 40%). This is compared with 21% amongst all people and 22% in the White British group. Rates were also lower in the pan-ethnic Mixed (31%) and Asian or Asian British group (27%).

As the Commission on Race and Ethnic Disparities (2021) points out, minority and immigrant groups are more likely to experience mental health difficulties in all areas around the world, including White minorities in majority White countries. This suggests that Black African, "Coloured" South Africans, and Indian or Asian-ethnic South Africans may experience the greatest mental health difficulties within Birmingham and the UK.

Mental health conditions appear to be prevalent within South Africa. However, only 25% of those living with probable depression and probable anxiety have received mental health treatment (Craig *et al.,* 2022). For South African migrants living in Birmingham, it is important to consider factors that influence the likelihood of living with a mental health condition. This may include factors identified by Craig *et al.,* but support should also be mindful of the lack of available services within South Africa, the impact of HIV, the history of the apartheid, and violence risk growing up in South Africa. The findings by Craig *et al.,* also highlighted the importance of supporting those who have experienced ACEs while growing up in South Africa.

2.2.2 Alcohol

There are no research projects or data on the British South African diaspora's alcohol consumption levels or patterns, nor any such information on the diaspora in comparable countries such as Australia and Canada. In the absence of such information, recent studies on alcohol consumption in South Africa may provide some insight.

According to the WHO (2023b), the rate of alcohol consumption in South Africa in 2019 was 8.8L per person (aged 15+) year, which is higher than the world average (5.8L). Comparatively, the UK average was 11L per person per year. Research by van Heerden *et al.*, (2009) revealed that within a survey of 4,351 adults living in South Africa, after controlling for race, sex, and birth cohort, White South Africans were 2.8 times more likely (95% CI 1.9 to 4.1) than Black South Africans to be alcohol users. "Coloured" South Africans to be alcohol users. The study also found that females were less likely (OR 0.2, 95% CI 0.2 to 0.3) to be alcohol users compared with males.

In 2015, alcohol was the fifth leading cause of death and disability in South Africa, accounting for 7.1% of all deaths. Older data also showed similar patterns, in 2000, alcohol accounted for 7.0% of all Disability Adjusted Life

Years (DALY) in South Africa.[§] (Trangenstein *et al.*, 2018). Alcohol consumption may also be a contributory factor in sexually transmitted infections (STIs) and interpersonal violence, two more health concerns prevalent within South Africa. It would be valuable to note if alcohol consumption is common in South African migrants, and whether it increases upon arrival to the UK.

2.2.3 Drug Use

There is no research or data on drug use within the South African community in the UK. Though it is worth noting that research by Peltzer and Phaswana-Mafuya (2018) from South Africa (n= 26,453) has found that illicit drug use is a growing health problem in the country. It found an increase of drug use in the previous 3-months, from 3.7% in 2008 to 4.4% in 2012.

In survey analysis (n=26,453), where a number of sociodemographic factors were controlled for, Peltzer and Phaswana-Mafuya (2018) found that drug use among South African men was higher among those from Mixed ethnic groups (compared with Black African), individuals with harmful alcohol use, victims of a violent crime, or with two or more sexual partners. Drug use was lower in men aged 55 or over. Similar findings were observed among South African women, with those from Mixed and White ethnic groups (compared with Black African), or those with harmful alcohol use having higher drug use. Women who were unemployed and looking for work were found to be much less likely to have used drugs than women in employment (**Table 9**).

Table 9: Association between sociodemographic variables and drug use:South Africa, 2012

Sociodemographic Variable	Men (aOR (95% Cl))	Women (aOR (95% CI))
Age 55 or more	0.19 (0.10 to 0.37)	0.84* (0.29 to 2.4)
Mixed ethnic group	1.9 (1.3 to 2.7)	5.2 (2.6 to 10)
White ethnic group	0.78* (0.48 to 1.3)	6.4 (2.9 to 14)
Unemployed (looking to work)	1.0* (0.46 to 2.2)	0.31 (0.12 to 0.79)
Harmful alcohol use	2.3 (1.7 to 3.2)	3.1 (1.6 to 6.1)
Victim of violent crime	1.7 (1.0 to 2.6)	1.9* (0.97 to 3.7)
Two or more sexual partners	1.8 (1.2 to 2.6)	1.7* (0.58 to 4.9)

Source: Peltzer and Phaswana-Mafuya (2018)

*Finding not statistically significant and show large amounts of variation and should be interpreted with caution

Also, specific socio-demographic factors have been associated with drug use in South Africa, which include male gender, younger age, specific population groups such as mixed race and the White ethnic group, lower income, or not employed, and geo-locality such as urban areas (Peltzer and Phaswana-Mafuya, 2018). Other certain health risk behaviours, such as common mental health disorders (major depression and anxiety disorders), alcohol use disorders, HIV risk behaviours and crime have been found to be associated with drug use.

[§] One DALY represents the loss equivalent to one year of full health.

It would be valuable to assess the presence of these risk factors, such as ethnicity, being a victim of violent crime, employment status, and age, within the British South African community and whether these factors predispose members of the community to illicit drug use. This can help prevention and intervention services to establish appropriate support for the community.

2.2.4 Smoking

There is no research on the British South African community's smoking habits. However, the charity Action on Smoking and Health (ASH) (2019) has found when people immigrate to the UK, many come from countries with a different legal framework for tobacco control, a different cultural approach to tobacco use and potentially a higher smoking rate. OHID estimates that the rate of current adult (18+) smokers in Birmingham in 2021 was 16% (OHID, 2023a).

The World Health Organisation African Region (AFRO) has the lowest smoking prevalence (an average of 19% across all 47 countries) of all WHO Regions in 2020 (Tobacco Tactics, 2022). It is anticipated that rates of smoking are declining in AFRO, with rates expected to be 11% in 2025. The prevalence of smoking in South Africa is 17%, just below the AFRO average. Cigarette smoking specifically is known to be a major risk factor for developing and causing frequent exacerbations of chronic obstructive pulmonary disease (COPD) (Saieva, Jenkins, 2021) (refer to *section 2.5.5.5*.

on COPD). COPD exacerbations have been linked to many triggers, such as change in season, air pollution, fires, as well as smoking.

South Africa has been one of the few countries in Africa to introduce marketing restrictions on tobacco. A tobacco sales ban was announced during the COVID-19 lockdown, and South Africa has restricted smoke free areas, where smoking is allowed only in smoking areas in places like bars, taverns, and restaurants, provided that they do not take up more than 25% of the venue (Business Tech, 2022). Legislations have also been passed to prevent tobacco advertisement, banning promotion and sponsorship of tobacco products (Tumwine, 2011). The South African government's policies on smoking will likely shape the smoking habits of the community here. A recent shift to limit smoking in public areas is similar to rules within the UK which may support the South African communities understanding while living within the UK.

2.2.5 Domestic Abuse

Domestic abuse is defined in the UK by the Domestic Abuse Act 2021 (Home Office, 2023). 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. Behaviour is "abusive" if it consists of any of the following^{††}:

- Physical or sexual abuse
- Violent or threatening behaviour

^{**} The definition of "Personally Connected" can be found in the Domestic Abuse Act 2021

⁺⁺ and it does not matter whether the behaviour consists of a single incident or a course of conduct.

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

While there is no data or research on domestic violence within the South African community in the UK, research from the CEDAW (2021) revealed that the scale of domestic violence, including femicide (the intention of killing someone because they are female), is alarmingly high in South Africa. Worldwide, 27% of women and girls aged 15 and older have experienced physical or sexual intimate partner violence; in South Africa between 33% and 50% have experienced this (CEDAW, 2021; Oram *et al.*, 2022). The research has found those who reported their abuser often did not get the protection they needed. According to official figures, out of 143,824 requests for protection orders in 2018 to 2019, only 22,211 were granted (CEDAW).

Considering the scale of domestic violence in South Africa is 'alarmingly high,' it would be valuable to conduct qualitative research, with members of the community in Birmingham to help establish the scale of the issue and any appropriate intervention.

2.2.6 Hate Crimes and Discrimination

According to research in South Africa, a legacy of systematic racial ordering and discrimination under apartheid means that South Africa remains deeply racialised, in cultural and social terms, as well as deeply unequal in terms of the distribution of income and opportunities (Seeking, 2008). South Africans continue to see themselves in the racial categories of the apartheid era, in part because these categories have become the basis for post-apartheid 'redress,' and because they retain cultural meaning in everyday life (Seeking, 2008). Data is not currently collected on racism and hate crimes involving South Africans in the UK; it may be useful to investigate the treatment of all South African ethnic groups within the community.

2.3 Healthy and Affordable Food

Key findings

- There is limited information on dietary intake among South Africans in the UK. In South Africa, 31% of women were affected by anaemia in 2020; progress towards global targets for anaemia have made no or worsening progress (Global Nutrition Report, 2023).
- Average red meat consumption in South Africa in 2022 was substantially above the recommended maximum target intake of 14g/day (149g, 1061% of target) (Global Nutrition Report, 2023).
- There is limited information on obesity among South Africans in the UK. South African women were found to have much higher rates of obesity (41%) than women in the UK (20%). The reverse trend was observed for men; 11% of South African and 20% of UK men were obese in 2016 and 2014 respectively (World Obesity Federation, 2023a).
- There is limited data on food insecurity among South Africans in the UK. Findings from a 2021 cross-sectional survey (n=3,402) found that 20% of adults within South Africa were food insecure, with social vulnerability increasing the risk of food insecurity (OR 2.76, 95% CI 2.76 to 2.77, p<0.001) (Mtintsilana *et al.*, 2022). This compares with 16% of households in the West Midlands that were food insecure (Birmingham City Council, 2023a).

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 (Ruthsatz and Candeias, 2020). For this reason, understanding dietary patterns and preferences provide useful insight into the likely health outcomes and concerns within a community (NHS, 2022). Examples of NCDs include mental health conditions, stroke, heart disease, cancer, diabetes, and chronic lung disease (United Nations Children's Fund (UNICEF), 2021).

2.3.1.1 Dietary Intake

In the absence of data on the South African community in the UK, research from South Africa can provide some insight which may be relevant to the community in the UK.

According to the Global Nutrition Report (2023), South Africa is on course to meet two of the global nutrition targets for maternal, infant, and young children nutrition: childhood wasting and childhood overweight. However, targets of reducing anaemia in women aged 15 to 49 have not improved, with 31% of women being affected in 2020 (Table 10). PHE (2017) suggest that attention must be paid to South African women and children on arrival to the UK, due to the increased risk of anaemia.

