

# BIRMINGHAM WEST LOCALITY PROFILE 2022

Birmingham City Council Public Health Knowledge Team April 2022 Acknowledgements

Authors:

Gurdeap Kaur - Senior Programme Officer (Knowledge Team) Mohan Singh - Senior Programme Officer (Knowledge Team) Muna Mohamed - Programme Officer (Knowledge Team) Ayomide Ogunyemi - Programme Support Officer (Knowledge Team)

#### With thanks to:

Jeanette Davis - Programme Officer (Evidence Team) Dr. Dyna Arhin-Tenkorang - Interim Assistant Director - Public Health Division Dr. Albert Prats Uribe - Assistant Director, Knowledge, Evidence & Governance Luke Heslop - Service Lead for Evidence Alex Dallaway - Senior Programme Officer (Evidence Team) Julia Pauschardt - Service Lead for Knowledge

### Contents

1.	Executive summary	6
	Health outcomes:	7
	Socioeconomic indicators	8
	Wellbeing and Health Problems	10
2.	Introduction	13
3.	Characteristics of the West Locality Population	15
	Age/Sex	15
	Ethnicity	15
	Life Expectancy	16
	Causes of early death	17
4.	COVID-19	20
	COVID-19 Cases	21
	COVID-19 Deaths	22
	COVID-19 Vaccine Uptake	23
5.	Socio-Economic Environment	24
	Employment	24
	Unemployment – unadjusted claimant count – October 2021	25
	Industry – Usual residents aged 16 and over	25
	Occupation – Usual residents aged 16 and over	26
	Qualifications – Usual Residents aged 16 and over	26
	Deprivation	27
	Violent Crime	28
	Resident Survey 2020 – Feeling Safe	30
6.	Physical Environment	31
	Air Quality	31
	Fuel Poverty	33
	Overcrowding and Density	34
	Parks and Open Spaces	36
7.	Child Health	39
	Infant Mortality	39
	Children Living in Absolute Poverty	39
	Teenage Pregnancy	40

Child Education	42
School Census	42
Educational Attainment	43
Child Obesity	44
Mental Health	46
8. Working Age Adults	48
Obesity	48
Smoking	49
Substance Misuse (Alcohol and Drugs)	51
Alcohol Related Deaths	51
Drug Use	53
9. Older Adults	56
Social Isolation	56
Hospital Admissions for Falls	56
Dementia	57
End of Life Care	58
10. Disease information from Quality Outcomes Framework	60
Cardiovascular disease (CVD)	60
CVD – hospital inpatient admissions	61
CVD deaths	62
Coronary Heart Disease (CHD)	63
Stroke	63
Hypertension	65
Heart failure	66
Atrial Fibrillation (AF)	67
Diabetes	67
Diabetes – Hospital Admissions	68
Diabetes Deaths	70
Respiratory	71
Respiratory Hospital Admissions	71
Respiratory Deaths	72
Chronic Obstructive Pulmonary Disease (COPD)	72
COPD prevalence	73
Asthma Prevalence	74
Cancer	74

	Cancer Prevalence	.75
	Cancer – hospital admissions	.75
	Cancer deaths	.77
11.	Accident and Emergency (A&E) Hospital Attendances	.78
12.	Conclusion	.80
1.	Appendix A	.82

### 1. Executive summary

This profile of the West locality of Birmingham provides information on health outcomes and socio-economic indicators. It aims to ensure every child, citizen, and place matters, and all live longer healthier lives. It contains information on health outcomes and social and economic indicators that are relevant to these outcomes.

The profile aims to enable residents, commissioners, and practitioners to form an evidenced-based understanding of local needs, which can be used to inform decision making and service provision for improving health and wellbeing and reducing health inequalities.

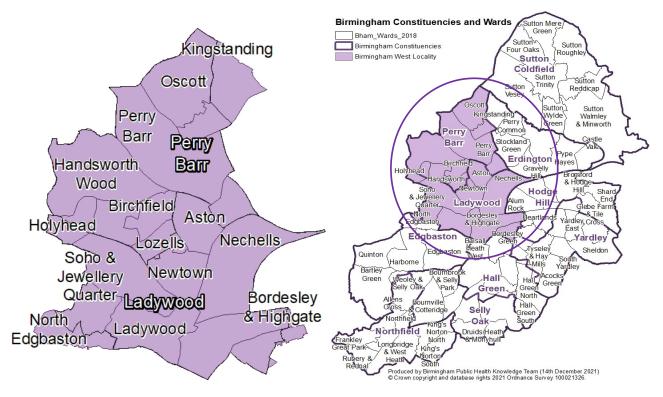


Figure 1: Birmingham West locality map and Birmingham map

Figure 1 illustrates two maps. The map on the left is of the West locality and the map on the right is the whole of Birmingham. The map for Birmingham highlights the areas within the West locality. Both maps show the wards and constituencies.

For explanation of ward and constituency, please see Appendix A.

### Health outcomes:

*Life expectancy*: During the last decade (2009 - 2019), life expectancy had increased slightly for the West locality, closing the gap compared to the England average. Women still live longer than men. Figure 2 shows life expectancy for the West locality, Birmingham, and England between 2017 - 2019. The current life expectancy in the West locality for females is 83.0 years and 77.3 years for males compared to England's 83.4 and 79.8 years, respectively.

-Population: The West locality had a population of approximately 263,919, 23.1% of Birmingham's population, with an average age of 32.9 years; this is higher for females (33.4 years) and lower for males (32.3 years). The West was the locality with the youngest average age and the only locality with more males than females.

-Life Expectancy: During the last decade (2009 - 2019) life expectancy in the West locality increased slightly. Life expectancy for females in the West locality was 83.0 which was higher than that for Birmingham females (82.6); but was low for males (77.3) compared to Birmingham males (78.4).

-Infant Mortality: Infant mortality makes up 37.2% of excess years of life lost for the Ladywood constituency and 22.4% in the Perry Barr constituency.

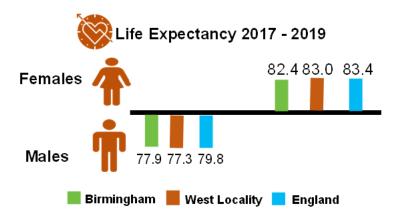


Figure 2: Life Expectancy for the West locality, relative to Birmingham and England (Source: ONS Deaths data 2017-2019)

**Causes of death:** The most common cause of early deaths was infant mortality which contributed to 37.2% of early deaths in Ladywood and 22.4% of early deaths in Perry Barr. Other common causes of early deaths for both Ladywood and Perry Barr include coronary heart disease (17% and 10.6%, respectively) and accidental poisoning (14.9% and 11.3%, respectively).

-Causes of Death: The most common cause of early death was infant mortality which contributed to 37.2% of early deaths in Ladywood and 22.4% in Perry Barr. Other common causes of early deaths for both Ladywood and Perry Barr include coronary heart disease (17% and 10.6%, respectively) and accidental poisoning (14.9% and 11.3%, respectively).

**COVID-19 pandemic:** The coronavirus pandemic impacted the West significantly as it did across the country. For the period (2004-2019), employment rates in the West were consistently below the Birmingham average and remained so during the pandemic, though the gap had reduced in the latter part of 2021. It also had an impact on the death rate, resulting in 766 COVID-19 deaths, that is 24.7% of all deaths in the locality. The locality had the worst rates for the first, second and booster vaccine uptake at 58%, 51% and 29%, respectively (see table 1).

-COVID-19: accounted for 24.7% of all deaths in the West, the highest of all five localities. The locality had the worst rates for the first, second and booster vaccine uptake at 58%, 51% and 29%, respectively.

### COVID-19 Vaccinations up to 17th January 2022

	1st dose	2nd dose	Booster	
West	58%	51%	29%	
Birmingham	68%	61%	40%	
England	91%	83%	63%	

Table 1: Vaccination uptake up to 17 January 2022 (Source: COVID-19 Vaccination Data).

**End-of-life care:** More than half (53.3%) of end-of-life care in the West locality was recorded in a hospital, and 34.7% at home. However, data was unavailable on whether patients received end-of-life care in their preferred place.

-Number of admissions due to falls for people aged 65+: The West locality had the lowest number of falls out of the five localities (2,337), decreasing by 11% between 2016/17 and 2020/21.

### Socioeconomic indicators

**Levels of Deprivation:** The West locality had more than half (51%) of its population (136,078) living in the most deprived decile. This was slightly better than the East locality (61%) but much worse compared to the North (34%), South (32%) and Central (31%) localities. However, deprivation is a key issue for the city with Birmingham ranked as the 7<sup>th</sup> most deprived local authority in the country, and 53% of the population living in the 10% most deprived areas in England – see figure 12.

-Deprivation: more than half (51.2%) of the population in the West locality live in the 10% most deprived decile, and more than one in three (37.5%) children live in absolute poverty.

-Overcrowding: The West locality had high levels of overcrowding and deprivation. There was more overcrowding in Holyhead, Perry Parr, Aston and Soho & Jewellery Quarter. People living in challenging housing conditions are more likely to experience poor health

-Fuel Poverty: The East and West had some of the highest levels of fuel poverty in the city. The increasing cost in energy bills and overall living costs will have a massive impact on people across the city and nationally, too, but will likely worsen the deprivation in both these localities.

**Children Living in Poverty:** The West locality had a much higher proportion of children living in absolute poverty (37.5%) compared to England (17.1%), and higher than that of the Birmingham proportion, too (27.6%) - see figure 3.

-Children with Special Educational Needs: The West locality had a slightly higher proportion of children with special educational needs (18%) compared to both Birmingham (17%) and England (16%).



Figure 3: Children living in Poverty for England, Birmingham and the West locality (Source: UK Parliament 2019 - 20)

**<u>Unemployment</u>** levels: In the West, unemployment levels differed between constituencies with very high levels of unemployment found in Ladywood (23.1%) compared to that found across the city (13.4%), but lower levels in Perry Barr (11.8%) - see figure 4.

-Unemployment: In the West, unemployment levels differed between constituencies with very high levels of unemployment found in Ladywood (23.1%) compared to that found across the city (13.4%), but lower levels in Perry Barr (11.8%).

-Qualifications: More than one in four people have no qualifications (28%), 13% have a level 1 qualification and only 1% were recorded as being on an apprenticeship.

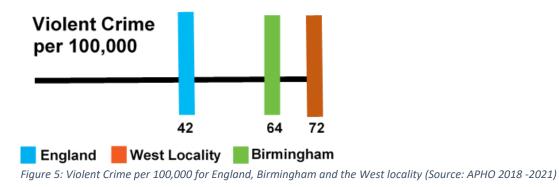


*Figure 4*: Unemployment using unadjusted claimant count for England, Birmingham and the West locality (Source: Claimant count Oct 2021)

**Violent Crime Admissions:** The admission rate in the West for violent crime was the highest of all localities (72 per 100,000) and was much worse than that found in England (42 per 100,000) - see figure 5.

-Feeling safe: 82% of the West locality residents feel safe going out during the day, however, this almost halves when compared to feeling safe at night (46%).

-Violent Crime: The admission rate in the West for violent crime was (72 per 100,000) higher than that across the city (63 per 100,000) and much higher than that found in England (42 per 100,000).



### Wellbeing and Health Problems

**Children with Special Educational Needs:** The West locality had a slightly higher proportion of children with special educational needs (18%) compared to both Birmingham (17%) and England (16%).

**Teenage conception:** The rate in the West was the lowest of all five localities at an average conception rate of 13 per 1,000, lower than the Birmingham (20) and England (18) rates.

-Teenage conception: The West had the lowest of all five localities at an average conception rate of 13 per 1,000, lower than both the Birmingham (20) and England (18) rates.

**Obesity:** Prevalence of obesity in the West locality (11.6%) for 4–5-year-olds was the second highest in the localities and by 10-11 years, it had the highest rate of the five localities at 28.0%. Prevalence does not improve in adults with two-thirds of those aged 18 and over either overweight or obese.

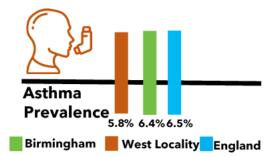
-Obesity: Prevalence of obesity in the West locality (11.6%) for 4-5-year-olds was the second highest in the localities and by 10-11 years, it had the highest rate of the five localities at 28.0%. Prevalence does not improve in adults with two-thirds of those aged 18 and over either overweight or obese.

**<u>Respiratory illnesses</u>**: The West locality, had the lowest prevalence of both asthma (5.8%) and COPD (1.0%) of all localities and was low compared to England – see figure 6 for asthma prevalence.

-Respiratory illnesses: The West locality, had the lowest prevalence for respiratory illnesses (1.1% for COPD and 5.8% for Asthma). When compared to England, prevalence was lower (1.8% and 6.5%, respectively).