Table 10: National progress towards global nutrition targets: South Africa,2015 to 2019

Global Nutrition Target	Progress	Affected Population (%)	Year
Childhood stunting	No progress or worsening	21*	2017
Low birth weight	No progress or worsening	14	2015
Exclusive breastfeeding	No data	32	2016
Anaemia (women)	No progress or worsening	31	2019
Childhood overweight	On course	12*	2017
Childhood wasting	On course	3.4*	2017
Sodium intake, women and men	Off course	N/A	N/A
Raised blood pressure (BP), women	Off course	26	2015
Raised BP, men	Off course	27	2015
Obesity, women	Off course	40	2015
Obesity, men	Off course	15	2015
Diabetes, women	Off course	13	2015
Diabetes, men	Off course	9.7	2015

Source: Global Nutrition Report (2023)

* Target relates only to children aged under 5

Of all dietary factors measured in the Report, a diet high in red meat was the highest attributable cause of mortality, followed by 'low in fruits,' 'low in vegetables,' and 'high in sugary drinks.' The Global Nutrition Report (2023) also highlighted the dietary intakes of key foods and nutrients, of which the average intake (grams per day) was below in many items including fruit (33g), vegetable (132g), legumes (32g), nuts (0.2g), and wholegrains (69g), while, fish (5g), and dairy (134g) falls into recommended levels for consumption (**Table 11**). Average red meat was substantially above the recommended maximum target intake (149g, 1061% of target), which may be a partial explanation to the high attributable cause of mortality for South Africans.

Table 11: National dietary intakes of key food or nutrients (grams/day) ofadults aged 20+: South Africa, 2022

	Food/ Nutrient	Current national intake (% given as percentage of target)	Maximum target intake*	Relation to target
F	Fruit	33g (16%)	200g	Below target intake
\	/egetables	132g (44%)	300g	Below target intake
L	egumes	32g (32%)	100g	Below target intake
Γ	Nuts	0.2g (1%)	25g	Below target intake
١	Wholegrains	69g (55%)	125g	Below target intake
F	ish	5g (18%)	28g	Within target
٢	Dairy	134g (54%)	250g	Within target
F	Red meat	149g (1061%)	14g	Exceeds maximum target intake

Source: Global Nutrition Report (2023)

* Intakes are reported in grams per day (g/d) for all dietary factors. Intakes are based on modelled estimates for adults aged 25 years and older.

Recommended intake targets were determined by the EAT-Lancet Commission on healthy diets from sustainable food systems.

According to PHE (2017), there is a high risk of Vitamin A and Vitamin D deficiency among South Africans. Vitamin D deficiency is particularly more common in people with darker skin, diet (vegans or vegetarians), or people who cover their skin for religious or cultural reasons.

2.3.1.2 Factors that Influence Dietary Intake

In addition, recent studies show that the present nutrition transition associated with economic development, urbanisation, and modernisation in South Africa (Vorster, Kruger, Margetts, 2011), is characterised by changes in dietary patterns and nutrient intakes that will increase the risk of diet-related NCDs (e.g., CVDs and heart disease, such as heart attacks and stroke; cancers; respiratory disease and lung disease, such as asthma and COPD; Type 2 diabetes). These changes include decreased intake of staple foods that are rich in starch and dietary fibre, increased consumption of food from animal origin which is rich in total and saturated fat, decreased intake of legumes and vegetables, and increased intake of energy-dense, micronutrient-poor snack and convenience foods and sweetened carbonated beverages (Vorster, Kruger, Margetts, 2011).

However, South Africa has recently enforced legislation to tackle dietary issues common within the population (World Heart Federation (WHF), 2017). In 2013, the South African Government introduced legislation to reduce salt intake to 5g a day per person by 2020. At this stage, it is too early to determine if the legislation has been successful, but promising results have been noted in studies such as the one by Strauss-Kruger *et al.*,

(2023) who found that the regulation had reduced average consumption of salt by 1.7g per day in a survey of young South African adults.

Furthermore, South Africa became the first African country to announce a sugar tax applying a 2.1 cents per gram of sugar exceeding 4g per 100ml in April 2018, later increasing to 2.21 cents in February 2019. A survey of 696 South Africans found that daily consumption of sugar-sweetened beverages had fallen from 29% to 21% from pre-sugar tax to post (Koen *et al.,* 2022). If results continue to show success within South African populations, it may be expected that similar patterns may be shown when South Africans migrate to the UK which has also recently adopted a sugar tax levy on drinks which has seen an estimated prevention of 5,000 cases of obesity in year 6 girls alone (UK Research and Innovation (UKRI), 2023).

2.3.1.3 Food in South African Culture

Research from South Africa by Knorr and Nielson (2020) found that the typical South African plate has a greater proportion of meat than vegetables, with meat consumed on average 4 times per week. Overall, bread with eggs and pap (a type of porridge made from maize), and meat are the most consumed meals in South Africa. Some of the traditional South African foods include:

- Biltong (thinly sliced, air-dried meat),
- Droewors (an air-dried sausage),
- Braai/ shisa nyama (meaning 'burn the meat' in Zulu, originating from Johannesburg),

- Chakalaka and pap (a mainstay of South African food; vegetable dish made of tomatoes, peppers, onions, beans, and carrots served cold with braaied meat),
- Bunny chow (street food of Durban, originally created by the immigrant Indian community; hollowed out loaves of bread, stuffed with spicy curry),
- Cape Malay curry and bobotie (both dishes introduced to the country by the South and Southeast Asian indentured workers brought by Dutch East India company and combine Asian spices with local flavours).

2.3.2 Obesity

Obesity and being overweight are associated with increased rates of chronic disease and are major risk factors for NCDs, such as CVD, Type 2 diabetes, and some types of cancer (WHO, 2023d). While there is no data on the rate and prevalence of overweight and obese South African populations living in the UK, research on the topic in South Africa provides some useful insight and may be relevant to the UK diaspora.

South Africa is one of the countries with the highest obesity prevalence in Africa. In 2016, 20% of men and 27% of women were classified as overweight (a body mass index (BMI) score of 25.0 to 29.9), while 11% of men and 41% of women in South Africa were obese (a BMI score of 30+) (World Obesity Federation, 2023a). The World Obesity Federation (2023b) also presented comparable data on overweight and obesity rates in the UK. In 2014, 41% of men and 31% of women were overweight, while 20% of men and women were obese. Obesity is the consequence of a disrupted energy balance to energy intake and is regulated through physiological

mechanisms, but these can easily be overridden by environmental, psychological, social, and cultural factors (Manafe, Chelule, and Madiba, 2022).

A prospective study (n=502) has found varying waist circumference thresholds for the prediction of incident dysglycaemia (blood sugar levels that go too low or too high) and type 2 diabetes amongst South African men and women (Goedecke *et al.,* 2022). The International Diabetes Federation (IDF) Europid (people of European origin) thresholds suggest a waist circumference of >94cm is most suggestive of dysglycaemia and type 2 diabetes. However, the study by Goedecke *et al.,* found strong evidence that the optimal waist circumference threshold to predict these two markers for South African men was 96.8cm. For South African women, the most suggestive threshold for dysglycaemia was 91.8cm, while for type 2 diabetes, it was 95.8cm. This may suggest that the IDF thresholds for waist circumference are not fully optimal for South African men and women, and specific thresholds may need to be developed to accurately assess the risk of metabolic syndrome within these communities.

While there is currently a knowledge gap on the prevalence of obesity within the community in the UK, it would be highly valuable to see whether this is a health concern, and whether there are variations by ethnicity and gender.

2.3.3 Food Insecurity

Francis-Devine *et al.*, (2022) suggest that household food insecurity is whether a household can acquire an adequate quality or sufficient quantity of food in socially acceptable ways. Food insecurity has been exacerbated by the Cost-of-Living Crisis. Between June and July 2022, of the 91% of

adults who reported an increase in their cost of living, 95% reported that their food bill had increased, while 44% reported that they had reduced spend on essentials, including food (Francis-Devine *et al.*, 2022).

There is no research on the prevalence of food insecurity within the British South African community. Findings from a 2021 cross-sectional survey (n=3,402) found that 20% of adults within South Africa were food insecure, with social vulnerability increasing the risk of food insecurity (OR 2.76, 95% CI 2.76 to 2.77, p<0.001) (Mtintsilana *et al.*, 2022). Social vulnerability was increased among people from rural areas, older persons, Black Africans, those without school certificates, low income individuals, and females. This compares to the West Midlands, where a reported 16% of households were food insecure (Birmingham City Council, 2023a). It is important to support South African migrants as they enter into the UK, with the Birmingham Food Strategy 2022 to 2030 (Birmingham City Council, 2023b), playing an essential role in improving food security for the citizens of Birmingham.

2.4 Active at Every Age and Ability

Key findings

- There is limited data on physical inactivity rates among South Africans in the UK. Physical inactivity rates in South Africa were reported as 29% in men and 47% in women. This compares with 32% of males and 40% of females in the UK who were physically inactive. This suggest rates of physical inactivity among South African women particularly is high (WHO, 2022c).
- There is limited data on the barriers and facilitators to physical activity among South Africans in the UK. Research in South Africa (n=381) found that among 11 to 15 year olds puberty, maternal education, and socioeconomic status (SES) contributed significantly in tendencies towards sedentary behaviour (adjusted R² 0.139, p<0.000) (Micklesfield *et al.*, 2014).

2.4.1 Physical Activity

2.4.1.1 Rates of Physical Activity

There is no data or published research on physical activity and inactivity levels of the South African community in the UK. While there is an information gap on this topic, research on physical activity conducted in South Africa may provide some useful insight and could be relevant to the community in the UK. International data published in the Lancet Physical Activity Series (2012) reported that 80% of 13 to 15-year-olds in South Africa (n=381) did not meet the current physical activity recommendations of 60 minutes of moderate to vigorous physical activity per day, and also highlighted the need for more physical activity surveillance data from Africa (Micklesfield *et al.,* 2014). The prevalence of physical inactivity, defined as doing no or very little physical activity at work, at home, for transport or during discretionary time, has been estimated to be 43% to 49% in South Africans 15 years of age and older (Micklesfield *et al.,* 2014). Although there is no directly comparable data from the UK, physical inactivity (less than 30 minutes per day) among children and young people aged 2 to 15 in England may be used as a comparator. In 2013, 24% of boys and 29% of girls self-reported less than 30 minutes of physical activity per day; particularly low levels among girls aged 15 years, 45% did less than 30 minutes per day (National Centre for Sport and Exercise, 2013).

International data on physical activity among South African adults is also available from the WHO Physical Activity Profile (2022c). It was reported that 29% of men and 47% of women (aged 18+) were physically inactive in South Africa (Table 12). In the same WHO dataset, physical inactivity in the UK was recorded as 32% and 40% for males and females aged 18+ respectively. In both South Africa and the UK physical inactivity increased with age. Overall South African males were typically less inactive than in the UK, but South African females were more physically inactive.

Table 12: Physical inactivity rates by gender and age group: South Africaand the UK, 2022

Age and gender	South Africa (%)	UK (%)
Male (18+)	29	32

Age and gender	South Africa (%)	UK (%)
Female (18+)	47	40
Male (70+)	41	47
Female (70+)	64	56

Source: WHO (2022c)

The recommendation from the South African Government is for adults to undertake 30 minutes of moderate-intensity physical activity each day of the week, which can be accumulated in bouts of at least 10 minutes during the course of the day (Botha *et al.*, 2013). For children and adolescents, the recommendation is 60 minutes of activity per day. This is in slight contrast with the UK's guidelines which recommends at least 150 minutes of moderate intensity activity a week or 75 minutes of vigorous intensity activity a week for adults (NHS, 2023). This may mean the expectations of physical activity may be different within the community. It would be useful to conduct a survey within the South African diaspora to determine how much physical activity is undertaken each day of the week, and whether this varies according to gender and ethnic groups.