-Smoking: The smoking prevalence in the West was the second highest of the five localities (17.0%) and also had here rates compared to Birmingham (16.7%) and England (15.9%).

-Air Quality: The West had poor air quality across the locality and had the poorest air quality in Birmingham. The high levels of both NO2 and PM10, contribute to poor health and early death.



*Figure 6*: Asthma prevalence for the West locality relative to Birmingham and England (Source: Quality Outcomes Framework 2019-20)

**Cancer:** Of the five Birmingham localities, the West had the lowest prevalence for cancer (1.5%) and was below the Birmingham (2.1%) and England (3.1%) rates. The West also had the lowest death rate for cancer (261per 100,000) across Birmingham and similar to that of England (260 per 100,000).

-Cancer: The West had the lowest prevalence for cancer (1.5%) in Birmingham and was low compared to England (3.1%), too. It also had the lowest death rate for cancer (261 per 100,000).

**Diabetes:** The West recorded the second highest prevalence for diabetes (9.8%) of all five localities. This was higher than the Birmingham (9.1%) and England (7.1%) rates. This figure denotes that a significant number of people were living with this life-long condition which is a risk factor for many chronic illnesses – see figure 7. This figure may underestimate the true size of the problem.

-Diabetes: Prevalence for diabetes in the West locality was the second highest after the East (9.8% and 11.2% respectively). This is higher than the England prevalence (7.1%). This figure denotes that a significant number of people are living with this life-long condition that is a risk factor for many chronic illnesses.



Figure 7: Diabetes prevalence for the West locality relative to Birmingham and England (Source: Quality Outcomes Framework 2019-20)

## 2. Introduction

This profile of the West locality of Birmingham provides evidence to support the realisation of the vision in which Birmingham is a city where all citizens share in the creation and benefits of sustainable economic growth, and live longer, healthier and happier lives. In the vision every child, citizen, and place matters; and the city's diverse environments provide education and employment opportunities that improves the lives and health of all groups. In line with the Health and Wellbeing Board Strategy (HWB), the focus is on the provision of information that can be used to support residents to achieve their full potential with respect to health and productivity<sup>1</sup>.

Residents, commissioners and practitioners in the health and care sector will find in the profile the evidence-base to help them understand the different needs of the diverse groups living in the neighbourhoods that make up the locality. The profile is also available to the public, voluntary organisations and elected members who serve the people of the locality to assist them in recognising the varying and unique challenges faced by residents. Information on these challenges will help inform future policies and projects, support funding applications, service redesigns and improvements to resource allocation.

The profile is one of a series of reports each containing evidence pertaining to one of the five Birmingham localities that is used by Birmingham's health and social care organisations to deliver services across the city. Each of the five localities is made up of 2 constituencies. These are:

- Central: Hall Green and Selly Oak
- East: Hodge Hill and Yardley
- North: Erdington and Sutton Coldfield
- South: Edgbaston and Northfield
- West: Ladywood and Perry Barr.

The content of the profile has been compiled by capturing a range of data sets for the locality and benchmarking these against the city and national averages. The profile highlights emerging issues and challenges by locality relative to the national picture, including some of the effects of the COVID-19 pandemic.

The profiles also provide information on the general characteristics of the local area, including population, age, and sex; causes of death; years of lost life; child health; working age adults; older adults; hospital admissions; and a breakdown of certain diseases.

The priorities discussed in this report are focused on addressing health inequalities. Research by Dahlgren<sup>2</sup> show that factors affecting health inequalities include genetics,

<sup>&</sup>lt;sup>1</sup> Birmingham City council. Birmingham City Council Plan: 2018-2022

<sup>&</sup>lt;sup>2</sup> Economic and Social Research Council. <u>The Dahlgren-Whitehead rainbow</u>.

lifestyle factors, social and community networks, and socio-economic, cultural and environmental conditions. These factors and their inter-relationships are illustrated in Figure 8 below.

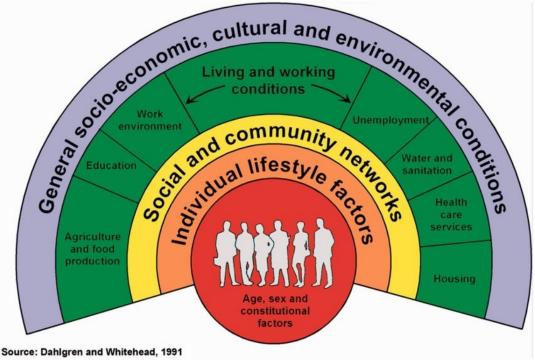


Figure 8: Dahlgren-Whitehead 1991 model of the determinants of health.

Research also indicates that the social determinants of health are important in influencing health with some studies attributing 30-55% of health outcomes to social determinants<sup>3</sup>. Addressing these social determinants is necessary for providing better health outcomes and reducing health inequalities.

Further development of the social determinants of health approach was undertaken in Marmot's review, commissioned to develop a strategy to address these health inequalities. This review proposed a framework<sup>4</sup> with indicators for monitoring these issues, including life expectancy, education, employment, deprivation, fuel poverty, and utilisation of outdoor space<sup>5</sup>. Many of these factors are also prioritised in our HWB strategy and addressed by the profiles.

This profile is based on geographical data at locality, constituency, ward and Lower Super Output Area (LSOA)<sup>6</sup> for the West locality.

<sup>&</sup>lt;sup>3</sup> World Health Organization. <u>Social determinants of health</u>.

<sup>&</sup>lt;sup>4</sup> Institute of Health Equity. Fair society healthy lives (The Marmot Review)-Executive Summary. 1

<sup>&</sup>lt;sup>5</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>6</sup> LSOA areas are small areas designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households.

# 3. Characteristics of the West Locality Population

Age/Sex

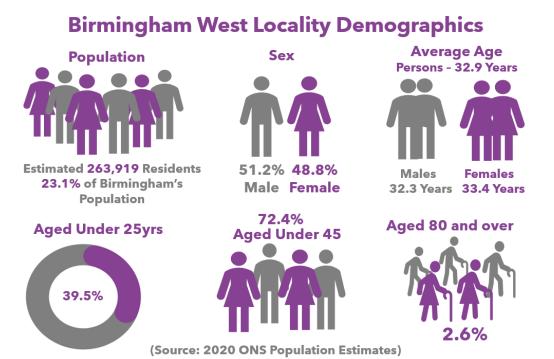


Figure 9: Birmingham West locality Demographics.

Figure 9 illustrates, there are approximately 263,919 people living in the West locality, 23.1% of Birmingham's population with an average age of 32.9 years, which makes the West the locality with the youngest average age in Birmingham. This locality is also the only locality with more males (51.2%) than females (48.8%). The average age for females is higher (33.4 years) than for males (32.3 years). The West locality has a large young population with nearly two fifths of the people (39.5%) aged under 25 years, and nearly three quarters (72.4%) under the age of 45 and only 2.6% aged 80 and over<sup>7</sup>. Between 2015 and 2019, Birmingham saw just over 110,000 migrants register with GP's across the city; of these 39% (43,005) were registered at practices based in the West locality.

### Ethnicity

An ethnic group is a social group of people that share a common and distinctive culture, religion, or language. Figure 10 shows the ethnic makeup of the West locality in comparison to Birmingham and England. The West locality had a White ethnic population of 33%, this is lower than the Birmingham average (57.9%), and the England average (85.4%).

The 2011 Census estimated that 67% of the West locality population were from a minority ethnic background, as opposed to 42% within Birmingham as a whole and 15% nationally. In the West, 39.7% are of Asian ethnic background, 33.0% White, 19.3% Black, 5.1% Mixed/Multiple ethnic background and 2.9% Other ethnicity.

<sup>&</sup>lt;sup>7</sup> Office for National Statistics. ONS 2020 Mid-Year Estimates.

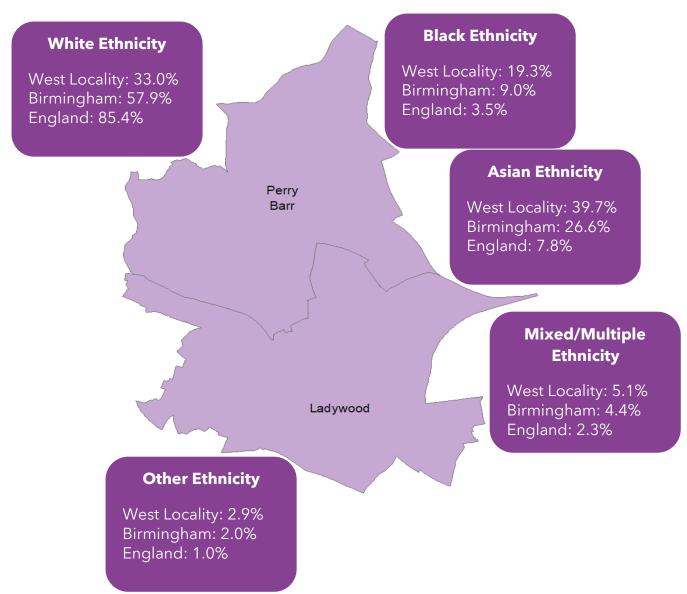


Figure 10: Ethnicity in the West locality in comparison to Birmingham and England (Source 2011 Census). For further breakdown, please see Appendix A.

### Life Expectancy

Life expectancy has increased slightly overall for Birmingham from 76.4 years in 2007/09 to 77.8 years in 2017/19 for males, and 81.4 to 82.4 years in females but this is lower compared to the England average (79.8 years in males and 83.4 years in females in 2017/19). For the same period, life expectancy increased in the West locality from about 75.0 years to 77.2 for males and 81.2 to 83.0 in females. The West has a lower life expectancy compared to the Birmingham average for males and a higher one than the Birmingham average for females (Figure 11).

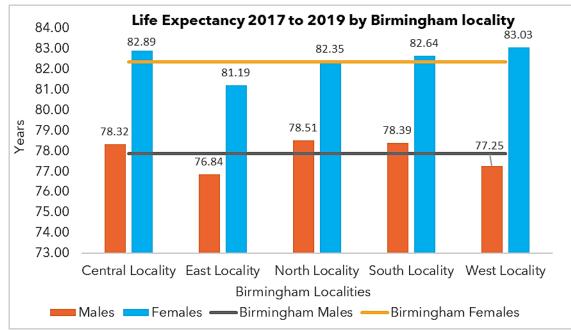


Figure 11: Life Expectancy data for all localities compared to Birmingham and England. (Source: ONS Deaths data)

### Causes of early death.

Overall, Birmingham has a lower life expectancy than the average for England. The major health conditions contributing to premature mortality can be identified by the number of years of life lost due to people dying before the age of 75. The impact of each of these by constituency for each locality, and Birmingham as a whole, has been calculated and displayed in a "Scarf Chart" (Figure 12) as proportions. In the table part of Figure 12, a positive percentage indicates that more years of life have been lost than would be expected; a negative percentage indicates that fewer years of life have been lost.

### Birmingham Leading 75% Conditions Applied to Districts in 2017-19

	100%			
٦LL	80%			
% Excess YLL	60%			
1%	40%			
	20%			
	0%	Ladywood	Perry Barr	BIRMINGHAM
		District	District	
Other		12.6%	35.9%	23.9%
Malignant neoplas	sm of breast	-1.1%	-1.0%	1.9%
■ Stroke		2.4%	0.6%	2.0%
Accidental poison exposure to anti sedative-hyp antiparkinsoni psychotropic dr elsewhere cla	epileptic, onotic, sm and ugs, not	1.7%	-0.6%	2.0%
COPD		1.6%	-2.5%	2.0%
Diabetes mellitus		1.9%	0.3%	2.2%
Other heart disea	ses	4.1%	4.0%	2.4%
Lung Cancer		1.8%	-1.5%	2.4%
Pneumonia		1.4%	3.3%	2.7%
Hypertensive dise	eases	2.0%	8.4%	3.8%
Alcoholic Liver Di	sease	2.5%	8.7%	4.3%
<ul> <li>Accidental poiso exposure to nar psychodys</li> <li>[hallucinogens], n classifie</li> </ul>	rcotics and leptics ot elsewhere	14.9%	11.3%	7.8%
Coronary Heart D	isease	17.0%	10.6%	10.2%
Infant Mortality		37.2%	22.4%	32.4%
			1	1

Figure 12: Excess years of life lost in Ladywood and Perry Barr and their causes. (Source: ONS Deaths/Vital Statistics 2017-19).

Figure 12 shows the leading causes of mortality in those aged under 75 for Birmingham applied to the West locality. The biggest single contributor to excess years of life lost is infant mortality in both Ladywood and Perry Barr. After infant mortality, coronary heart disease and accidental poisoning are among the main causes of death.