2.4.1.2 Sport in South African Culture

Sports plays a significant role in South African culture, with football (soccer), cricket and rugby being the three mainstream sports. South Africa has hosted several sporting events, including the 1995 Rugby World Cup, 2003 ICC Cricket World Cup and 2007 ICC World Twenty20, and 2010 FIFA World Cup (BBC Sport, 2003; South Africa.info, 2010; FIFA, 2010; ESPN, 2011).

There has also been a significant contribution in sports by South Africanborn British people, particularly in Commonwealth sports such as cricket and rugby. By 2013, the English cricket team had 17 South African-born players (Wilde, 2013) and, similarly, over a dozen have played for both the England and Scotland national Rugby Union teams, reported in 2009 (Live Journal, 2009). Some notable names in sports include cricketers Kevin Pietersen and Andrew Strauss; golfer Justin Rose (2013 U.S. Open championship winner); cyclist Chris Froome (7-time grand tour winner and Olympic bronze medallist); Paralympic cyclist Jaco van Gass (Paralympic champion); swimmer Keri-Anne Payne (two-time world champion and Olympic silver medallist); Rugby Union player Mike Catt (2003 World Cup winner).

2.4.2 Mobility and Living with a Physical Disability

There is no data or research on mobility-related conditions such as musculoskeletal disorders among the UK's South African community.

2.4.3 Barriers and Facilitators to Physical Activity

There is no information on the factors that influence physical activity in South Africans in the UK. Data from a 2012 Household Survey investigated factors which may influence the likelihood of being moderately or vigorously physically active amongst 26,339 individuals (Mlangeni *et al.,* 2018):

 Moderate activity: The study demonstrated decreased likelihood of moderate physical activity among women (OR 0.7, 95% CI 0.6 to 0.8, p<0.001). Increased likelihood of moderate physical was significantly associated with individuals from high socioeconomic status (SES^{‡‡}) households (OR 2.3, 95% CI 1.6 to 3.3, p<0.001).

- Vigorous activity^{§§}: The likelihood of vigorous physical activity decreased with age, especially among the 50+ group (OR 0.2, 95% CI 0.1 to 0.2, p<0.001). Similar to moderate activity, likelihood of vigorous physical activity was decreased among women (OR 0.3, 95% CI 0.3 to 0.4, p<0.001), and increased among individuals from high SES households (OR 1.9, 95% CI 1.6 to 2.2, p<0.001).
- Likelihood of participation in vigorous activity was also less likely amongst individuals who reported fair or poor health (OR 0.4, 95% CI 0.5 to 0.9, *p*<0.001) (compared with good health), and those who did not belong to a medical aid scheme (OR 0.6, 95% CI 0.5 to 0.7, *p*<0.001) (compared with those who did).

A South African research project (n=381) found that puberty, maternal education, and socio-economic status (SES) contributed significantly in tendencies towards sedentary behaviour (adjusted R² 0.139, p<0.000) (Micklesfield *et al.*, 2014). UK-based research on these risk factors could help ascertain whether these factors encourage a sedentary lifestyle among the diaspora as well.

75 minutes of vigorous intensity activity a week can give similar health benefits to 150 minutes of moderate intensity activity

 ^{‡‡} SES was defined as "a composite measure based on availability of essential services and ownership of a range of household assets." SES was split into low, medium, and high.
^{§§} Vigorous activity makes you breathe hard and fast and if you are working at this level, you will not be able to say more than a few words without pausing for breath. In general,

2.5 Living, Working and Learning Well

Key findings

- Limited data available on rates of NEET among South Africans in the UK. Rates of NEET in South Africa among 20 to 24 years olds in 2021, was 50% for men and 57% for women (OECD, 2023).
- In the 2021 to 2022 academic year, there were 1,795 students from South Africa enrolled in higher education institutions in England (HESA, 2023).
- The South African-born population in England and Wales had a high percentage with a level 4 or above qualification (54%), compared with the England and Wales average (ONS, 2023).
- Census data from 2021 revealed that 78% of South-African born people in England and Wales were economically active, higher compared with Birmingham (56%) and England and Wales (61%) averages (ONS, 2023).
- According to the 2021 Census, there was a higher percentage of South African-born people working as managers, directors, and senior official occupations (18%), compared with Birmingham (9.3%) and England and Wales (13%) averages (ONS, 2023).
- South Africans occupied almost 2,000 posts in the NHS (0.14% of all NHS posts) in 2016 (Baker, 2022).

- The 2021 Census showed that a much higher percentage of the South African-born population lived in socially rented properties from the council or local authority (37%) than the England and Wales average (8.3%) (ONS, 2023).
- The South African-born community has a high percentage in very good health (55%) compared with Birmingham (48%) and England and Wales (48%) averages (ONS, 2023).
- A South African study (n=6,442) which draws upon the South African Demographic Health Survey 2016, found prevalence of pre-diabetes and diabetes within the sample population to be 67% and 22% respectively (Grundlingh *et al.,* 2022).
- Prevalence of hypertension, according to the most recent national and regional surveys in South Africa, was around 35% to 49% of adults, with at least one third unaware of their hypertensive status (Ware *et al.,* 2019).
- A higher percentage of South African-born people in England and Wales (88%) identified as not disabled under the Equality Act compared with Birmingham (83%) and England and Wales (83%) averages (ONS, 2023).
- 2.5.1 Education, Qualification, Skills, and Training

2.5.1.1 Not in Employment, Education, or Training

Education and employment status has been shown to be a marker for 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 (Powell, 2021).

Information on NEET is only available in the UK by ethnicity. Data from the ONS (2020) shows the rate of young people NEET by ethnicity (**Table 13**). In England and Wales, 12% of people aged 16 to 25 were NEET between the years 2017 to 2019, including. 12% of White ethnic people and people of Black ethnicity. Rates of Asian ethnic people NEET were lowest for the Asian: Indian group (7.3%), and highest for the Asian: Pakistani group (14%). This demonstrate the differences in NEET rates that may be noted between different South African populations.

Comparatively, in South Africa in 2021, the rates of NEET were both 12% in women and men aged 15 to 19 (Organisation for Economic Co-operation and Development (OECD, 2023). This grew significantly in ages 20 to 24, with 50% of men and 57% of women aged 20 to 24 NEET. This would suggest a lack of employment, education, or training opportunity within South Africa as people enter their twenties. It is important therefore for South Africans in the UK to know their opportunities for career development during their adolescents, to reduce rates of those NEET.

Table 13: Rates of those NEET by ethnicity: England and Wales, 2017 to2019

Ethnicity	Percentage of those NEET
All	12
White: All	12
Mixed: All	11
Asian: Indian	7.3
Asian: Pakistani	14
Asian: Bangladeshi	12
Asian: Chinese	4.5
Asian: Other Asian	11
Black: All	12
Other: All	9.6

Source: ONS (2020)

2.5.1.2 Higher and Further Education

From the latest data from Higher Education Statistics Agency (HESA) (2023), the UK-based body which collects education-related data, financial year 2021 to 2022 in England (**Table 14**). 110 of these enrolled into universities in the West Midlands. Of the 110 that enrolled into West Midlands universities, 45 enrolled into undergraduate courses and 65 enrolled into postgraduate courses.

Table 14: Higher education (HE) student enrolment of South Africans:England, 2021 to 2022

Region	All undergraduate	All postgraduate	Total (undergraduate and postgraduate)
London	220	320	540
South East	160	210	370
South West	170	60	230
North West	85	40	125
East of England	40	85	125
Yorkshire and The Humber	50	60	110
West Midlands	45	65	110
East Midlands	70	35	100
North East	50	20	70
The Open University	10	0	10
Total	900	895	1,795

Source: HESA (2023)

Note: Please note that this data includes rounded totals to the nearest 5

Of the South Africans who enrolled in the academic year 2021 to 2022, HESA (2023) report that 5 enrolled at Aston University, 10 did so at Birmingham City University, and 25 enrolled at the University of Birmingham. No students enrolled at University College Birmingham. *Caution must be applied to these statistics as figures were rounded to the nearest 5.*

2.5.1.3 Highest Level of Qualification

Census data is not available on the highest level of qualification by local or regional level. In the interest of this, South African-born populations living in England and Wales qualification status is compared with England and Wales averages (**Table 15**). Overall, the South African-born population had higher levels of qualification, with 54% at Level 4 or above: degree (BA, BSc), higher degree (MA, PhD, PGCE), NVQ level 4 to 5, HNC, HND, RSA Higher Diploma, BTEC Higher level, professional qualifications, compared with 33% within England and Wales.

Those with Level 3 qualifications: 2 or more A levels or VCEs, 4 or more AS levels, Higher School Certificate, Progression or Advanced Diploma, Welsh Baccalaureate Advance Diploma were also higher in South African-born people (20% compared with 17%). England and Wales averages were higher for categories no qualifications (18% vs 6.2%) and Other: apprenticeships, vocational or work-related qualifications, other qualifications achieved in England or Wales, qualifications achieved outside England or Wales (equivalent not stated or unknown) (8.1% vs 6.2%).

Table 15: Highest level of qualification within South African-born people:England and Wales, 2021

Highest Level of Qualification	South African (%)	England and Wales (%)
No qualifications	6.2	18
Level 1 and entry level qualifications	5.3	9.6
Level 2 qualifications	8.8	13
Level 3 qualifications	20	17
Level 4 qualifications or above	54	34
Other: vocational or work-related qualifications	6.0	8.1

Source: ONS (2023) (190 category dataset for country of birth and 7 categories for highest level of qualification)

Note: Does not apply was removed from the calculations, as this may include ineligible populations (e.g., children) who may not have had the opportunity to gain certain levels of qualifications.

2.5.2 Employment and Economic Activity

2.5.2.1 Economic Activity

Rates of economic activity status by country of birth were captured within the 2021 Census (**Figure 13**, see **Appendix 3.11**. Figure 13: Economic activity and inactivity within South African-born populations: England and Wales, 2021 for full data table). According to the ONS (2023), people were defined as being economically active if they were: in employment (an employee or self-employed), unemployed but looking for work and could start in 2 weeks, or unemployed but waiting to start a job

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that had been offered and accepted. 78% of South African-born people were economically active, higher compared with Birmingham average (56%) and the England and Wales average (61%).

Figure 13: Economic activity and inactivity within South African-born populations: England and Wales, 2021



Economically active Sconomically inactive

Source: ONS (2023) (60 category dataset for country of birth)

Note: "does not apply" was removed from this dataset as it may have included groups that could not be economically active (e.g., children).

Among the economically active population, 93% of South African-born people were in employment (excluding students), and 4.3% were unemployed (excluding students). There was a higher proportion of South African-born residents in employment when compared with the Birmingham (85%) and England and Wales (92%) averages (**Figure 14**, see **Appendix 3.12.** Figure 14: Economic activity by category, within South African-born people: England and Wales, 2021 for full data table). Birmingham had the highest averages for both unemployed groups, full-time students or excluded full-time students. In the 2021 census, unemployed is classified as 'seeking work or waiting to start a job already obtained: available to start working within 2 weeks'.



Figure 14: Economic active population by category, within South Africanborn people: England and Wales, 2021

Source: ONS (2023)

2021 Census (60 category dataset for country of birth)

ES: In employment = Economically active (excluding full-time students): In employment

ES: Unemployed = Economically active (excluding full-time students): Unemployed: Seeking work or waiting to start a job already obtained: Available to start working within 2 weeks

IS In employment = Economically active and a full-time student: In employment

IS: Unemployed = Economically active and a full-time student: Unemployed: Seeking work or waiting to start a job already obtained: Available to start working within 2 weeks

Note: "does not apply" was removed from this dataset as it may have included groups that could not be economically active (e.g., children).

2.5.2.2 Economic Inactivity

The 2021 Census also holds information on economic inactivity by country of birth. In the 12-category dataset, economic inactivity is split into 5 categories:

- 1. Retired
- 2. Student
- 3. Looking after home or family
- 4. Long-term sick or disabled
- 5. Other

In the 2021 Census, there was a lower percentage of South Africans economically inactive by any category (21%), compared with the Birmingham (44%) and England and Wales (39%) average (Table 16).

Table 16: Economic inactivity by category within South African-bornpeople: England and Wales, 2021

Economic inactivity status	South African (%)	Birmingham (%)	England and Wales (%)
Economically inactive: Retired	9.8	16	22
Economically inactive: Student	3.6	10	5.6
Economically inactive: Looking after home or family	3.8	8.2	4.8
Economically inactive: Long- term sick or disabled	1.8	5.4	4.2
Economically inactive: Other	2.3	5.1	3.1
Total	21	44	39

Source: ONS (2023) (60 category dataset for country of birth, 12 category data for economic activity)

Note: "does not apply" was removed from this dataset as it may have included groups that could not be economically active (e.g., children).

2.5.2.3 Occupation

According to the 2021 Census, there was a higher percentage of South African-born people working as managers, directors, and senior official occupations (18%), compared with Birmingham (9.3%) and England and Wales averages (13%) (Table 17). Additionally, the South African-born population had a high percentage of the population in professional

occupations (31%) compared with Birmingham (21%) and England and Wales (20%) averages.

Table 17: Occupation by category within South African-born populations: England and Wales, 2021

Occupation	South African (%)	Birmingham Average (%)	England and Wales (%)
Managers, directors, and senior officials	18	9.3	13
Professional occupations	31	21	20
Associate professional and technical occupations	17	11	13
Administrative and secretarial occupations	9.2	9.3	9.3
Skilled trades occupations	5.9	8.3	10
Caring, leisure and other service occupations	7.3	10	9.4
Sales and customer service occupations	4.2	8.2	7.5
Process, plant, and machine operatives	3.0	8.7	7.0
Elementary occupations	4.6%	13.4%	10.5%

Source: ONS (2023) (60 category data for country of birth)

Note: "does not apply" was removed from this dataset as it may have included groups that could not be economically active (e.g., children).

2.5.2.4 South Africans in the NHS

Baker (2022) reports that the proportion of those working in the NHS with an African nationality has risen from 1.9% in 2016 to 3.1% in 2022. South Africans occupied almost 2,000 posts (0.14% of all NHS posts with all nationalities; 0.7% among foreign nationalities). It is worth noting, half of South Africans in the NHS were nurses, health visitors or provide support to doctors, nurses, and midwives. Around a guarter were scientific, therapeutic, and technical staff, and around 16% were Hospital and Community Health Service (HCHS) Doctors.

Deprivation 2.5.3

The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England and is calculated using outputs from the Indices of Deprivation (IoD) domains. There are seven distinct domains of deprivation, including 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.

All populations in Birmingham are more likely to experience deprivation than the national average. Table 18 shows the top 10 most populated MSOAs in Birmingham by South African-born citizens by IMD score, a lower score indicates less deprivation. For South African-born people, none of the top 10 most populated MSOAs are in the top 10% most deprived neighbourhoods nationally. The two MSOAs in the top 20% most deprived are California and Attwood Green & Park Central which have 31 and 29 South-African born people living within, respectively. The most populated MSOAs are in Edgbaston North (50 people) and Selly Oak (50 people);

Edgbaston North is in the top 40% most deprived, while Selly Oak is in the top 60% most deprived.

It is important to note that while some MSOAs are more deprived than others, some people can live in the most deprived areas and not be deprived themselves, while some can experience deprivation despite living in the least deprived areas. **Table 18:** IMD score of 10 most populated MSOAs within South African-born people: Birmingham, 2021

MSOA in Birmingham	Total South African-born populations	IMD Score	2019 Decile (Where 1 is 10% Most Deprived Nationally)
Edgbaston North	50	25	4
Selly Oak	50	17	6
Edgbaston South & University	41	15	7
Central	40	22	5
Ladywood - Summer Hill	38	32	2
Reddicap Heath	34	26	4
Shenley Lane	32	27	3
Harborne East	31	17	6
California	31	41	2
Attwood Green & Park Central	29	39	2

Source: ONS (2023)

While there is limited information on deprivation in relation to the South African community in the UK, it is likely only a small proportion of the community faces deprivation with majority benefitting from a high standard of living. South African-born people in the UK have high levels of employment (*see section 2.5.2*) and are well educated (*see section 2.5.1*). This would indicate that a lower percentage of South Africans experience deprivation compared with other communities living in Birmingham.

2.5.4 Housing

The 2021 Census showed that a much higher percentage of the South African-born population lived in socially rented properties from the council or local authority (37%) than the England and Wales average (8.3%). There are **Table 19**).

Table 19: Tenure and property ownership by South African-bornpopulation: England and Wales, 2021

Region	South African-born (%)	England and Wales (%)	
Owned (Outright)	15	27	
Owned (Mortgage or	22	26	
loan or shared ownership)	38	36	
Private landlord or	2.5	19	
letting agency			
Other private rented or living rent free	4.4	2.2	
Social rented (from council)	37	8.3	
Other social rented	2.7	8.3	

2.5.5 Physical Health

2.5.5.1 General Health

The 2021 Census data captures how people define their own health, from very good health to very bad health, by country of birth (Figure 15, see

Source: ONS (2011) (Table CT0565)

Appendix 3.13. Figure 15: General health score within South African-born populations: England and Wales, 2021 for full data table). The South African-born community had a high percentage in very good health (55%) compared with Birmingham and England and Wales averages (48% for both). Those in good health was similar across all groups; South African-born (34%), Birmingham average (33%), England and Wales average (34%).

Figure 15: General health score within South African-born populations: England and Wales, 2021



Source: ONS (2023)

2.5.5.2 Diabetes

Diabetes refers to the condition where blood glucose levels are too high and can be caused by the body not producing insulin (type 1) or producing insufficient or ineffective insulin (type 2) (Diabetes UK, n.d.). Diabetes UK (2021) suggest that more than 4.9 million adults in the UK in 2021 were living with diabetes; 850,000 of whom were undiagnosed. Type 2 diabetes contributes to around 90% of all cases of diabetes. In Birmingham, from 2017 and 2018, diabetes prevalence was around 8.6%, compared with 6.8% nationally in the UK (Birmingham City Council, 2019).

In the absence of data on diabetes within the South African community in the UK or in a comparable country, research by Grundlingh *et al.*, (2022) on the health condition in South Africa may provide some useful insight. According to the IDF (2021) the rates of South Africans with diagnosed diabetes has risen from 7.0% in 2011 to 11% in 2021. It is predicted that rates will rise to 12% in 2030 and further to 13% in 2045. However, in 2021 it was estimated that 45% of the population with diabetes were undiagnosed. The IDF estimate that in 2021, 11% of deaths of 20-60 year olds in South Africa were diabetes-related.

The study by Grundlingh *et al.*, (2022) which draws upon the South African Demographic Health Survey 2016 (n= 6,442, aged 15 years and older) found prevalence of pre-diabetes and diabetes within the sample population to be 67% and 22%, respectively. Among those who had never been tested for diabetes prior to the survey, 10% of females and 6% of males were found to have diabetes, and 67% of both males and females were found to be pre-diabetic. Thus, a large proportion of the South

***Rohrer's Index is a measure of leanness (or corpulence) of a person

African population remainsThese included demographic factors (i.e., gender, race, wealth index), health-related factors (i.e., Rohrer's Index^{***}, waist circumference, haemoglobin level, BP, medication, perception of health), and lifestyle factors (i.e., amount of processed food eaten, levels of salt consumption, portions of fruits and vegetables eaten, sugary drinks consumed, and smoking levels). Some of these factors can be seen in **Table 20**.

Table 20: Sociodemographic variables associated with pre-diabetes anddiabetes: South Africa, 2016

Variable	Pre-diabetic OR (95% CI)	Diabetic OR (95% CI)
Male (ref = Female)	1.3 (1.0 to 1.7)	1.4 (1.0 to 2.0)
Black/African (ref = Other)	1.1 (0.74 to 1.6)*	1.5 (0.95 to 2.4)*
Rohrer's Index	1.1 (1.0 to 1.2)	1.1 (0.99 to 1.1)*
Waist Circumference	1.0 (1.0 to 1.1)	1.0 (1.0 to 1.1)
Abnormal BP	1.2 (0.93 to 1.4)*	1.3 (1.0 to 1.7)
Sugary drinks (in previous day)	1.1 (0.92 to 1.4)*	1.3 (0.99 to 1.6)*

Source: Grundlingh et al., (2022)

*These factors confidence intervals overlap with the reference value, so are not statistically significant and should be interpreted with caution.

This highlights the importance of considering diabetesthe study found significant interactions between some of the lifestyle factors, demographic factors, and anthropometric measures, indicating that the effects each of

these factors have on the likelihood of an individual having pre-diabetes or diabetes is confounded by other factors (Grundlingh *et al.*, 2022).

While it is difficult to know whether the South African community in the UK has a similar prevalence of diagnosed pre-diabetes and diabetes, it is important to raise awareness of services that can assess South Africans diabetes risk upon entry to the UK. For example, South African communities should receive the NHS Health Check for adults aged 40 to 74 which can spot early signs of type 2 diabetes.

2.5.5.3 Hypertension

Hypertension, also known as high or raised BP, significantly increases the risk of heart, brain, kidney, and other diseases. It is estimated that 46% of adults with hypertension are unaware of their condition. Hypertension can be affected by diet, physical activity, smoking, alcohol consumption and weight (WHO, 2021). Hypertension is defined as BP \geq 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. It is estimated that Birmingham has around 12% of its registered population on the hypertension register, which compares to 14% nationally across the UK (Birmingham City Council, 2019).

There is no research or data on hypertension within the South African community in the UK or comparable countries. High BP, or hypertension, caused an estimated 10.7 million deaths worldwide in 2015 and rates were higher in low-income and middle-income countries (LMICs); South Africa is an upper middle-income country in which hypertension is a highly prevalent condition. Prevalence of hypertension, according to the most

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recent national and regional survey, was around 35% to 49% of adults, with at least one third unaware of their hypertensive status (Ware *et al.*, 2019).

Recent research in (Kohli-Lynch *et al.*, 2022). This research from 2022 found hypertension was estimated to cause 14,000 ischaemic heart disease events, 13,300 strokes and 6,100 cases of chronic kidney disease annually. Some of the additional risk factors significantly associated with hypertension risk were identified by Ware *et al.*, (2019) in **Table 21**.