300 2017-2019 Directly standardised Preventable Death Rates per 100,000

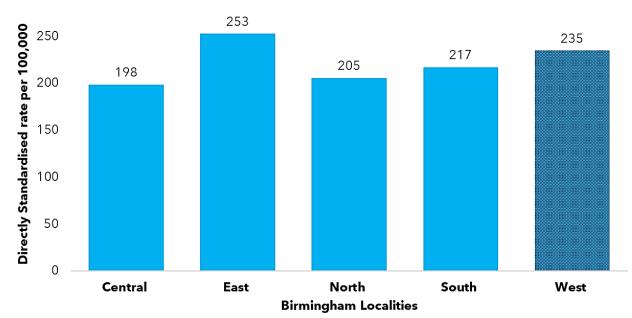


Figure 13: Preventable deaths DSR rates per 100,000 in under 75s. (Source: ONS Annual Deaths data for 2017 to 2019)

Between 2017 to 2019, the West locality had the second highest directly standardised rate of preventable deaths (235 per 100,000) across all localities (Figure 13). Preventable deaths, also known as avoidable deaths, are deaths resulting from, or related to risk factors which could have been avoided. The East locality had the highest rate of preventable deaths across Birmingham (253), while the Central locality had the lowest rate (198).

### 4. COVID-19

COVID-19 is an acute respiratory disease caused by a novel coronavirus (SARS-CoV-2, previously known as 2019-nCoV)<sup>8,9</sup>. The virus is believed to have originated in Wuhan, China, where it spread quickly to the rest of the world. The World Health Organisation declared COVID-19 as a public health emergency of international concern (PHEIC) on 30<sup>th</sup> January 2020, and a pandemic on 11<sup>th</sup> March 2020<sup>10</sup>.

In the first and second waves of the pandemic, more men died from COVID-19 compared with women and the death rate was highest in the over 65s<sup>11</sup>. The pandemic had a worse impact on those from lower socioeconomic backgrounds than the more affluent parts of the population. In the UK, Black, South Asian, and White Irish people were more likely to acquire the infection and be hospitalised compared to White British<sup>12</sup>. People from minority ethnic backgrounds have been disproportionately affected by COVID-19<sup>13</sup>. People who had no qualifications or those from lower socioeconomic backgrounds also had higher levels of positive infection result<sup>11</sup>. People who died from COVID-19 were twice as likely to be from the most deprived regions in the country than those from the least deprived<sup>14,15,16</sup>. In-hospital deaths were also higher in the Asian or Black populations, and this was not necessarily attributable to deprivation or clinical risk factors<sup>10,11,13</sup>. Besides being male and older, other risk factors include being obese<sup>10</sup>, having uncontrolled diabetes, severe asthma and other medical conditions<sup>12</sup>.

 <sup>&</sup>lt;sup>8</sup> Guo, Y., Cao, Q., Hong, Z. et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak - an update on the status. Military Med Res 7, 11 (2020). <a href="https://doi.org/10.1186/s40779-020-00240-0">https://doi.org/10.1186/s40779-020-00240-0</a> 8 Kannan S, Shaik Syed Ali P, Sheeza A, Hemalatha K. COVID-19 (Novel Coronavirus 2019) - recent trends. Eur Rev Med Pharmacol Sci. 2020 Feb;24(4):2006-2011. doi: 10.26355/eurrev\_202002\_20378. PMID: 32141569.
 <sup>9</sup> Kannan S, Shaik Syed Ali P, Sheeza A, Hemalatha K. COVID-19 (Novel Coronavirus 2019) - recent trends. Eur Rev

Med Pharmacol Sci. 2020 Feb;24(4):2006-2011. doi: 10.26355/eurrev\_202002\_20378. PMID: 32141569. <sup>10</sup> World Health Organisation. <u>WHO Director-General's opening remarks at the media briefing on COVID-19 - 11</u> <u>March 2020</u>.

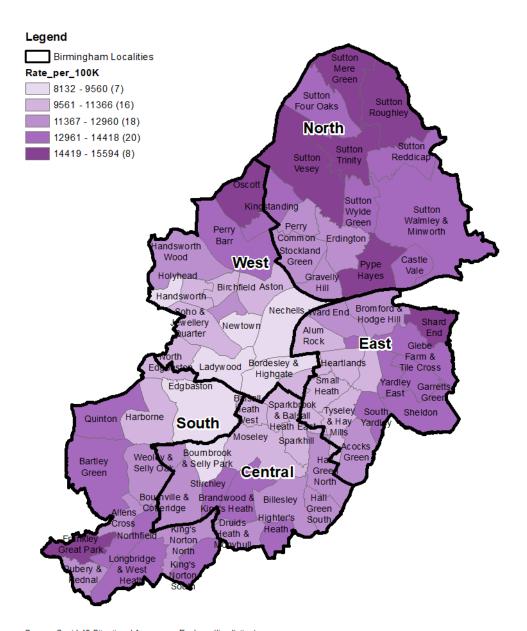
<sup>&</sup>lt;sup>11</sup> Office for National Statistics. <u>Updating ethnic contrasts in deaths involving the coronavirus (COVID-19), England: 24</u> January 2020 to 31 March 2021.

 <sup>&</sup>lt;sup>12</sup> Niedzwiedz CL, O'Donnell CA, Jani BD, et al. Ethnic and socioeconomic differences in SARS-CoV-2 infection: prospective cohort study using UK Biobank. medRxiv 2020.04.22.20075663; doi.org/10.1101/2020.04.22.20075663
 <sup>13</sup> The Lancet. Intersectionality and developing evidence-based Policy COVID-19

<sup>&</sup>lt;sup>14</sup> Wachtler B, Michalski N, Nowossadeck E, et al. Socioeconomic inequalities and COVID-19 – A review of the current international literature. Journal of Health Monitoring · 2020 5(S7) DOI 10.25646/7059.

<sup>&</sup>lt;sup>15</sup> Williamson E, Walker AJ, Bhaskaran KJ, et al. OpenSAFELY: factors associated with COVID-19-related hospital death in the linked electronic health records of 17 million adult NHS patients. medRxiv 2020.05.06.20092999; doi: https://doi.org/10.1101/2020.05.06.20092999

<sup>&</sup>lt;sup>16</sup> Office for National Statistics. <u>Deaths involving COVID-19 by local area and socioeconomic deprivation: deaths</u> <u>occurring between 1 March and 31 July 2020</u>.



#### COVID-19 Confirmed Case Rates per 100,000 by Ward 1st January 2021 to 12th December 2021 (Pillar 1 & 2)

Source: Covid-19 Situational Awareness Explorer (line listing). Produced by Birmingham Public Health Division (16 Dec 2021) © Crown copyright and database rights 2021 Ordnance Survey 100021326. Figure 14: Confirmed COVID-19 cases (rate per 100,000 population). (Source: UK Health Security Agency COVID-19 Situational Awareness Explorer)

The West locality recorded 150,580 COVID-19 cases per 100,000 between January – December 2021, the lowest rate of the five localities. Figure 14 shows that Oscott (14,975), Perry Barr (13,304) and Lozells (12,324) had the highest confirmed case rates with Nechells (8,508) having the lowest rate. The North locality recorded the highest confirmed COVID-19 case rate with 210,412 cases per 100,000.

### COVID-19 Deaths

Figure 15 is a trend chart showing the average weekly deaths and the excess five-year average deaths since January 2020 for Birmingham. Between April and May 2020 and again between November 2020 to March 2021, excess deaths were mainly associated with COVID-19.

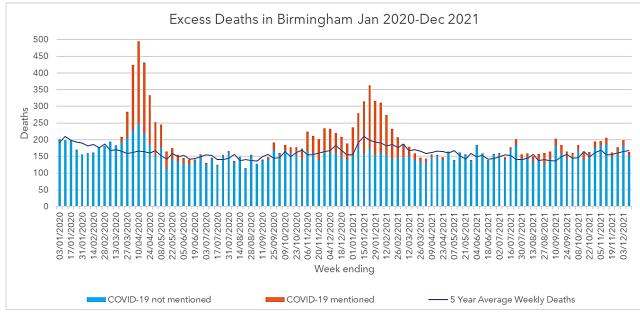


Figure 15: Excess deaths in Birmingham between January 2020 and December 2021. (Source: UK Health Security Agency COVID-19 Situational Awareness Explorer)

The West locality had the lowest number of total deaths (3,095) of the five localities but nearly a quarter (24.7%) of those deaths were due to COVID-19, the highest proportion of all localities. When comparing only COVID-19 deaths by locality, the East had the highest proportion of COVID-19 deaths at 23.4% (786 deaths) and the West the second highest at 22.8% (766 deaths) – see table 2.

Localities	Number of COVID-19 deaths	Total Number of deaths	% of all deaths that were COVID- 19 related by locality*	Comparing COVID deaths between localities**
Central Locality	672	3,289	20.4%	20.0%
East Locality	786	3,615	21.7%	23.4%
North Locality	621	3,592	17.3%	18.5%
South Locality	513	3,252	15.8%	15.3%
West Locality	766	3,095	24.7%	22.8%
Total	3358	16,843	19.9%	100.0%

Table 2: COVID-19 related deaths from 1<sup>st</sup> February 2020 to 1<sup>st</sup> October 2021. \*Percentage of deaths with COVID-19 mentioned on the death certificate of all the deaths registered in each locality. \*\*Comparing percentage of COVID-19 related deaths between localities. (Source: ONS deaths data for 1<sup>st</sup> Feb 2020 to 1<sup>st</sup> Oct 2021)

#### **COVID-19 Vaccine Uptake**

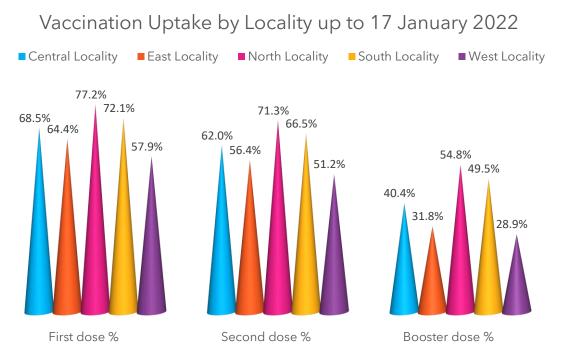
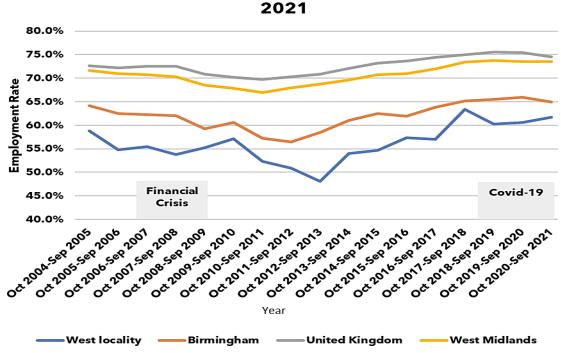


Figure 16: Percentage vaccination update by Birmingham locality. (Source: NHS Immunisation Management Service)

The West locality had the worst uptake numbers with only about half the population taking their first and second doses and only a quarter for the booster. All three doses were considerably less than the England averages (90.6%, 83.2% and 63.2%, respectively). The North had better uptake with 77%, 71% and 55% taking up the first, second and booster doses, respectively – see figure 16.

### 5. Socio-Economic Environment Employment

Figure 17 shows the percentage for resident employment rates by locality, compared to the West Midlands, Birmingham, and the United Kingdom between 2004 - 2021. Employment rates for the locality had been generally much lower than that found for Birmingham, the West Midlands and United Kingdom. The locality saw a dip during the financial crisis, but the lowest employment rates was seen in 2012/13. Employment rates peaked in 2017/18, however fell again in 2019/20, likely due to COVID-19.



Employment Rate Trend Chart - Oct 2004 - Sept 2021

Figure 17: Employment Trend Chart. Caution should be taken when referring to this data, as it is based on the ONS Annual Population Survey, which is survey-based data and the sample size at locality level is small, therefore the data could be prone to sampling error. (Source: ONS Annual Population Survey)

Although most localities saw a fall of employment during the global financial crisis in 2008/09, the West locality saw a slight fall just before the global financial crisis in 2007/08, where the employment rate fell to 53.8%. Employment levels slowly rose to over 57% in 2014/15 and was at its peak in 2017/18 (63.4%) after which it dipped again. From 2018-2019, there was a very slow, steady increase.

#### **Unemployment - unadjusted claimant count - October 2021**



Figure 18: Unadjusted unemployment claimant count by constituency, Birmingham and England, October 2021 (source: ONS Claimant count by sex and age).

Figure 18 shows unemployment using unadjusted claimant count. This is the number of people claiming Jobseeker's Allowance plus people claiming Universal Credit who are required to seek work. Unemployment levels within the locality differed with unemployment very high in Ladywood (23.1%) compared to that found across the city (13.4%), while Perry Barr had lower levels of unemployment (11.8%). While Ladywood constituency had the highest levels of unemployment in the city, Sutton Coldfield constituency (North locality) had the lowest (3.2%).