Table 21: Sociodemographic variables associated with hypertension risk:South Africa, 2015

Variable	Hypertension (n)	Hypertension (OR, 95% Cl)
"Coloured" Ethnicity*	206	1.6 (1.1 to 2.2)
Waist-to-height ratio more than 0.5	1,176	4.3 (1.4 to 13)
Have ever used alcohol	243	1.5 (1.0 to 2.1)
Diabetes diagnosis	135	2.0 (1.3 to 3.1)

Source: Ware *et al.,* (2019)

*Reference ethnic group in the study was Black African (OR 1)

In addition, research from 2012 using the South African National Health and Nutrition Examination Survey (SANHANES) found that almost a third of South Africans aged 15 or older were hypertensive (Kandala *et al.*, 2021). The 2016 Demographic Health Survey indicated hypertension prevalence in females at 46% and 44% in males. In many LMICs higher than global average prevalence has been reported, attributed to treatment noncompliance, urbanisation, and the behavioural risk factors such as poor diet, physical inactivity, and alcohol and tobacco use. It would be valuable to assess the presence of these factors among British South Africans and whether these increase the prevalence of hypertension within the community.

2.5.5.4 Cardiovascular Disease

CVD is one of the leading causes 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 (The King's Fund, 2021).

There is no data or information on CVD among South Africans in the UK or the diaspora in other countries. However, recent research on CVD in South Africa indicates the country is experiencing an increasing burden of CVD, including coronary heart disease (CHD) and stroke. This may imply the community from South Africa may also be experiencing an increasing burden of CVD, though there is currently a research gap on this topic. CVDs account for 31% of global deaths annually (Abdelatif, Peer, and Manda, 2021), with more than 80% due to CHD and stroke; this amounts to 15 million deaths. The CVD burden in LMICs, including those in sub-Saharan Africa is more severe and occurs at a younger age.

Findings from the WHF (2017) suggest that CVDs accounted for almost a fifth (18%) of all deaths in South Africa. Conversely, the rate of pre-mature mortality within the UK caused by CVD is 22% (British Heart Foundation, n.d.). According to the WHF, some risks factors for CVD prevalence within South Africans include:

- 17% of the population smoke tobacco (for more information *see section 2.2.4*),
- Around 8.8L of pure alcohol consumed per person (for more information *see section 2.2.2*),
- High levels of obesity (for more information *see section 2.3.2*).

Figure 16 shows that CVD, risk factors associated with developing CVD, or consequences of developing CVD, are common in the leading causes of death in South Africa in 2018 (see **Appendix 3.14.** Figure 16: Leading underlying natural causes of death for South Africans, South Africa: 2018 for full data table). These include diabetes (5.9%), cerebrovascular diseases (5.1%), other forms of heart disease (5.1%), hypertensive diseases (4.5%), and ischaemic heart diseases (3.0%) (Stats SA, 2021).

Figure 16: Leading underlying natural causes of death for South Africans, South Africa: 2018



Source: Stats SA (2021)

As outlined in *section 2.3.1*, legislation to reduce sugar and salt intake in South Africa may reduce rates or slow the prevalence of CVD and CVD-related mortality. As there is a lack of research on CVD from South Africans

living in the UK, it would be valuable to note how dietary changes may change upon migrating to the UK and if there are discrepancies between the effectiveness of UK and South African legislation to tackle CVD. Overall, studies have found there to be a lack of research (Abdelatif, Peer, and Manda, 2021) on CVD in South Africa as well as on the communities from the country settled abroad. It would be valuable to see how the changing diet and other lifestyle changes post-migration also impacts the prevalence of CVDs within the community.

2.5.5.5 Chronic Obstructive Pulmonary Disease

COPD refers to a range of conditions affecting the lungs including emphysema and chronic bronchitis; COPD accounts for approximately 30,000 deaths annually (British Lung Foundation, n.d.). Published research on COPD shows a significantly lower risk for all other ethnic groups when compared with the White British group. Smoking status and intensity were found to have almost identical influences on COPD risk across ethnic groups.

There is no research on COPD within the South African community in the UK or in a comparable country. Research has however found interesting linkages between COPD and smoking in South Africa. COPD exacerbations have been linked to many triggers, such as change in season, air pollution, fires, as well as smoking. COPD has a prevalence rate of around 13% in Africa, with estimates of around 20% for South Africa. According to the Birmingham Health Profile 2019, from 2016 to 2017 it can be estimated that Birmingham had around 1.5% of its registered population on this register; this compares with 1.9% nationally (Birmingham City Council, 2019).

In March 2020, South Africa introduced a contentious ban on the sales of tobacco and electronic cigarette products (Saieva and Jenkins, 2021). At the time, the smoking rate in South Africa was around 22%. Recent research has compared the number of COPD presentations at a large regional referral hospital in the Western Cape province from January to August 2019 with the same period in 2020 (to factor in the tobacco sales ban). Electronic emergency centre data showed a reduction of 69% in COPD presentations across the country. Researchers argue that this notable reduction in COPD presentations reduced service pressure on emergency centres most likely benefitted patients' health (Saieva and Jenkins, 2021). Further research and policies are needed to ensure ongoing reduction in the prevalence of smoking to in turn reduce COPD.

2.5.5.6 Cancer

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

It is worth noting, when looking at the impact of cancer in South Africa, the top five invasive cancers reported in the country in 2019 for men were prostate, colorectal, lung, Non-Hodgkin's Lymphoma and Melanoma (CANSA, 2022). Among South African women, the top five invasive cancers were breast, cervix, colorectal, uterus and Non-Hodgkin's Lymphoma. These are similar to the most common cancers in the UK (top three common cancers for males: prostate, lung, and bowel; top three common cancers for females: breast, lung, and bowel) (Cancer Research UK, 2023).

The incidence of all cancers in South Africa is increasing over time, with the total number of cases predicted to almost double between 2019 and 2030 (Finestone and Wishnia, 2022). It is also one of the leading causes of mortality in the country, accounting for 10% of national deaths. By comparison, cancer is the cause of over a quarter of all deaths in the UK in a typical year. In the years 2017 to 2018, there were around 167,000 cancer deaths in the UK, equating to nearly 460 deaths per day (Cancer Research UK, 2023).

The rates of cancer mortality in South Africa can, in part, be explained by the inequities that exist in access to cancer prevention, screening, diagnosis and treatment that lead to poorer health outcomes (Finestone and Wishnia, 2022). It would be valuable to research the prevalence of cancer within the UK-based South African community, to see whether the community face barriers in accessing cancer prevention, screening, diagnosis, and treatment services, and whether specific subsets of the South African community are less likely to attend regular cancer screenings.

Research has also found the reason for the higher rates of cancer to be an increase in the age-specific incidence rate of cancer, in line with an ageing South African population (CANSA, 2022). As a NCD, cancer forms part of the quadruple disease burden faced by South Africa (Finestone and Wishnia, 2022). The country faces a quadruple burden of disease resulting from:

- 1. Communicable diseases such as HIV and Acquired Immunodeficiency Syndrome (AIDS) and TB;
- 2. Maternal and child mortality;

- NCDs such as hypertension and CVD, diabetes, cancer, mental illnesses, and chronic lung diseases like asthma;
- 4. Injury and trauma (WHO, 2017).

2.5.6 Living with a Physical Disability

The 2021 Census allowed for investigations into who assessed their day-today activities as limited by long-term physical or mental health conditions (LTHC) or illnesses which are considered disabilities. Under the Equality Act (2010), disability is classified as having a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities.

Table 22 shows the percentages of differing disability categories for South African-born people in England and Wales, alongside Birmingham and England and Wales averages. A higher percentage of South African-born people (88%) identified as not disabled under the Equality Act compared with Birmingham (83%) and England and Wales (83%) averages. Overall, this would suggest that the South African-born population had a lower prevalence of disability compared with local and national averages.

There were higher percentages of those that were disabled under the Equality Act in England and Wales. Across England and Wales, 7.5% of the general population felt that a disability or LTHC limited day-to-day activity a lot, while 10% felt it limited a little. Comparative numbers for Birmingham were 8.1% and 9.2%, while South African-born figures were 3.9% and 8.0%.

Table 22: Disability status within South African-born populations: Englandand Wales, 2021

Disability	South African %	Birmingham %	England and Wales %
Disabled under the Equality Act: Day-to-day activities limited a lot	3.9%	8.1%	7.5%
Disabled under the Equality Act: Day-to-day activities limited a little	8.0%	9.2%	10%
Not disabled under the Equality Act: Has long- term physical or mental health condition but day-to-day activities are not limited	8.8%	5.1%	6.8%
Not disabled under the Equality Act: No long- term physical or mental health conditions	79%	78%	76%

Source: ONS (2023) (60 category dataset for country of birth, 6 category dataset for disability status)

Of those who identified as being disabled under the Equality Act, South African-born populations living in England and Wales appear to be less affected than Birmingham and national averages. **Figure 17** shows that 33% of the South African-born people who identified as living with a disability under the Equality Act felt that their day-to-day activities were limited a lot, which is lower than England and Wales (43%) and Birmingham

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(47%) (see **Appendix 3.15.** Figure 17: Day-to-day activities limited by disability, within South African-born populations: England and Wales, 2021 for full data table).

Figure 17: Day-to-day activities limited by disability, within South Africanborn populations: England and Wales, 2021



Source: ONS (2023) (60 category dataset for country of birth, 6 category dataset for disability status)

2.5.7 Access to Services

There is no information on how the South Africans access services when living in the UK. South Africans living within South Africa have very different

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experiences of health services. Health services in South Africa are available to all, but care is inequitable between the public and private sector, with it disproportionately favouring private healthcare (Columbia University Irving Medical Centre, n.d.). Of all trained doctors in South Africa, around 79% work privately, leaving only 21% for the public sector. Despite this, only 18% of the population regularly use private healthcare. The rates of those who use private healthcare are uneven across ethnic groups with 73% of White people being members of a medical scheme, 52% of Asian individuals being so, and only 10% of Black Africans. To improve on the lack of quality and access to care, the government plans to establish the National Health Insurance in 2026.

As PHE (2017) suggests, it is important to make sure upon entry to the UK, South African communities are aware of how the NHS works, entitlements to healthcare and screening and to ensure that children and young people are correctly screened, and up to date with national immunisation schedules.

2.6 Protect and Detect

Key findings

- There are limited findings for South Africans in the UK relating to protect and detect topics.
- Rates of cancer screening within South Africa are low, with 6% of females aged 50 to 69 having received a breast examination or mammography versus 75% within the UK. Of women aged 20 to 69, 17% of South Africans have received a cervical cancer screen, versus 70% of women of the same age in the UK (PHE, 2017).
- In South Africa, 37% of women had received their first dose, and 34% their second dose of the HPV vaccine in 2017 (82% and 67% respectively for England in 2022) (HPV Information Centre, 2023).
- South Africa has the highest HIV prevalence in the world, approximately 13% of the population lives with HIV; compared with 0.16% of the UK population (Galappaththi-Arachchige *et al.,* 2018 and Stanford, 2022).
- South Africa has a high prevalence of TB (40 to 499 cases per 100,000 people), compared with the England average (7.8 per 100,000 people in 2021).

2.6.1 Screening

2.6.1.1 Rates of Screening

Cancer is one of the major causes of death in the UK, with more than 1 in 4 deaths in the UK being attributed to cancer in 2019 (Cancer Research UK, n.d.). 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.