#### Industry - Usual residents aged 16 and over

Industry	South	Central	East	North	West	Birmingham
A Agriculture, forestry and fishing	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
B Mining and quarrying	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
C Manufacturing	8.2%	7.8%	11.1%	10.0%	9.1%	9.2%
D Electricity, gas, steam and air conditioning supply	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%
E Water supply	0.6%	0.6%	0.7%	0.8%	0.6%	0.6%
F Construction	6.3%	5.6%	6.5%	7.4%	4.5%	6.1%
G Wholesale and retail trade	13.6%	14.8%	18.0%	16.1%	16.2%	15.7%
H Transport and storage	4.0%	5.0%	8.4%	5.0%	6.1%	5.7%
I Accommodation and food service activities	5.6%	5.9%	6.8%	4.8%	8.5%	6.3%
J Information and communication	2.9%	3.5%	2.5%	3.2%	3.1%	3.0%
K Financial and insurance activities	3.9%	4.0%	3.5%	4.2%	4.4%	4.0%
L Real estate activities	1.6%	1.5%	1.2%	1.5%	1.5%	1.5%
M Professional, scientific and technical activities	5.9%	6.1%	3.6%	6.4%	5.9%	5.6%
N Administrative and support service activities	4.8%	4.5%	6.2%	4.8%	6.1%	5.3%
O Public administration and defence	5.1%	4.8%	4.1%	5.3%	<b>4.9%</b>	4.8%
P Education	12.9%	15.2%	9.9%	11.8%	10.5%	12.1%
Q Human health and social work activities	19.2%	14.9%	13.1%	13.5%	13.5%	14.8%

#### Caution should be taken when using this data as it is based on the 2011 Census.

Table 3: Percentage of people in Birmingham and Birmingham localities by Industry type (Source: 2011 Census)

Table 3 shows the percentage of usual residents aged 16 and over by industry. About 16% of the West locality population worked in the Wholesale and retail trade, 14% in Human Health and Social Work activities, and 11% in Education.

### Occupation - Usual residents aged 16 and over

Occupation	South	Central	East	North	West	Birmingham
1. Managers, Directors and Senior	8.4%	8.4%	6.6%	10.7%	7.3%	8.3%
Officials						
2. Professional Occupations	21.9%	22.4%	11.2%	19.0%	16.3%	18.3%
3. Associate professional and technical	11.4%	12.0%	8.4%	12.5%	10.6%	11.0%
occupations						
4. Administrative and secretarial	11.9%	10.9%	11.9%	13.0%	11.0%	11.7%
occupations						
5. Skilled trades occupations	9.7%	9.0%	11.5%	9.9%	9.2%	9.8%
6. Caring, leisure, and other service	10.8%	9.4%	11.1%	9.1%	10.0%	10.1%
occupations						
7. Sales and customer service	7.7%	8.9%	10.5%	8.0%	10.0%	9.0%
occupations						
8. Process plant and machine operatives	6.7%	7.4%	12.7%	7.1%	9.2%	8.5%
9. Elementary occupations	11.5%	11.5%	16.2%	10.7%	16.3%	13.2%

Caution should be taken when using this data as it is based on the 2011 Census.

Table 4: Percentage of people in Birmingham and Birmingham localities by occupation type (Source: 2011 Census)

Table 4 shows the percentage of usual residents aged 16 and over by occupation type. In the West locality, 16% worked in Professional occupations (occupations which require a high level of knowledge and experience). This was also the biggest occupation overall for Birmingham, as well as for the Central and North localities, too. Sixteen percent of residents were in Elementary occupations, 11% in Administrative occupations (involving administrative and clerical work), 10% in Caring, Leisure and Other Service occupations (involving the provision of services to customers) and 10% in Sales and customer service occupation.

### Qualifications - Usual Residents aged 16 and over

Qualifications	South	Central	East	North	West	Birmingham
No qualifications	26%	25%	36%	26%	28%	28%
Level 1 qualifications	13%	12%	15%	13%	13%	13%
Level 2 qualifications	14%	13%	14%	15%	13%	13%
Apprenticeship	2%	2%	2%	3%	1%	1%
Level 3 qualifications	14%	15%	10%	12%	14%	14%
Level 4 qualifications and above	26%	27%	14%	26%	22%	22%
Other qualifications	5%	6%	8%	5%	<b>9%</b>	9%

#### Caution should be taken when using this data as it is based on the 2011 Census.

Table 5: Percentage of people in Birmingham and Birmingham localities by qualifications (Source: 2011 Census)

Table 5 shows the percentage of usual residents aged 16 and over by qualification type. Twenty-eight percent of the West locality had no qualifications, which was the same as the Birmingham average. The East locality had the highest percentage (36%) of people with no qualifications. One in five people (22%) of the West locality Page **26** of **84** 

population had a level 4 and above qualification, which was the same as that of Birmingham. The East locality (14%) had the lowest proportion of people with a level 4 and above qualification.

### Deprivation

The Index of Multiple Deprivation (IMD) is a measure of the relative levels of deprivation and ranks the relative deprivation for every small area in England from 1 (most deprived area) to 32,844 (least deprived area). These small areas are Lower-layer Super Output Areas (LSOAs)<sup>17</sup>, which are small areas designed to be of a similar population size – an average of 1,679 residents and 643 households in Birmingham LSOAs. Birmingham ranks the 7<sup>th</sup> most deprived local authority with 43% of the population living in the 10% most deprived areas of England.

Localities	2020 Population per Locality in 10% most deprived Nationality Decile	% of Population in 10% most deprived Nationality Decile by Locality
Central	68,484	30.6%
East	148,639	61.2%
North	65,887	33.6%
South	67,976	32.0%
West	136,078	51.2%

Table 6: 2020 population estimates by locality living in the 10% most deprived decile. (Source: IMD2019 scores and 2020 ONS Populations.)

Table 6 shows the number of people living in the 10% most deprived decile. The West locality had more than half the population living in the 10% most deprived decile (51%), this is higher for the East (61%), while the South (32%), North (34%) and Central (31%) localities had lower proportions.

Figure 19 shows a map of the local areas by their national rank, the darkest purple shading being the most deprived. The West locality was ranked by constituency, with Ladywood ranking as the 2<sup>nd</sup> most deprived constituency in Birmingham while Perry Barr was the 7<sup>th</sup> most deprived constituency.

<sup>&</sup>lt;sup>17</sup> LSOAs (Lower-layer Super Output Areas) are small areas designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households.

#### Index of Multiple Deprivation (IMD) 2019 by LSOA

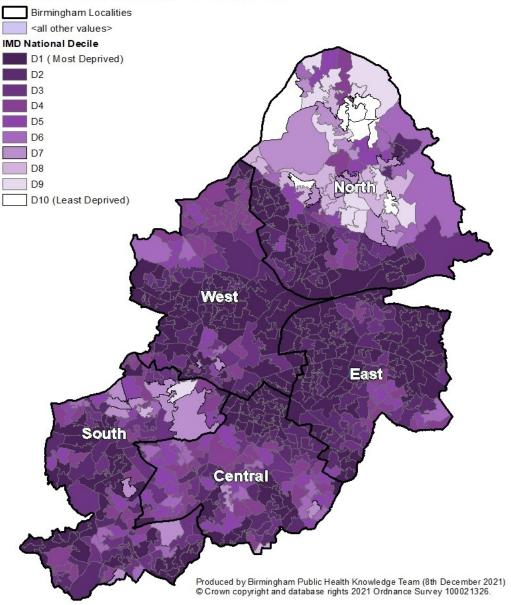


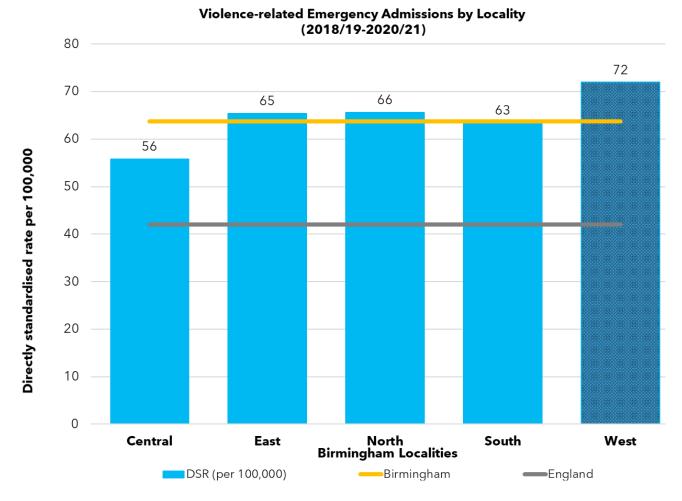
Figure 19: 2019 IMD Deprivation Map of Birmingham. (Source: IMD 2019)

### **Violent Crime**

One of the Government's ambitions is to end violence against women and girls<sup>18</sup> with an emphasis on prevention. The focus of the emergency admissions due to violence indicator below (Figure 20) is to enable prevention and treatment alongside criminal justice measures for a balanced approach to this issue using interventions that are effective and evidence based.

Figure 20 shows the percentage of emergency admissions due to violent crime for all five localities compared to Birmingham and England. During 2018 - 2021, the West locality recorded 72 per 100,000 emergency admissions due to violence. This is higher

<sup>&</sup>lt;sup>18</sup> HM Government. <u>Call to end violence against women and girls</u>



than both the England (42) and Birmingham (64) rates and is the highest rate of all localities. The Central locality had the lowest rate (56).

Figure 20: Emergency hospital admissions due to violence (including sexual violence) by the five Birmingham localities. (Source: HES Inpatients data, 2018/19-2020/21)

### **Resident Survey 2020 - Feeling Safe**

Figure 21 shows the findings from a Resident's Survey conducted in 2020. Most people in the West locality reported feeling safe during the day in their local area but less than half said they felt safe going out at night.

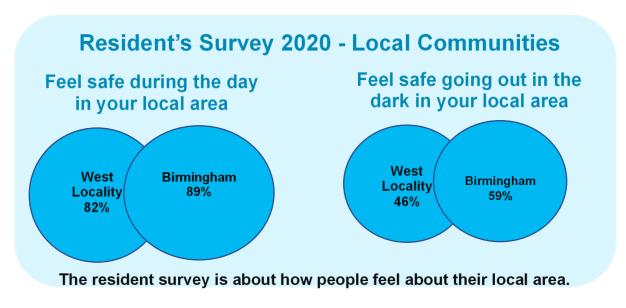


Figure 21: Resident Survey 2020 - Feeling safe in your local area.

Eighty-two percent of residents said they felt safe going out during the day in their locality. This is lower than that found for the city (89%). People felt less safe going out in the dark with less than half (46%) of responders feeling safe in the dark, compared to 59% for the rest Birmingham residents.

### 6. Physical Environment Air Quality

Air quality is the term we use to describe how polluted the air we breathe is. When air quality is poor, pollutants in the air may be hazardous to people, particularly those with lung or heart conditions.

Clean air is a basic requirement of a healthy environment for us all to live in, work, and bring up families. Air quality has improved significantly in recent decades, but there are some parts of our country where there are unacceptable levels of air pollution.

Air pollution is primarily caused by the combustion of fossil fuels, for example, in power generation, industrial processes, domestic heating and road vehicles. These can give rise to a number of pollutants including nitrogen oxides (NOx), sulphur dioxide (SO<sub>2</sub>) and particulate matter (PM). Chemical reactions in the atmosphere can also lead to the generation of other pollutants. Ozone is produced by the effect of sunlight on nitrogen oxides and volatile organic compounds (also produced by industry), while NOx and sulphur oxides can also contribute to the formation of particulate matter. On average, transport is responsible for 80% of NOx emissions at the roadside in areas where we need to act to reduce levels<sup>19</sup>.

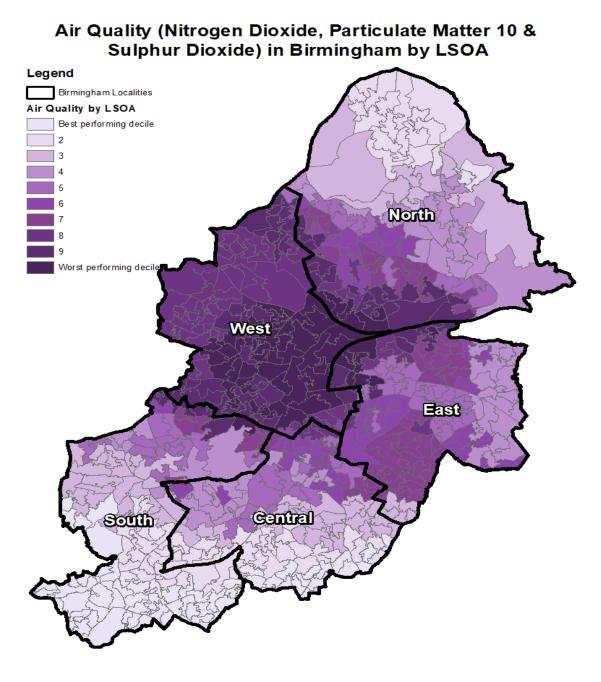
In the UK, it is estimated that each year there are 40,000-50,000 deaths attributable to air pollution<sup>20</sup>; in Birmingham, 5.8% of deaths are attributable to fine particulate matter<sup>21</sup>, which equates to about 479 deaths a year for 2019. WHO estimates that about 58% of air pollution pre-mature death is due to ischaemic heart disease and stroke, 18% due to chronic obstructive pulmonary disease and acute lower respiratory infection, and 6% of deaths to lung cancer <sup>22</sup>.

<sup>&</sup>lt;sup>19</sup> Department for Environment Food and Rural Affairs. <u>Improving air quality in the UK Tackling nitrogen dioxide in our towns and cities: UK overview document (December 2015).</u>

<sup>&</sup>lt;sup>20</sup> Policy Connect Limited. <u>Briefing - The health effects of air pollution: time to act</u>.

<sup>&</sup>lt;sup>21</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>22</sup> World Health Organization. <u>Ambient (outdoor) air pollution</u>.



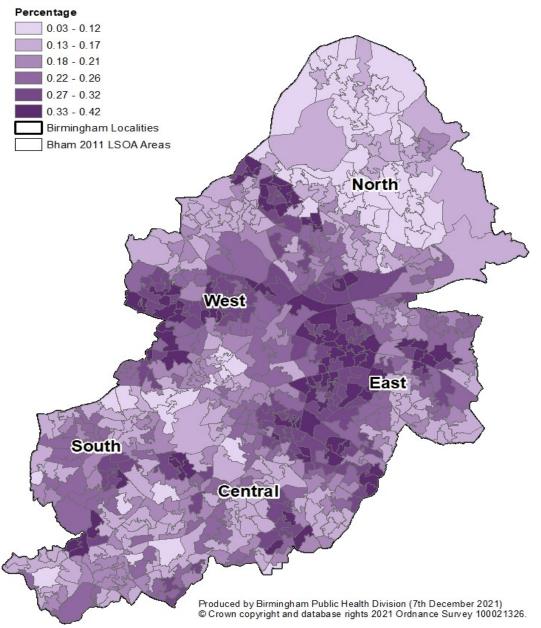
Data from Consumer Data Research Centre Access to Health Assets and Hazards (AHAH) index. Produced by Birmingham Public Health Division (Dec 2021) © Crown copyright and database rights 2021 Ordnance Survey 100021326.

Figure 22: Air Quality in Birmingham. (Source: Consumer Data Research Centre)

Figure 22 shows that the West had poor air quality across the locality and had the poorest air quality in the city. The high levels of both  $NO^2$  and  $PM_{10}$ , contribute to poor health and early death.

### **Fuel Poverty**

Fuel poverty is defined as households having low income but high fuel costs. In Birmingham, 21% of all households (92,990 households) are living with fuel poverty<sup>23</sup>.



#### Estimated Fuel Poor Rate per 1,000 Households (2021) Source: Department for Business, Energy and Industrial Strategy

Figure 23: Fuel Poverty by Birmingham LSOA. (Source: Department for Business, Energy & Industrial Strategy, 2021)

Figure 23 shows that fuel poverty is particularly high in both the West and East of the city, therefore people will be struggling to pay high energy costs due to low income. Living in a poorly heated home is strongly linked to poor health outcomes

<sup>&</sup>lt;sup>23</sup> Department for Business, Energy & Industrial Strategy - Sub-regional fuel poverty data 2021 (2019 data).

and the West locality, alongside the East locality are areas with particularly high poverty rates (Department for Business, Energy & Industrial Strategy (2021)<sup>24</sup>.

In November 2021, the WarmBrum Campaign was launched to help tackle fuel poverty in the city. A hundred and forty front line officers have received Fuel Poverty training from Agility Eco to date. A Fuel Poverty Alliance (as a subsidiary of Birmingham's Financial Inclusion Partnership) has been set up, bringing together City Housing, Public Health and multiple partners. This approach is to ensure households receive advice & support, along with energy efficiency measures to their homes through government grants. The fuel poverty metric was revised in spring 2021 by Central Government with an emphasis on poor energy efficient homes and low incomes. Birmingham is trying to maximise all externally available funding to ensure that vulnerable people in the city are supported. Working with the Council's delivery partner Agility Eco, it has been agreed over 600 eco flex requests (supporting more households/residents who are vulnerable living in a cold home) will deliver over 1,000 individual energy saving measures, with an estimated lifetime bill savings of over £5 million.

A fuel poverty strategy is currently under development to underpin the Council's work in this area.

### **Overcrowding and Density**

In Birmingham, 9.1% of households were overcrowded (Census 2011). These households have at least one bedroom too few for the number of people living in the household. Looking at the city's density also shows a small increase of 9.6%, from 36.5 persons to 40 persons per hectare from 2001-2011. This is an increase similar to the 9.8% change in population since 2001.

Figure 24 shows the geographical trend for overcrowding tends to be focused on the City Centre and inner-city suburbs, across the West and East localities, both having high levels of deprived areas and overcrowding. There was also a pocket of overcrowding in the Selly Oak ward, which may be due to its high proportion of student population.

People living in challenging housing conditions are more likely to experience poor health. Research undertaken by the Office for National Statistics shows that residents living in overcrowded households report significantly higher levels of "not good health"<sup>25</sup>.

 <sup>&</sup>lt;sup>24</sup> Department for Business, Energy & Industrial Strategy - Sub-regional fuel poverty data 2021 (2019 data)
 <sup>25</sup> Office for National Statistics. <u>2011 Census analysis: General Health in Overcrowded and Under-occupied</u> <u>Households in England and Wales</u>.

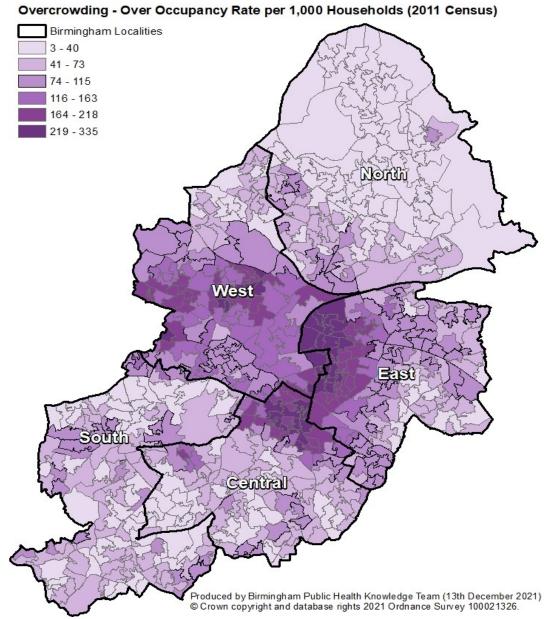


Figure 24: Overcrowding - over occupancy rate per 1,000 households in Birmingham. (Source: ONS Census 2011)

### Parks and Open Spaces

Parks and open spaces including playgrounds and green areas can help promote mental and physical health and reduce morbidity and mortality for local residents. These spaces provide psychological relaxation and stress alleviation, stimulating social cohesion, supporting physical activity, and reducing exposure to air pollutants, noise and excessive heat<sup>26</sup>.

It is important that there is equitable access to these spaces. Birmingham City Council was the first UK local authority to develop a measurement tool for Environmental Justice. Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income, with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. Figure 25 shows a map of where in the city compound issues are being felt most. The red wards show those areas of the city where there is the least environmental justice for citizens living there<sup>27</sup>. The West locality is a mixed picture of moderate and very poor environmental justice, and therefore requires some attention and work around environmental justice.

Although people need parks and green spaces nearby, it is important to have well managed and good quality facilities as this will encourage visits and use of facilities. The quality of green spaces has a stronger bearing on health outcomes than the quantity of green spaces. Visiting and use of parks can help address policy priorities such as reducing obesity, diabetes, and heart disease<sup>28</sup>.

Birmingham is home to a wealth of parks and green spaces, with over 8,000 acres of green space and 600+ parks, 15 of which have been awarded Green Flag Status (benchmark international standard for publicly accessed parks and green spaces in the UK and around the world). The Council's 25-year City of Nature plan aims to increase the number of parks and green spaces, so that Birmingham becomes known as the City of a Thousand Green Spaces.

The Active Parks scheme in Birmingham has helped thousands of people lead active lives. It encourages people to be more physically active and free sessions are open to people of all ages and abilities to take part in everything from Zumba to Tai Chi in numerous locations across the city. It has also helped to bring some previously underused parks into use. Since COVID-19 and lockdown restrictions from the pandemic, the Active Parks scheme was discontinued. However, since lockdown has been lifted events and activities are starting up again across the city.

<sup>1. &</sup>lt;sup>26</sup> World Health Organization 2017, <u>Urban Green Spaces and Health</u>.

<sup>&</sup>lt;sup>27</sup> Birmingham City Council. Our Future Nature City Plan (draft).

<sup>&</sup>lt;sup>28</sup> National Heritage Fund. <u>Space to thrive, 2019</u>.

#### Combined Index by Ward - Mean Value

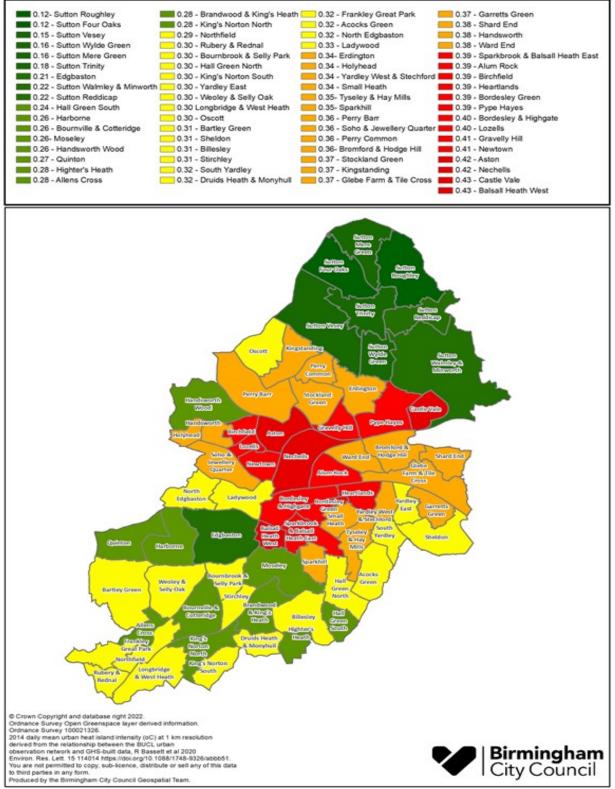


Figure 25: Environmental Justice map. Red areas show where local residents have the least environmental justice.

In the West locality there are:



Figure 26: West locality parks and open spaces. (Source: BCC Parks White Book 2021 and Noun Project 2022)

Figure 26 illustrates the number of parks and green spaces in the West locality. The West locality had 97 parks, 47 parks with play areas, 7 parks with pools, no country parks, 7 education playing fields, 1 golf course and 1 miniature golf course, and 14 allotments. In total, there were 600.95 hectares of parks and green space area in this locality, ranking fourth for size of green space and parks of all five localities. The North locality had the biggest area of parks and green space (1,429.06).

To find a local park near you, use the link below: <u>Find a park</u>

# 7. Child Health

Birmingham has a higher fertility rate than the England and West Midlands averages and has the largest proportion of children aged 0-5 years of any local authority in England.

The population of children and young people in Birmingham are more ethnically diverse than the older population of the city and this diversity increases with every cohort of children born.

Birmingham faces significant challenges in pregnancy reflected in the persistently high rates of still birth and infant mortality. These high rates of poor outcomes could reflect genetic issues and are deeply influenced by inequities in access to antenatal services, and by the prevalence of substance misuse and smoking during pregnancy.

## **Infant Mortality**

In 2018/20, the rate for infant mortality for Birmingham was 6.6 per 1,000 live births which was higher than the rate for England (3.9 per 1,000)<sup>29</sup>. This rate is used to measure the general health of the population and reflects the wider relationship between determinants of health (social, economic and environmental) and causes of infant mortality. Reducing infant mortality is part of the UK Government strategy (Healthy Lives, Healthy People: Our Strategy for Public Health November 2010)<sup>30</sup>.

Figure 12 (Scarf Chart) shows that infant mortality makes up 37.2% of excess years of life lost for the Ladywood constituency and 22.4% in the Perry Barr constituency.