Screening can also contribute to the prevention of cervical and colorectal cancers by detecting precancerous growths that can be swiftly removed. The main cancer screening programmes offered in the UK are:

- Cervical screening: offered to all women and people with a cervix aged 25 to 64 to check the health of cells in the cervix. It is offered every 3 years for those aged 25 to 49, and every 5 years from the ages of 50 to 64. Cervical screening helps identify pre-cancerous cell changes in the cervix. These changes can be treated, preventing cancer from developing. Cervical screening is believed to save up to 5,000 lives a year in the UK (Marlow, Wardle, and Waller, 2015).
- Breast screening: offered to women aged 50 to 70 to detect early signs of breast cancer. Women over 70 can self-refer as well. Breast screening prevents approximately 1,300 women from dying of breast cancer every year in the UK. (Marmot, Cameron, and Dewar, 2012). Uptake of breast cancer screening is defined as the proportion of

women invited who attend from screening within 6 months of their invitation.

 Bowel cancer screening for colorectal cancer: offered to everyone aged 60 to 74, using a home test kit every 2 years. Colorectal cancer (CRC) screening can prevent cancer through the detection and removal of precancerous growths and detect cancer at an early stage when treatment is usually more successful.

There is no research on the South African community in the UK and the rates of cancer (and cancer screening). Rates of cancer screening within South Africa are low, with 6% of females aged 50 to 69 having received a breast examination or mammography versus 75% within the UK (PHE, 2017). Of women aged 20 to 69, 17% of South Africans have received a cervical cancer screen, versus 70% of women of the same age in the UK⁺⁺⁺. It is therefore important to ensure that South Africans are aware of cancer screening services offered within the UK, particularly as there are likely many people that have not been diagnosed with abnormal cells, or a heightened risk of cancer within South Africa.

2.6.1.2 Factors Associated with Cancer Screening

A cross-sectional household survey of 10,831 women aged 30+ in South Africa investigated factors associated with cancer screening (Phaswana-Mafuya and Peltzer, 2018). After controlling for sociodemographic and health variables, the following affected screening uptake:

Cervical Cancer:

• As highest level of education increase, the likelihood of attending cervical cancer screening increased (Table 23). Although these findings were not statistically significant so should be interpreted with caution.

Table 23: Adjusted odds ratio relating to uptake of cervical screening byhighest level of education: South Africa, 2018

Highest level of education	Adjusted odds ratio (95% CI)
None	1
Less than Primary	1.5 (0.90 to 2.6)
Primary	1.7 (0.97 to 3.1)
Secondary or more	3.4 (0.98 to 6.0)

Source: Phaswana-Mafuya and Peltzer (2018)

Compared to Black Africans (AOR 1), the White sample (AOR 3.7, 95% CI 1.9 to 7.0) and "Coloured" sample (AOR 2.5, 95% CI 1.6 to 2.9) were more likely to attend cervical cancer screening. Similar results were seen in the Indian or Asian sample, but these results were not significant (AOR 1.7, 95% CI 0.82 to 3.7).

Breast cancer:

• As highest level of education increase, the likelihood of attending breast cancer screening increased (Table 24).

⁺⁺⁺ It is important to note that the age that females are offered cervical cancer in the UK at 25 years-old, not 20.
Table 24: Adjusted odds ratio relating to uptake of cervical screening byhighest level of education: South Africa, 2018

Highest level of education	Adjusted odds ratio (95% CI)
None	1
Less than Primary	2.0 (0.79 to 5.2)
Primary	2.8 (2.3 to 5.9)
Secondary or more	3.8 (1.9 to 7.7)

Source: Phaswana-Mafuya and Peltzer (2018)

Compared to Black Africans (AOR 1), the White sample (AOR 3.3, 95% CI 1.5 to 7.2) and Indian or Asian sample (AOR 4.1, 95% CI 1.7 to 9.7) were more likely to attend breast cancer screening. Similar results were seen in the "Coloured" sample, but these results were not significant (AOR 1.3, 95% CI 0.62 to 2.6).

Additionally, factors such as living in urban areas, higher wealth index, younger age and having one or more chronic conditions were positively associated with cervical and breast cancer screening.

These factors can be helpful for South Africans living in the UK, where it appears that the priority for cancer screening promotion should be at those with a lower educational level and to Black-ethnic South Africans. However, it is unclear whether these same variables would be applicable to South Africans in the UK.

2.6.2 Vaccination programmes

Human Papillomavirus (HPV) is the collective name given to a group of viruses; "high risk" HPV are linked to cervical cancer, anal cancer, genital

cancers and cancers of the head and neck. The HPV vaccine can drastically reduce the likelihood of developing cervical cancer; incidence was reduced by 90% in those vaccinated between ages 12 and 13 and by 34% in those vaccinated from ages 16 to 18 (Cancer Research UK, 2021).

According to The HPV Information Centre (2023), in 2017 the percentage of South African women (age of women not given) who had received their first dose of HPV was 37%, while second dose coverage was 34%. The HPV vaccination has not been introduced amongst South African men. Comparatively, the percentage of females in year 9 in England who have received one and two doses was 82% and 67% in the academic year 2021 to 2022. The rates in males in year 9 was 78% and 62% (UK Health Security Agency (UKHSA), 2022).

Within South Africa, vaccination coverage in 2022 varied between 82% (Measles-containing vaccine, 2nd dose) and 91% (DTP-containing vaccine, 1st dose). Hib, measles 2nd dose, rotavirus, pneumococcal immunisations are included in routine or national services, while data is not available for rubella vaccine and hepatitis birth-dose availability (WHO, 2023c). South Africans may not know of the immunisation and vaccination programmes available to adults living in the UK, so it is important to ensure that recent South African migrants, are up to date with the UK schedules (PHE, 2017).

2.6.3 Sexual Health and other infectious diseases

2.6.3.1 All Sexual Health

There is an absence of research on sexual health within the South African community living within Birmingham. Research from South Africa can help close this knowledge gap. South Africa-based research has found that South African women are particularly vulnerable to sexual health concerns (Galappaththi-Arachchige *et al.,* 2018). The main risks include a high prevalence of teenage pregnancy, HIV, STIs and female genital schistosomiasis^{‡‡‡} (FGS).

2.6.3.2 HIV

South Africa has the highest HIV prevalence in the world, with approximately 7.7 million people living with HIV (Nuh, 2021) (13% of South Africa's population), which represents 18% of the global burden of HIV concerns (Galappaththi-Arachchige *et al.*, 2018). By comparison, there are around 106,890 (0.16% of the UK's population) people living with HIV in the UK (Stanford, 2022).

According to the National Aids Trust (n.d.), migrant populations in the UK are disproportionately affected by HIV. Due to the high prevalence of HIV within South Africa, for South Africans living in the UK, it is important to offer and recommend HIV testing to all children and adults according to the UK national testing guidelines (PHE, 2017).

It would therefore be highly valuable to conduct research on the South African community to determine sexual health concerns, particularly those related to HIV, to ensure appropriate treatment is offered to members of the diaspora.

2.6.4 COVID-19

There is no data or qualitative research on the impact of coronavirus on the South African community living in the UK. South Africa first introduced COVID vaccines in February 2021 and set a target of fully vaccinating 67% of the population (40 million people) by the end of that year (GAVI, 2023). By mid-January 2023, almost two years later, only 35% (21 million people) had been fully vaccinated. *The number of doses to be fully vaccinated varies depending on which vaccine is administered; some require multiple doses, while others require just two given 6 months apart* (South African Government, n.d.). This is lower than when compared with the vaccination coverage in Birmingham; 67% have had the first dose and 62% have had the 2nd dose (Gov.UK, n.d.).

According to GAVI (formerly known as the Global Alliance for Vaccines and Immunization, an international organisation which aims to improve access to new and underused vaccines), the area with the lowest uptake was in Soweto, a township in Johannesburg. This is an underdeveloped, racially segregated urban area with about 1.7 million inhabitants, with mostly an ethnically Black population. Here only about 20% have visited a vaccine site for inoculation (GAVI, 2023). Some of the reasons for the low uptake cited include haphazard media reporting of the coronavirus disease, conflicting messages from health and government authorities, absence of explanation of concepts related to the vaccine and the disease in non-expert and local languages.

^{***}FGS is the gynaecological manifestation of Schistosoma haematobium infection characterised by the deposition of parasite eggs in the genital tract of young girls and women.

It would be valuable to conduct research on the vaccine take up in South Africa by ethnic group to gauge levels of hesitancy, with this process also drawing out the reasons for the hesitation.

2.6.5 Other Infectious Diseases

2.6.5.1 Tuberculosis

In 2020, there were 548 TB case reports to the PHE Enhanced Tuberculosis Surveillance system (ETS) for individual's resident in the West Midlands (UKHSA, 2020). The West Midlands has higher rates of TB than England as a whole. Case numbers decreased in 8 out of 14 local authorities, with the largest reduction in numbers observed in Birmingham (212 in 2019 versus 189 cases in 2020)⁻ Individuals born outside of the UK accounted for 69% of people with TB in the West Midlands in 2020 (365 out of 526) and experienced a rate of TB 13 times higher than the rate among UK-born individuals. TB admissions in Birmingham are concentrated in wards where a greater proportion of the South African community reside (map shown in **Figure 18** (Birmingham City Council, 2012).



Figure 18: Map of Birmingham showing the differing rates of TB admissions in electoral wards: Birmingham, 2005 to 2008



Source: Birmingham City Council (2012)

South Africa is reported to have a high prevalence of TB (40 to 499 cases per 100,000 people, n.d.) and also those from South Africa were reported to have a high number of Multi Drug Resistant (MDR) forms of TB (PHE, 2017). This compares to average Birmingham rates of TB (19 per 100,000 from years 2019 to 2021) and UK incidence of TB (7.8 per 100,000 in 2021). PHE suggested the following advice for healthcare practitioners on the health needs of migrant patients from South Africa:

- a. Screen all new entrants (including children) from (country) for TB according to NICE guidelines
- b. Refer to TB services promptly if screening is positive
- c. Seek advice, if you are a local TB service, from the MDR-TB Clinical Advice Service before treating patients from South Africa for TB
- **d.** Maintain long term vigilance for symptoms of TB even if initial screening is negative
- e. Be aware that TB is a notifiable disease.

According to Stats SA (2021), TB was the leading cause of death in South Africa in 2018, contributing to 6.0% of deaths.

2.6.5.2 Hepatitis

South Africa has a higher than UK rate of hepatitis^{§§§} B and C, so it is worth considering screening for hepatitis, especially if other risk factors apply (PHE, 2017). It is particularly of note to screen pregnant women, and to immunise infants of mothers who have a positive hepatitis B diagnosis,

raising awareness of the universal immunisation programme for hepatitis B and the selective immunisation programme for higher risk groups.

2.6.5.3 Typhoid

PHE (2017) also highlighted that there is an increased risk of typhoid amongst South African communities. They noted the importance of ensuring that travellers to and from South Africa have all typhoid immunisation and advice. It is also important to consider enteric fever (fever affecting the intestines), how to prevent enteric fever; this is particularly more important if there has been recent travel to-and-from Somalia.