Risk factors for infant mortality include high maternal BMI<sup>31,32</sup>, teenage pregnancy, smoking, sudden unexpected deaths in infancy (SIDs), household overcrowding and breastfeeding<sup>33</sup>. Poverty is on the rise, especially in-work poverty. About 60% of those living in poverty in all ages were living in working households; high and increasing rents are part of the problem <sup>34</sup>. In 2018/19, 33.9% of those under-16s in Birmingham were living in poverty<sup>35</sup>.

# **Children Living in Absolute Poverty**

Absolute poverty is defined as living in a household with income less than 60% of the (inflation adjusted) median (middle) household income in 2010/11. Table 7 shows that 37.5% of children aged 0-15 were living in absolute poverty in the West locality. This is more than double the rate for England (17.1%) and higher than the Birmingham average (27.6%). The East locality had the highest level of child poverty (38.8%).

<sup>&</sup>lt;sup>29</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>30</sup> Office for Health Improvement and Disparities. Public Health Profiles. © Crown copyright 2021.

<sup>&</sup>lt;sup>31</sup> BMI; Body mass index

<sup>&</sup>lt;sup>32</sup> Huo N, et al. Association of Maternal Body Mass Index With Risk of Infant Mortality: A Dose-Response Meta-Analysis. Front Pediatr. 2021 Mar 12;9:650413. doi: 10.3389/fped.2021.650413

<sup>&</sup>lt;sup>33</sup> Public Health England. <u>Infant and perinatal mortality in the West Midlands</u>.

<sup>&</sup>lt;sup>34</sup> Cardiff University. <u>Hick and Lanau</u> In-Work Poverty in the UK.pdf (nuffieldfoundation.org).

<sup>&</sup>lt;sup>35</sup> Public Health England. <u>Child Health Profile March 2021</u>.

### Children aged 0-15 living in Absolute Poverty during 2019/2020

West Locality	Birmingham	England	Locality with the highest Child Poverty	Locality with the lowest Child Poverty
37.5%	27.6%	17.1%	East locality 38.8%	North locality 17.8%

(Absolute poverty is based on households below the average income).

Table 7: Children aged 0-15 living in absolute poverty in Birmingham, 2019/20. (Source: House of Commons, 2021 and Fingertips,2021)

### **Teenage Pregnancy**

Teenage pregnancy refers to under-18 conceptions, including those leading to live births and terminations. Teenage mothers are less likely to finish their education, are more likely to bring up their child alone and in poverty and have a higher risk of poor mental health than older mothers. Infant mortality rates for babies born to teenage mothers are around 60% higher than for babies born to older mothers<sup>36</sup>.

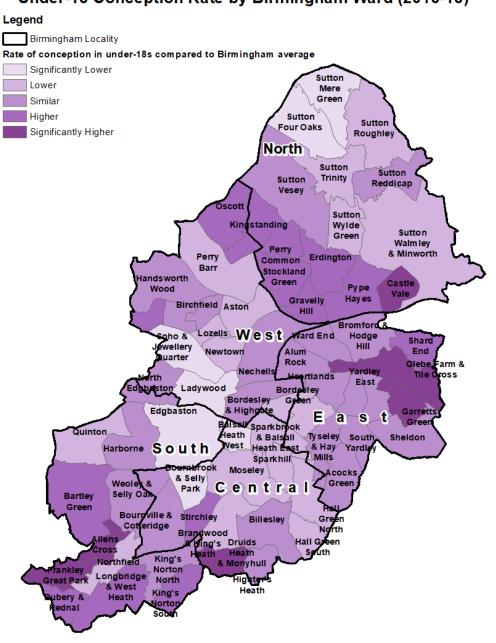
Children of teenage mothers are more likely to be living in poverty and poor-quality housing and have an increased risk of having accidents and behavioural problems. There is a growing recognition that socio-economic disadvantage can be both a cause and a consequence of teenage motherhood<sup>36</sup>.

Qualitative research in the UK points to poor material circumstances, unhappiness at home or at school, and low expectations for the future as factors associated with high teen pregnancy rates<sup>36</sup>.

Under-18 conception rate had been falling steadily in England and Birmingham. In England, the rate had fallen from 22.8 per 1,000 population in 2014 to 15.7 in 2019, a 7.1 reduction. In Birmingham, the decrease was lower at 6.4 from 24.3 per 1,000 population in 2014 to 17.9 in 2019<sup>37</sup>.

<sup>&</sup>lt;sup>36</sup> Public Health England. <u>Teenage Pregnancy Prevention Framework (publishing.service.gov.uk)</u>.

<sup>&</sup>lt;sup>37</sup> Public Health England. <u>Teenage pregnancy and young parents</u> - Report for Birmingham



### Under-18 Conception Rate by Birmingham Ward (2016-18)

Produced by Birmingham Public Health Division (Dec 2021) © Crown copyright and database rights 2021 Ordnance Survey 100021326.

Figure 27: Under 18 Conception rate per 1,000 females aged 14-17 by Birmingham ward. (Source: ONS 2017/20)

Figure 27 shows that the West locality had generally lower rates of teenage conception compared with the Birmingham average. Within the locality, higher rates of teenage conception were seen in Oscott and Kingstanding.

### **Child Education**

The evidence shows that children and young people facing additional challenges consistently have worse health outcomes, whether these are children with disabilities, children in care, lesbian, gay, bisexual or trans youth or those who have faced adverse childhood experiences. However, in Birmingham there is some positive evidence that Birmingham is closing this gap for some of these children for some outcomes, and the trend is moving in the right direction.

### **School Census**

The 2021 school census<sup>38</sup> reported, in Birmingham, there are 500 state-funded schools with over 66% of those students from ethnic minority backgrounds and 40.6% having English as a second language (EAL). These numbers are higher than the England averages of 26.5% and 19.3%, respectively (Figure 28). Birmingham also had a higher level of children with special educational needs (SEN) compared to England (17.3% compared to 15.6%).

In the West locality, Ladywood and Perry Barr both had more students, compared to the Birmingham average, who were from BAME backgrounds or whose first language was not English. They had more students who received free school meals (FSM), at 44.8% and 33.0%, respectively, compared to 35% in Birmingham. Both Ladywood and Perry Barr had similar proportion with SEN (18.0% and 17.7%) compared to the Birmingham average (17.3%).

# **Education: 2021 School Census** The School Census is a statutory data collection for all maintained (state-funded) schools in England.

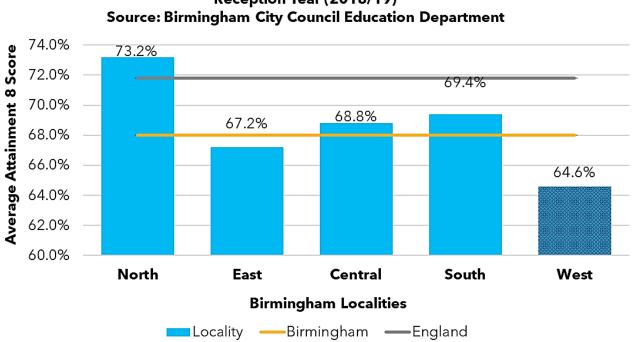
	Number of schools	*BAME	*EAL	O Free School Meals	*SEN
Ladywood	83	<b>92.8</b> %	67.2%	44.8%	<b>18.0%</b>
Perry Barr	48	80.6%	<b>50.6%</b>	33.0%	17.7%
Birminghar	n 500	66.6%	40.6%	35.0%	17.3%
England	24,360	<b>26.5</b> %	19.3%	20.8%	15.6%

\*BAME - Black, Asian and Minority Ethnicity, \*EAL - English as a Second Language, \*SEN - Special Educational

Figure 28: 2021 School Census for Birmingham (Source 2021 School Census Data)

<sup>&</sup>lt;sup>38</sup> School census data January 2021

### **Educational Attainment**



Percentage of pupils achieving good level of development in Reception Year (2018/19) Source: Birmingham City Council Education Department

Figure 29: Reception Year 2018/19 Attainment per Birmingham locality. (Source: Birmingham City Council- Education performance statistics)

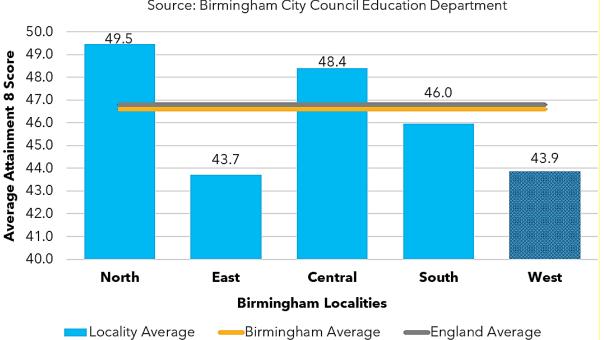
Figure 29 shows the percentage of children achieving a good level of development during their early years' foundation stage. Achievement in the West locality was far below the England and Birmingham averages<sup>39</sup>.

Figure 30 below shows the average Attainment 8 score by locality. Attainment 8 measures pupils' attainment across 8 qualifications including<sup>40</sup>:

- maths (double weighted) and English (double weighted, if both English language and English literature are sat)
- 3 qualifications that count in the English Baccalaureate (EBacc) measures
- 3 further qualifications that can be GCSE qualifications (including EBacc subjects).

<sup>&</sup>lt;sup>39</sup> Birmingham City Council. Education performance and statistics | Birmingham City Council.

<sup>&</sup>lt;sup>40</sup> Department for Education. <u>Secondary accountability measures guidance Feb 2020 (publishing.service.gov.uk)</u>.



Key Stage 4 Average Attainment 8 score for Secondary Pupils (2018/19)

Source: Birmingham City Council Education Department

Figure 30: Average Attainment 8 score for each of the Birmingham localities. Attainment 8 measures pupils' attainment across 8 qualifications including double maths and double English if both English language and English literature are sat. (Source: Birmingham City Council- Education performance statistics)

The West locality was below average for Attainment 8 compared to both the England and Birmingham averages<sup>41</sup>.

### **Child Obesity**

The term obesity describes a person with a lot of body fat. In 2018/19, about 1 in 4 children starting primary school in England were overweight or obese (including severely obese) with that number rising to more than 1 in 3 by year six<sup>42</sup>. Birmingham had a higher prevalence of child obesity where the proportion of obesity is more than one in ten 4-5-year-olds (11.0%; Figure 31) and a guarter of all 10-11-year-olds (25.6%; Figure 32).

Obesity prevalence is highest amongst the most deprived groups in society. Children in the most deprived parts of the country are more than twice as likely to be obese than those living in the least deprived areas. Children who are healthy weight are 13% more likely to report doing well at school than obese children<sup>44</sup>. Obesity is associated with reduced life expectancy and a range of health conditions including type 2 diabetes, cardiovascular, liver, respiratory diseases and cancer. Obesity can also have an impact on mental health<sup>43</sup>.

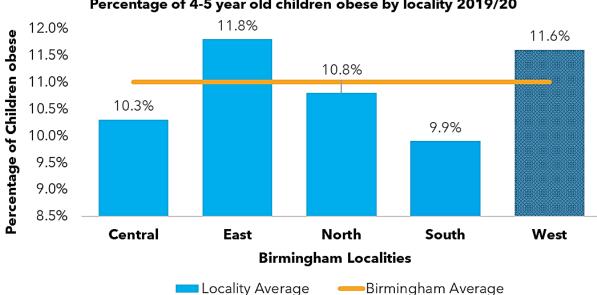
The National Institute for Health and Care Excellence (NICE) has produced guidance on Obesity Prevention covering children, young people and adults and it outlines how the

<sup>&</sup>lt;sup>41</sup> Birmingham City Council. Education performance and statistics | Birmingham City Council.

<sup>&</sup>lt;sup>42</sup> House of Lords Library. <u>Tackling childhood obesity: What is the strategy? - House of Lords Library (parliament.uk)</u>.

<sup>&</sup>lt;sup>43</sup> National Health Service (NHS). Obesity - NHS (www.nhs.uk).

NHS, local authorities, early years' settings, schools, and workplaces can increase physical activity and make dietary improvements.



Percentage of 4-5 year old children obese by locality 2019/20

The West locality had the second highest prevalence of obesity of the Birmingham localities for 4-5-year-olds with 11.6% obese. This was slightly higher than the Birmingham average (11%). The East locality had the highest (11.8%).

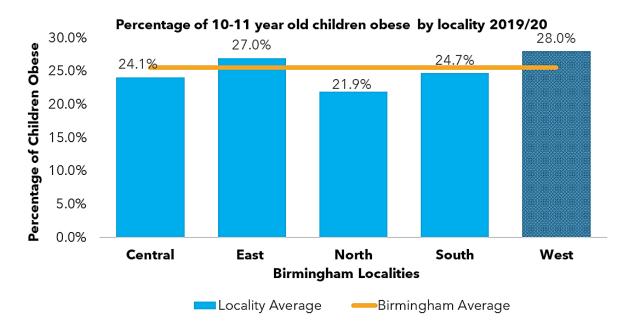


Figure 32: Percentage of Year 6 pupils that are obese by Birmingham locality. (Source: NCMP 2019/20).