2.6.5.4 Malaria

The risk of malaria in South Africa is heightened, due to a presence of the species P. falciparum (the deadliest of five human malaria species) (PHE, 2017). It is important to remember that malaria can be rapidly fatal, so to therefore test people who have travelled to and from South Africa if they feel unwell.

2.6.6 Oral Health

There is no data or qualitative research on the dental health of the South African community living in the UK. There is, however, an abundance of oral health data in South Africa included in the Oral Health Country Profile 2022 (WHO, 2022a). The profile reported the prevalence of untreated carries of deciduous teeth in children aged 1 to 9 was 41%, and people aged

^{§§§} Hepatitis is defined as a disease that causes inflammation of the liver.

5+ with permanent teeth was 28%. The prevalence of severe periodontal disease in people aged 15+ was 25%, with 8.4% of those aged 20+ experiencing edentulism. The number of new cases of lip and oral cavity cancer was 3.8 per 100,000, made up of 5.2 per 100,000 in males and 2.7 per 100,000 in females. Risk factors for South Africans' oral health include a high sugar intake, high alcohol use, and high rates of smoking.

2.7 Ageing Well and Dying Well

Key findings

- There is limited data on life expectancy for South Africans in the UK. In South African life expectancy at birth in 2021 was estimated at 59.3 years for men and 64.6 years for women (South African Government, 2023).
- There is limited data on dementia for South Africans in the UK. Community-based epidemiological studies from South Africa suggested a dementia prevalence of between 7.9% and 11%. This is compared with 4% prevalence in England (Akinyemi *et al.,* 2021 and OHID, 2022b).
- There is limited data on frailty among South Africans in the UK. Research from South Africa (n= 3,989, mean age 61 years) which uses the electronic frailty index (eFI) has found that the median frailty index for South Africa was 0.13 (defined as mild frailty); it also found 557 (14%) had moderate frailty and 263 (6.6%) had severe frailty (Barker *et al.*, 2021).

2.7.1 Life Expectancy and Healthy Life Expectancy

There is an absence of data on life expectancy within the South African community living in the UK. Life expectancy at birth in the UK from 2018 to 2020 was 79.0 years for males and 82.9 years for females (ONS, 2021a). It is also worth noting, life expectancy at birth in South Africa for 2021 was

estimated at 59.3 years for males and 64.6 years for females (South African Government, 2023).

2.7.2 Dementia

Dementia and Alzheimer's disease are the leading cause of death among the general population of England and Wales, this cause represented 13% of all death registrations in the period of 2017 to 2019 (ONS, 2021b).

While there is no data or research on dementia within the South African community in the UK, some community-based epidemiological studies from South Africa provide some insight. Two research studies were captured in a review by Akinyemi *et al.*, (2021), including a 2013 study (n=140) from within nursing homes and a 2017 study (n=1,394) from the Amatole District. These reports found prevalence of dementia to be 7.9% and 11% respectively. This can be compared with the 4% prevalence rate of dementia in England (OHID, 2022b).

Birmingham and Solihull Integrated Case System (BSoL ICS) has launched a Dementia Strategy for 2023 to 2028 (BSOL ICS, 2023). The Strategy reveals that the diagnosis rate in Birmingham and Solihull is currently 57%. The aim is to reach the mandated national target of 68%.

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. 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.

A research study from South Africa assessed the association of poverty with dementia (n=227) (Trani et al., 2022). The study found multidimensional poverty was strongly associated with dementia. According to the study, multidimensional poverty included seven dimensions that are central to well-being (education, health, economic activity, living standards, social participation, fair treatment, and psychological well-being) and 11 indicators of deprivation within those dimensions (limited access to education; severe limitation of activity; difficulty functioning; unemployment; deprivation of access to running water, electricity, and a flush toilet; lack of involvement in community groups; discrimination; depression; and decreased self-esteem). The study suggests that the prevalence and depth of poverty are higher among adults with dementia, with the lack of education, poor health, and unemployment found to be major dimensions of poverty that were associated with a higher prevalence of dementia. The research recommends that long-term interventions beginning early in life may affect social determinants of health through targeted structural policies, for example, access to quality education and health care, and prevent dementia later in life (Trani et al., 2022).

Further research from South Africa by Jacobs *et al.,* (2022) found that people living with dementia and carers experience high levels of internalised stigma related to negative public attitudes associated with high levels of isolation and limited access to support. Qualitative research

within the community to gauge perceptions of dementia would be valuable in shaping the care and support for the community's elderly and can help shape the care system for the diaspora to avail in a decade when dementia will be more prevalent within the group.

2.7.3 Frailty, Loneliness, and Isolation

There is an absence of UK-based research on frailty, loneliness, and isolation within the South African community. However, research from South Africa provides some useful insight.

A 2021 study, investigating data from the 'Health and Ageing in Africa: A Longitudinal Study of an in-depth Community in South Africa' found that the median frailty index for the South African population (n=3,989, mean age 61.3) was 0.13 (defined as mild frailty). The study also found 557 (14%) had moderate frailty and 263 (6.6%) had severe frailty (Barker *et al.*, 2021). The electronic Frailty Index (eFI) is defined by Lansbury *et al.*, (2017) as:

- Score 0 to 0.12 represents patients without frailty.
- >0.12 to 0.24 represents patients with mild frailty.
- >0.24 to 0.36 represents patients with moderate frailty; and
- >0.36 represents patients with severe frailty.

Also, the pilot study by Lansbury *et al.*, (2017) (n=6,670, with date of birth used to identify patients aged \geq 75 years n = 589) in a suburban primary care practice in southern England, found the eFI range was 0.03 to 0.61 (mean 0.23, representing patients with mild frailty) for all patients aged \geq 75 years. Additionally, 32% of the sample had moderate frailty (n=189) and 12% had severe frailty (12%).

Overall, this would indicate that a lower percentage of South Africans live with frailty, compared with England averages. However, frailty is associated with age and the average age within the South African study was lower than the England based study, so results should be interpreted with caution.

2.7.4 Care Homes and Domiciliary Care

There is no data or research on the use of care homes and domiciliary care within the British South African community.

2.7.5 End-of-life and Palliative Care

Similar to care homes and domiciliary care, there is no data or research on the use of end-of-life and palliative care within the British South African community.

2.8 Contributing to a Green and Sustainable Future

Key findings

- The environmental justice index experienced by South Africans living in Birmingham is largely variable, from areas such as Edgbaston with high levels of environmental justice (0.21), to areas with limited environmental justice, such as Soho & Jewellery quarter (0.36) (Birmingham City Council, 2022a and ONS, 2023).
- Approximately 15% of the South African-born population resided in the top 15 most polluted Birmingham MSOAs in 2021, compared with 5.4% of the White British population (MHCLG, 2019 and ONS, 2023).
- South Africans who are most vulnerable to the Urban Heat Island effect are those who live in more central areas of Birmingham, such as Digbeth and Five Ways North (Tomlinson *et al.*, 2013).

2.8.1 Environmental Justice

The Environmental Justice map combines 5 indicators, namely, the index of Years of Life Lost (YLL), Urban Heat Island (UHI) effect, IMD, Public green space access and flood risk. The indicators are combined and scaled in a range of 0 to 1, with 0 being the most 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 (Birmingham City Council, 2022a).

The largest populations of South Africans in Birmingham by ward in 2021 were found in Ladywood, Soho & Jewellery Quarter, Weoley & Selly Oak, Harborne and Edgbaston; these wards have variable mean values on the environmental justice index. South Africans living in Edgbaston are likely to experience much higher levels of environmental justice (0.21) than South Africans living in Soho & Jewellery Quarter (0.36) (Table 25).

Table 25: Environmental Justice Index with top 10 wards with greatestproportion of South African-born residents: Birmingham, 2021

Ward	South African residents (n.)	Proportion of South African population in Birmingham (%)	Index – mean value
Ladywood	86	5.3	0.33
Soho & Jewellery			0.36
Quarter	82	5.0	
Weoley & Selly Oak	76	4.6	0.30
Harborne	74	4.5	0.26
Edgbaston	65	4.0	0.21
Moseley	62	3.8	0.26
Bournbrook & Selly Park	61	3.7	0.30
North Edgbaston	55	3.4	0.32
Erdington	41	2.5	0.34
Quinton	39	2.4	0.27

Source: Birmingham City Council (2022a) and ONS (2023)

2.8.2 Access to Green Spaces

Green spaces are defined as "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 (PHE, 2020).

Birmingham has been named one of the greenest cities in Europe, with over 600 publicly accessible green and blue spaces across the city. 60% of Birmingham residents visit green spaces on a weekly basis, with 72% choosing to visit the green space closest to their home. However, there is an observed inequality in access to good quality green spaces across the city (Birmingham City Council, 2022b).

The environmental justice index defines access to green space as "within 1,000m and at least 2 hectares" (Birmingham City Council, 2022a). ONS data for 2020 provides insight into the average combined size of parks or public gardens and playing fields within 1,000m radius of residents by MSOA (ONS, 2021c).

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. For example, in the Central MSOA, with a South African-born population of 38, the average size of the nearest green space is 0.57 hectares, below the definition for access to green space. However, this dataset does not indicate the size of the next nearest green space, which may meet the requirements listed above (ONS, 2021c).

2.8.3 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, 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 (WHO, 2022b). The effects of air pollution disproportionately affect vulnerable communities such as children, pregnant people, older adults, and those with pre-existing conditions (Birmingham City Council, 2020).

It is estimated that in Birmingham 900 deaths annually are attributable to air pollution (Birmingham City Council, 2020). Additionally, Fingertips data estimates that in 2021, 6.2% of mortalities in Birmingham were attributable to particulate air pollution. This is compared with 5.5% nationally (OHID, 2023b).

2019 data from the IMD estimated the concentration of four main air pollutants: nitrogen oxide, benzene, sulphur dioxide and particulate matter. The overall pollution levels were calculated and given an associated score. A higher score indicates a higher level of air pollution; nationally scores range from 0.32 to 1.90 (MHCLG, 2019). Table 26 maps the 15 most polluted MSOAs in Birmingham and the corresponding South African-born populations.

Table 26: Average air pollution of four main air pollutants by MSOA,displaying South African-born populations within each MSOA: Birmingham,2020 and 2021

MSOA	Pollution Score	South African-born population (no.)
Central	1.55	40
North Central and Dartmouth Circus	1.52	28
Nechells	1.51	3
Digbeth	1.49	11
Aston Park	1.48	5
Brookvale	1.47	17
Five Ways North	1.46	21
Ladywood – Summer Hill	1.45	38
Middlemore	1.45	10
Washwood Heath	1.45	8
Lozells East	1.42	4
Hockley & Jewellery Quarter	1.41	15
Attwood Green & Park Central	1.41	29
Saltley West	1.41	3
Perry Beeches East	1.41	13

Source: MHCLG (2019) and ONS (2023)

From these datasets it can be estimated that 15% of the South African-born population resided in the top 10 most polluted MSOAs in Birmingham 2021, compared with approximately 5.4% of the White British population in Birmingham (ONS, 2023).

2.8.4 Flood Risk

There is no data on the flood risk experienced by South Africans living in Birmingham.

2.8.5 Urban Heat Island Effect

The 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 (Tomlinson *et al.*, 2013).