Figure 31: Childhood obesity 4-5-year-olds by Birmingham locality. (Source: NCMP 2019/20)

The West locality had a higher prevalence of childhood obesity in 10-11-year-olds (28%), compared to the Birmingham average (25.6%), making it the locality with the highest prevalence while the North had the lowest (21.9%).

Figure 33 below shows the West locality generally had higher rates of children that were overweight and obese in Reception and Year 6 as that across the city. For Reception pupils, parts of Oscott had significantly high levels of obesity in the locality while Perry Barr had the lowest rate. However, for Year 6 pupils the picture changes substantially with a number of wards having significantly higher obesity rates than the Birmingham average such as Perry Barr, Aston, Birchfield, Handsworth, Holyhead, Lozells, Soho & Jewellery quarter, Bordesley & Highgate and Ladywood.

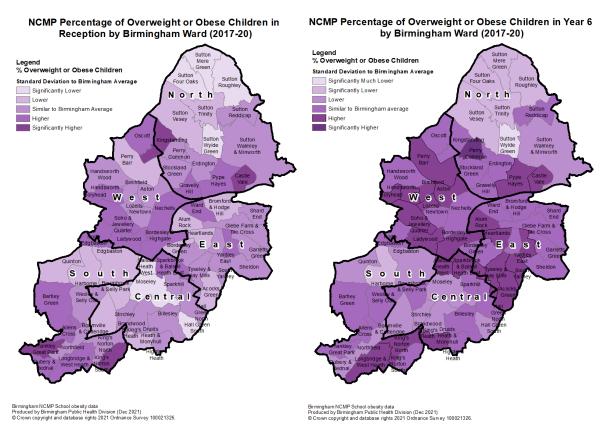


Figure 33: Map of Birmingham showing percentage of overweight & obese children in Reception and Year 6 between 1st April 2017 to 31st March 2020. (Source: NCMP 2017-20)

# Mental Health

About half of all lifetime mental health disorders start by mid-teens and three out of four by mid-20s<sup>44</sup>, but treatment often does not start until years later<sup>45</sup>. Many risk factors for mental health disorders are the result of inequalities therefore addressing these will

<sup>44</sup> Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Ustün TB. Age of onset of mental disorders: a review of recent literature. Curr Opin Psychiatry. 2007 Jul;20(4):359-64. doi: 10.1097/YCO.0b013e32816ebc8c. PMID: 17551351; PMCID: PMC1925038

<sup>&</sup>lt;sup>45</sup> Gov.UK. Guidance: <u>Children and young people; Updated 25 October 2019</u>.

help promote good mental health and resilience in children and young people<sup>46</sup>. Better Mental Health is also one of ten priorities in the PHE Strategy 2020-25<sup>46</sup>

The Children's Society estimate that in the last three years, mental health problems in young people increased by 50%; that 1 in 6 children aged 5-to-19 years are likely to have a mental health problem; and that 17-22-year-old young women are at the greatest risk for developing mental health issues. They also estimate that three guarters of children and young people do not get the help needed and 34% of those who are referred to the NHS are not accepted for treatment. Furthermore, they found that two thirds would rather not access mental health services through their General Practice<sup>47</sup>.

Data at locality level was unavailable however, there was information at the local authority level and the Clinical Commissioning Group (CCG) area on mental health referral and service use.

In 2018/19, there were 17,985 new referrals to secondary mental health services for under 18s in Birmingham, a rate of 6,704 per 100,000. This rate was higher than that for England (5,994) but lower compared to the West Midlands (7,309)<sup>48</sup>.

In 2018/19, there were 375,315 under 18s accessing NHS funded community treatment services for mental health in England. Of those, 6,230 were in Birmingham and Solihull CCG area and 2,615 in Sandwell and West Birmingham CCG<sup>49</sup>. Between July and September 2021, the number of children and young people receiving at least 2 contacts (including indirect contact but not SMS or email) with mental health services before their 18<sup>th</sup> birthday was 99,431 in England. Of those, 2,220 were in the Birmingham and Solihull CCG area and 2,495 for The Black Country and West Birmingham CCG<sup>50</sup>.

NHS England has committed to increasing mental health spending by at least £2.3bn a year by 2023/24 and developed the Mental Health Investment Standard (MHIS) to track delivery of this objective. Birmingham and Solihull's CCG planned to spend £339.7m on mental health in 2021/22 which is almost a 5% increase on the previous year's actual spend (£324.1m)<sup>51</sup>. The Black Country and West Birmingham planned spend for the same period was £333.1m, an increase of 3% on the previous year's actual spend (323.0M).

 <sup>&</sup>lt;sup>46</sup> Public Health England. <u>PHE Strategy 2020-25 Executive Summary (publishing.service.gov.uk)</u>.
 <sup>47</sup> The Children's Society. <u>Children's mental health statistics</u>.

<sup>&</sup>lt;sup>48</sup> Office for Health Improvement and Disparities. Public health profiles. © Crown copyright 2022

<sup>&</sup>lt;sup>49</sup> NHS Digital. Number of children and young people accessing NHS funded community mental health services in England, April 2018 to March 2019, Experimental Statistics - NHS Digital.

<sup>&</sup>lt;sup>50</sup> NHS Digital. Mental Health Services Monthly Statistics, Final September 2021 - NHS Digital. MHSDS Monthly: Final July 2021 to September 2021 (Quarter 2 2021/22) Mental Health Services Selected NHS England Measures Reference Tables.

<sup>&</sup>lt;sup>51</sup> National Health Service (NHS). <u>NHS Mental Health Dashboard: November 2021</u>.

# 8. Working Age Adults

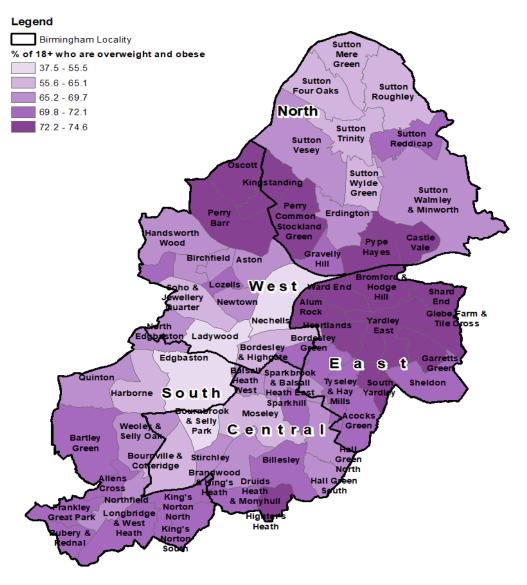
A Birmingham Public Health priority for working age adults (16-64-year-olds) is to address the cumulative impact of unhealthy behaviours e.g., unhealthy eating leading to overweight and obesity, smoking and substance misuse.

### Obesity

Obesity increases the risk of many health conditions including heart disease, type 2 diabetes, high blood pressure and certain cancers such as colon cancer.

In 2019/20, over 65% of the adult population (18+) in Birmingham were overweight or obese<sup>52</sup>. Figure 34 shows the West locality generally had high levels of obesity. Seventy-three percent of those 18 and over were overweight or obese in Oscott and Perry Barr, followed by Bordesley Green (72%). Nechells and Ladywood had the lowest rate with just over half (55% and 56%, respectively) of adults overweight/obese.

<sup>&</sup>lt;sup>52</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. 2021 © Crown copyright. Page **48** of **84** 



#### Percentage of Adults who are Overweight or Obese by Birmingham Wards (January 2019-March 21)

Produced by Birmingham Public Health Division (Dec 2021) © Crown copyright and database rights 2021 Ordnance Survey 100021326.

Figure 34: Map showing percentage of adults who are overweight or obese by Birmingham wards. (Source: GP Primary care data, Jan 2019-Mar 2021)

### Smoking

Smoking has been linked to many illnesses including chronic obstructive pulmonary disease, cardiovascular diseases, many cancers including mouth, lung, stomach, liver and kidney. Smoking exacerbates respiratory illnesses such as asthma and the common cold. It can increase risk of stillbirths, miscarriages and premature birth. In the UK, about 78,000 people die from smoking each year<sup>53</sup>.

The Government's Tobacco Control Plan sets out the strategy to reduce smoking in pregnancy, young and adult populations.

<sup>&</sup>lt;sup>53</sup> NHS. <u>What are the health risks of smoking? - NHS (www.nhs.uk)</u>

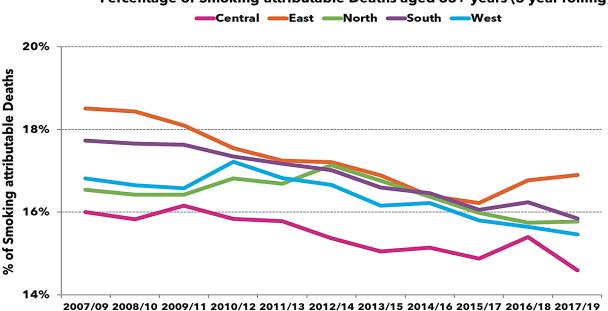
#### Estimated smoking numbers and prevalence in 2021

Area	Estimated number of smokers	Estimated smoking prevalence (%)
Central	28,588	15.4%
East	31,926	17.3%
North	33,438	16.5%
South	37,797	17.3%
West	46,734	17.0%
Birmingham	178,483	16.7%
West Midlands	849,742	16.3%
England	8,045,428	15.9%

Table 8: Estimated smoking prevalence in 2020/21 by Birmingham locality compared with Birmingham, West Midlands region and England. (Source: National General Practice Profiles data from the OHID website, 2021)

In 2020/21, the smoking prevalence in Birmingham in those aged 15 and over was 16.7%, higher than England's 15.9% (Table 8). The West locality had even higher prevalence at 17.0% of the population estimated to smoke and had the second highest rate out of the five localities.

In 2018/19, the proportion of women in Birmingham, smoking in early pregnancy was 11.6% which was better than England (12.8%) and the West Midland region (14.5%)<sup>54</sup>. However, the proportion of women known to be smoking at the time of delivery was 9.3% in 2020/21<sup>55</sup>, higher than the Government's target of reducing smoking in pregnancy to 6% or less by end of 2022<sup>56</sup>.



# Percentage of Smoking attributable Deaths aged 35+ years (3 year rolling)

#### **3** year rolling years

Figure 35: Smoking attributed deaths by Birmingham locality. (Source: ONS Deaths 2007-19).

<sup>&</sup>lt;sup>54</sup> Office for Health Improvement and Disparities. <u>Public health profiles</u>, © Crown copyright 2022

<sup>&</sup>lt;sup>55</sup> Office for Health Improvement and Disparities. <u>Public health profiles</u>. © Crown copyright 2022

<sup>&</sup>lt;sup>56</sup> Office for Health Improvement and Disparities. <u>Public health profiles</u>. © Crown copyright 2022

The West locality had seen a change in smoking attributable deaths of people aged 35 and over. In 2007/09 the number of smoking attributable deaths was 698. In 2017/19 this number reduced to 648, a 7% decrease (50 deaths), which was the second lowest change in smoking attributable deaths of all localities. The East locality saw the biggest decrease (14.5%) while the North locality saw an increase of 1%, from 903 to 912 smoking attributable deaths.

### Substance Misuse (Alcohol and Drugs)

Drug and alcohol misuse is a major public health concern and socioeconomic burden, responsible for considerable healthcare expenditure in the UK<sup>57</sup>. The annual estimated cost to the NHS of treating drug misuse is approximately £500m<sup>58</sup>, whilst the healthcare cost of alcohol misuse is estimated to be as much as £3.5bn per year<sup>59</sup>. The adverse impact on health is equally large, with 4,561 deaths (79.5 deaths per million) related to drug poisoning recorded in England and Wales in 2020<sup>60</sup>. The impact also appears to be greater in the UK compared to other countries. In Europe, the UK ranked 11<sup>th</sup> highest for the number of years lost due to ill-health, disability or early death due to a substance use disorder and has the highest rate of people living with disability as a result of substance misuse<sup>61</sup>.

### **Alcohol Related Deaths**

Alcohol is the biggest risk factor for death, ill health and disability for those aged 15-49 years and the fifth biggest risk factor across all ages<sup>62</sup>. Alcohol has been implicated in more than 60 medical conditions including depression, liver disease and certain cancers including mouth, throat, stomach, liver and breast<sup>64</sup>. In 2020, Birmingham's alcohol-related mortality rate was 44 per 100,000, which was higher than the England rate of 37.8 per 100,000<sup>63</sup>. It also had a higher rate for alcohol-specific death (17.3 versus 13 per 100,000, respectively)<sup>64</sup>.