Published research from Tomlinson *et al.*, (2013), produced spatially assessed heat-health risk map for Birmingham, as seen in **Figure 19**. By overlapping this data to Census data, it can be inferred that some South Africans living in Birmingham are more at risk than others. Those more at risk will be those who live more in the centre of the city, such as MSOAs: Central, Digbeth, and Five Ways North.

Kilometers 3 6 Source: Tomlinson et al., (2013)

Figure 19: Spatially assessed heat-health risk: Birmingham, 2011

3. Closing the Gaps

There is currently limited understanding of the intersectional experiences of South Africans outside of small qualitative research studies and international databases, this is in part due to lack of relevant data. Additionally, it is difficult to accurately ascertain the health of South Africans in the UK as many studies included are from South Africa.

Due to the limited data presented on South Africans in the UK, it is important to interpret international data presented throughout this report with caution as health data may not be applicable to the current health and wellbeing of South Africans in the UK.

Research on the South African community has suggested that intersectionality between country of birth and other aspects of identity, such as gender and age are associated with poorer health outcomes, and it is important that this is explicitly considered when responding to this profile. For example, women experience higher rates of domestic violence, higher rates of obesity and higher rates of physical inactivity. There is limited data available, but it is also likely that South Africans who have a disability or identify as LGBTQ+ experience compounding health issues.

4. Conclusion

This Community Health Profile clearly demonstrates a significant breadth of health inequalities affecting South Africans.

Throughout the Community Health Profile, it has been identified that many healthcare services in South Africa are lacking in provision, staff and facilities. This may impact the quality of treatment and result in rates of screening and health checks to be low or unrecorded in South Africa. It is important that South Africans are made aware of the NHS (and the available services that the NHS provides) upon entry to the UK and for new migrants to discuss how the healthcare in the UK may compare to the healthcare that they are used to. It would also be beneficial to ensure South Africans are up to date with national guidelines on screening, vaccinations, and immunisations.

This profile has revealed that certain health outcomes and determinants of health are more pronounced within different ethnic communities. For example, White South Africans were 2.8 times more likely than Black South Africans to be alcohol users (Heerden *et al.*, 2009). Therefore, it is important to understand the differences in health between ethnic groups that constitute the South African community in the UK.

It is also important to acknowledge that there are also some positives in the report and that in some areas, such as economic activity and education, South Africans have more positive behaviours and outcomes than the England and Wales population (ONS, 2023). We should also recognise the vibrant and varied culture and heritage of people from South Africa in the UK. However, these assets are often overshadowed by the negative inequalities highlighted above.

Additionally, many of the findings in this report must be considered with caution due to the scarcity of UK specific research on the South African population. Much of the data comes from South Africa and may not be generalisable to the UK population of South Africans, and more research is required on those living in the UK to understand their unique health needs. The determinants of health will be different in the UK to South Africa and impact people's health in different ways.

The Community Health Profile provides an evidence summary for communities and partners to start to co-produce solutions and better address these long standing inequalities to create better environments and services to support South Africans to live healthier, longer, and happier lives.

5. Appendices

Appendix 1: Search Strategy

Topic Area	General Search Terms	Specific Search Terms
Getting the Best Start in Life	"South Africa" or "South African" AND young*" or "youth" or "child*" or "babies" or "infant*"	"South Africa" or "South African" 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	"South Africa" or "South African" AND "mental*" or "wellbeing" or "wellness" or "access" or "balance"	"South Africa" or "South African" 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	"South Africa" or "South African" AND "food" or "diet" or "obesity" or "meat" or "vegetarian" or "nutrition" or "vegan"	"South Africa" or "South African" 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	"South Africa" or "South African" AND "physical activity" or "activity" or "exercise" or "inactivity"	"South Africa" or "South African" 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"

Topic Area	General Search Terms	Specific Search Terms
Living, Working and Learning Well	"South Africa" or "South African" 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"	"South Africa" or "South African" 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	"South Africa" or "South African" AND "protect" or "detect" or "screening" or "vaccin*" or "sexual health" or "infectious disease" or "oral health"	"South Africa" or "South African" 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"
Ageing Well and Dying Well	"South Africa" or "South African" AND "ageing" or "aging" or "dying" or "dementia" or "end of life" or "palliative" or "frailty" or "lon*" or "isolat*" or "care"	"South Africa" or "South African" 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	"South Africa" or "South African" AND "sustainability" or "green future" or "sustainable" or "environment"	"South Africa" or "South African" 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 South Africans in the UK, Publications exclusive to people from South Africa.	links (including articles behind paywalls); graphs and figures reproduction depends on	to articles published in the last 20

Appendix 3: Raw Data

Appendix 3.1. Figure 2: Top non-UK countries of birth: England and Wales, 2011 and 2021

Country of birth	2011 population	2021 population
South Africa	191,023	217,180
Germany	273,564	263,368
Nigeria	191,183	270,768
Bangladesh	211,500	273,042
Italy	134,619	276,669
Ireland	407,357	324,670
Romania	79,687	538,840
Pakistan	482,137	623,557
Poland	579,121	743,083
India	694,148	920,361

Source: ONS (2023)

Appendix 3.2. Figure 3: Year of arrival of South African-born UK residents: England and Wales, before 1981 to 2021

Years of arrival	South African-born population
Before 1981	21,734
1981 to 1990	13,697
1991 to 2000	41,230
2001 to 2010	66,358
2011 to 2021	72,599

Source: ONS (2023)

Appendix 3.3. Figure 5: Year of arrival of South African-born UK residents: West Midlands, before 1981 to 2011

Years of arrival	South African-born population
Before 1981	1,459
1981 to 1990	902
1991 to 2000	2,364
2001 to 2011	4,123

Source: ONS (2011)

Appendix 3.4. Figure 6: Religions of South African-born people, England and Wales, 2021

Religion	South African-born population (%)
Christian	58
No religion	30
Not answered	5.3
Jewish	2.7
Muslim	1.7
Hindu	1.5
Other religion	0.9
Buddhist	0.3
Sikh	0.1

Source: ONS (2023)

Appendix 3.5. Figure 7: Proportion (%) of ethnic groups among South African-born UK residents: England and Wales, 2021

Ethnicities	South African-born population (%)
White ethnic	86
Black ethnic	5.0
Mixed or Multiple ethnic	4.2
Asian ethnic	3.6
Other ethnic group	1.6

Source: ONS (2023)

Appendix 3.6. Figure 8: Population pyramid, gender and age group of South African-born populations: West Midlands, 2021

Age group	Male (%)	Female (%)
0 to 4	0.7	0.7
5 to 9	1.9	1.8
10 to 15	5.1	4.7
16 to 19	4.4	4.1
20 to 24	7.2	6.7
25 to 29	15	14
30 to 34	17	15
35 to 39	15	14
40 to 44	9.1	8.9
45 to 49	5.6	5.8
50 to 54	4.8	5.5
55 to 59	4.1	5.2
60 to 64	3.7	4.8
65 to 69	2.8	3.4
70 to 74	1.7	2.2
75 to 79	1.1	1.6
80 or over	1.3	2.7

Source: ONS (2023)

Appendix 3.7. Figure 9: Populations of South African-born people by age: West Midlands, 2021

Age group	South African (%)	West Midlands average (%)
0 to 4	0.8	5.6
5 to 9	2.6	6.2
10 to 15	6.8	7.5
16 to 19	6.4	4.8
20 to 24	8.5	6.1
25 to 29	12	6.3
30 to 34	12	6.7
35 to 39	13	6.4
40 to 44	8.5	6.1
45 to 49	6.0	6.2
50 to 54	5.7	6.9
55 to 59	4.9	6.7
60 to 64	4.6	5.7
65 to 69	3.1	4.9
70 to 74	1.9	4.9
75 to 79	1.2	3.8
80 or over	2.2	5.1

Appendix 3.8. Figure 10: Populations of those with a South African nationality by age: England and Wales, 2021

Age group	South African identity (%)	England and Wales average (%)
0 to 4	2.3	5.4
5 to 9	3.4	5.9
10 to 15	4.7	7.2
16 to 19	3.5	4.6
20 to 24	5.9	6.0
25 to 29	11	6.6
30 to 34	14	7.0
35 to 39	14	6.7
40 to 44	12	6.3
45 to 49	10	6.4
50 to 54	6.5	6.9
55 to 59	4.4	6.8
60 to 64	3.5	5.8
65 to 69	2.2	4.9
70 to 74	1.5	5.0
75 to 79	0.8	3.6
80 or over	1.1	5.0

Source: ONS (2023)

Source: ONS (2023)

Appendix 3.9. Figure 11: The percentage of South Africans aged 5 to 19 who are overweight, by gender: South Africa, 2010 to 2016

Year	Boys (%)	Girls (%)
2010	11	20
2011	13	22
2012	14	23
2013	15	25
2014	17	26
2015	19	28
2016	20	29

Source: Global Nutrition Report (2023)

Appendix 3.10. Figure 12: The percentage of South Africans aged 5 to 19 who are obese, by gender: South Africa, 2010 to 2016

Year	Boys (%)	Girls (%)
2010	4.4	7.1
2011	5.1	7.9
2012	5.9	8.8
2013	6.8	9.8
2014	7.7	11
2015	8.7	12
2016	9.8	13

Source: Global Nutrition Report (2023)

Appendix 3.11. Figure 13: Economic activity and inactivity within South African-born populations: England and Wales, 2021

Economic Activity Status	South African (%)	Birmingham Average (%)	England and Wales Average (%)
Economically active	78	56	61
Economically inactive	23	44	39

Source: ONS (2023)

Appendix 3.12. Figure 14: Economic activity by category, within South African-born people: England and Wales, 2021

Economic Activity Status	South African %	Birmingham Average %	England and Wales %
ES: In employment	93	85	92
ES: Unemployed	4.3	8.5	4.7
IS: In employment	1.6	4.2	2.8
IS: Unemployed	0.7	2.1	1.0

Source: ONS (2023)

Appendix 3.13. Figure 15: General health score within South African-born populations: England and Wales, 2021

General health	South African (%)	Birmingham (%)	England and Wales (%)
Very good health	55	48	48
Good health	34	33	34
Fair health	8.6	13	13
Bad health	2.0	4.5	4.0
Very bad health	0.5	1.5	1.2

Source: ONS (2023)

Appendix 3.14. Figure 16: Leading underlying natural causes of death for South Africans, South Africa: 2018

Condition	Percentage
Tuberculosis	6.0
Diabetes	5.9
Cerebrovascular diseases	5.1
Other forms of heart disease	5.1
HIV disease	4.8
Hypertensive diseases	4.5
Influenza and pneumonia	3.9
Ischaemic heart diseases	3.0
Chronic lower respiratory diseases	3.0
Malignant neoplasms of digestive organs	2.4

Source: Stats SA (2021)

Appendix 3.15. Figure 17: Day-to-day activities limited by disability, within South African-born populations: England and Wales, 2021

ľ	Limitation of Disability	South African (%)	Birmingham (%)	England and Wales (%)
E	Disabled under the Equality Act: Day-to-day activities limited a lot	33	47	43
E	Disabled under the Equality Act: Day-to-day activities limited a little	68	53	57

Source: ONS (2023)

5. Acknowledgements and Authors

Authors

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