Figure 36 shows a 3-year rolling rate for alcohol-related deaths for those aged 25-64 by Birmingham locality. Between 2017/19, the West locality accounted for one in four Birmingham deaths (25%), with 190.16 recorded deaths. This was the highest number of deaths across all five localities.

<sup>62</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>57</sup> Shei A, Hirst M, Kirson NY, Enloe CJ, Birnbaum HG, Dunlop WCN. Estimating the health care burden of prescription opioid abuse in five European countries. Clin Outcomes Res. 2015 Sep 15 [cited 2021 Aug 10];7:477-88. Available from: /pmc/articles/PMC4577260/

<sup>&</sup>lt;sup>58</sup> House of Commons Library. <u>Human and financial costs of drug addiction</u>.

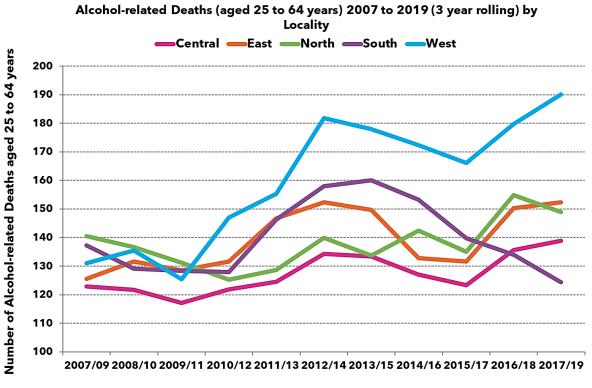
<sup>&</sup>lt;sup>59</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>60</sup> Office for National Statistics. <u>Deaths related to drug poisoning in England and Wales</u>.

<sup>&</sup>lt;sup>61</sup> Institute for Health Metrics and Evaluation. <u>GBD Compare tool</u>.

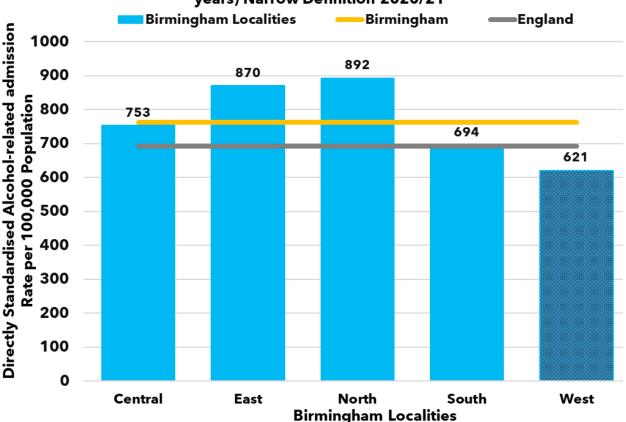
<sup>&</sup>lt;sup>63</sup> Office for Health Improvement and Disparities. <u>Public Health Profiles</u>. © Crown copyright 2021

<sup>&</sup>lt;sup>64</sup> Office for Health Improvement and Disparities. Public Health Profiles. © Crown copyright 2021



3 year rolling years

Figure 36: Alcohol related deaths (aged 25-64 years), by Birmingham localities. (Source: ONS Deaths 2007-2019).



Directly Standardised Alcohol-related admission rates (aged 25-64 years) Narrow Definition 2020/21

Figure 37: Directly standardised alcohol admission rates by Birmingham locality. (Source: NHS Digital HES 2020-21 Inpatients data).

Figure 37 shows the directly standardised hospital admission rates for alcohol related admissions in 2020/21 by locality for those aged 25-64. The rate for the West locality was 621per 100,000, the lowest of all localities and lower than the Birmingham and England rates, too. The North locality had the highest rate (892).

# Drug Use

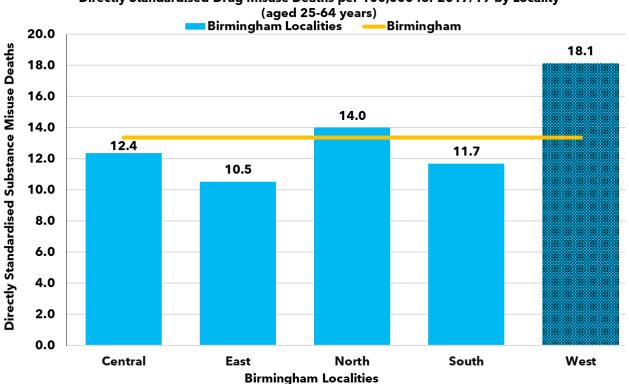
Drug misuse is also a significant cause of premature mortality. Between 2018- 2020, 8,185 deaths from drug misuse were recorded in England, a directly standardised rate of 5.0 per 100,000. Deaths in males are significantly higher than for females<sup>65</sup>.

Drug use disorders are the fourth ranked cause of death in the 15-49 age group in the UK after cancers, cardiovascular disease, and suicide. In 2020, the highest rate of drug misuse deaths was found in those aged 45 to 49 years, closely followed by those aged 40 to 44 years. Those born between 1970 and 1979, often referred to as 'Generation X', have consistently had the highest rates of drug misuse deaths for the past 25 years. However, they are not the only age group affected. Nearly one in nine deaths registered

<sup>&</sup>lt;sup>65</sup> Office for Health Improvement and Disparities. <u>Public health profiles</u>. © Crown copyright 2022

among people in their 20s and 30s in England and Wales were related to drug misuse in 202066.

Figure 38 below shows the directly standardised rates of drug misuse deaths for those aged between 25 and 64 years for the period 2017/19 for each Birmingham locality, specifically related to drugs (not including alcohol). Intentional and unintentional deaths are included.



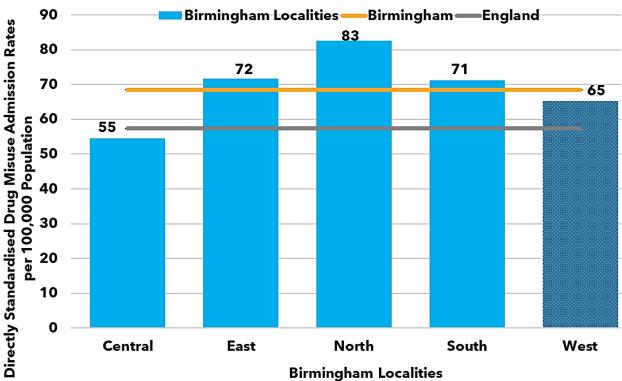
Directly Standardised Drug Misuse Deaths per 100,000 for 2017/19 by Locality

In the West, the directly standardised drug misuse death rates per 100,000 was the highest of all localities (18.1). This was much higher than the Birmingham rate (13.4). The East locality recorded the lowest rate (10.5).

Hospital admission rates for drug misuse for those aged 25- to 64 are shown in Figure 39 below. These are inpatient admissions for mental and behavioural disorders, toxic effects and poisoning by locality. In the West locality, the directly standardised rate of hospital admissions due to drug misuse for this group was 65 per 100,000 between 2018/19 and 2020/21, which was the second lowest of all localities. The North locality had the highest number of admissions (83) while the Central locality had the lowest number (55).

Figure 38: Directly standardised drug misuse deaths per 100,000 by Birmingham locality (aged 25-64). (Source: ONS Deaths 2017-2019)

<sup>&</sup>lt;sup>66</sup> Birmingham Substance Use Needs Assessment 2021 (Draft)



Directly Standardised Drug Misuse Admission Rates (aged 25-64 years) 2018/19 to 2020/21

Figure 39: Directly standardised drug misuse admission rates (aged 25-64 years) by Birmingham locality. (Source: NHS Digital HES Inpatients 2018/19 to 2020/21 data).

The draft Substance Use Needs Assessment will be published soon, which will provide comprehensive information about substance misuse in the city.

# 9. Older Adults Social Isolation

Loneliness and social isolation are terms that are often used interchangeably to mean the same thing but are in fact different but related concepts. Social isolation is an objective measure of how much contact with other people an individual has. Social isolation is measured using a series of questions including marital/cohabiting status, monthly contact with family and friends, and involvement in groups/organisations<sup>67</sup>.

Loneliness, on the other hand, is subjective and was defined in the Jo Cox Commission on Loneliness as "A subjective, unwelcome feeling of lack or loss of companionship. It happens when we have a mismatch between the quantity and quality of social relationships that we have, and those that we want"<sup>68</sup>. Both loneliness and social isolation are associated with negative health behaviours, risks to mental and physical health, and increased mortality risk<sup>69</sup>.

Birmingham has a higher proportion of adults aged over 65 who live alone (34.4%, Census 2011) than the England average (31.5%). However, there is a similar proportion of adult social care users who have as much social contact as they would like in Birmingham (40.3%) compared to England (43.5%).

The ONS Community Life Survey in 2019/20 showed that 9% of people over 65 felt lonely some or all of the time.<sup>70</sup>. Other studies estimate between 5 and 15% of those aged 65 or over often feel lonely<sup>71</sup>.

### **Hospital Admissions for Falls**

Having falls in the past year is the biggest risk factor for predicting further falls. Older people are at the greatest risk and this increases with age. About 30% of those over 65 years and half of those over 80 have falls at least once a year<sup>72</sup>.

Falls impact not just the health of the person who falls but can also have an effect on their family members and carers. Falls can lead to injury, distress, loss of independence and mortality. There is also a large healthcare cost with falls estimated to cost the NHS more than £2.3 billion per year<sup>74</sup>.

NICE guidance recommends older adults should be routinely asked about falls by health and social care professionals. This will allow commissioners to get a sense of the problem and ensure appropriate preventative measures are put in place.

<sup>&</sup>lt;sup>67</sup> Institute for Fiscal Studies 2018, <u>The dynamics of ageing</u>

<sup>&</sup>lt;sup>68</sup> Age UK 2017, <u>Combatting loneliness one conversation at a time</u>

<sup>&</sup>lt;sup>69</sup> Public Health England 2015, <u>Reducing social isolation across the life course</u>

<sup>&</sup>lt;sup>70</sup> Department for Digital, Culture, Media & Sport 2020, <u>Community life survey 2019-20</u>

<sup>&</sup>lt;sup>71</sup> Campaign to End Loneliness 2015, <u>Measuring your impact on loneliness in later life</u>.

<sup>&</sup>lt;sup>72</sup> National Institute for Health and Care Excellence. <u>Falls in older people: assessing risk and prevention</u>.

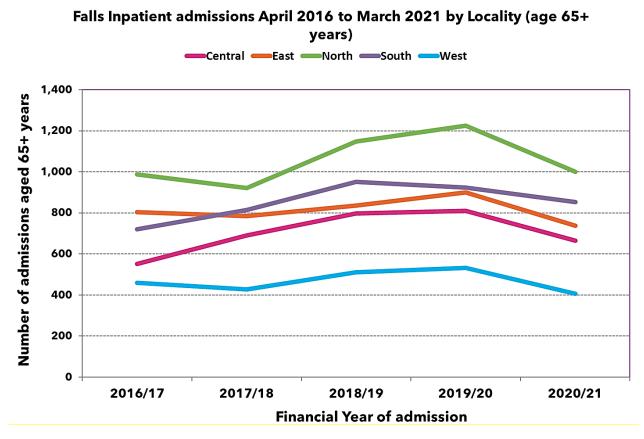


Figure 40: Number of admissions for falls for people aged 65+ by Birmingham locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21 data).

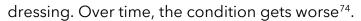
Between 2016/17 and 2020/21 there were approximately 19,463 hospital admissions across Birmingham for falls-related conditions for those aged 65 years and over. The West locality had the lowest number of total falls out of the five localities (2,337). Falls in the West locality had decreased by 11% between 2016/17 and 2020/21, the highest decrease of all five localities. The Central locality had the biggest increase of 20% – see figure 40.

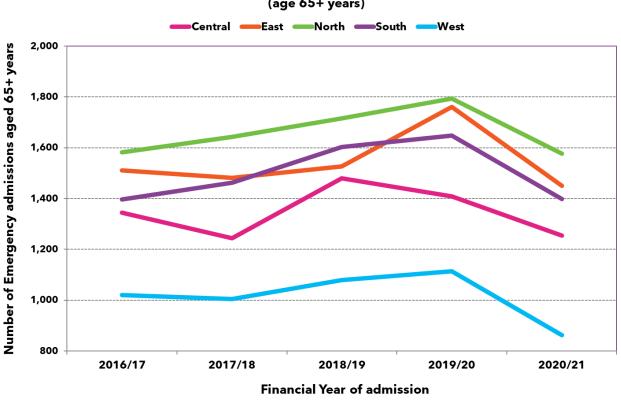
### Dementia

Dementia is used to describe a range of conditions that affect the brain. There are over 200 types of dementia and the five most common ones are Alzheimer's, vascular dementia, dementia with Lewy bodies, frontotemporal dementia and mixed dementia<sup>73</sup>.

Dementia is more common in older people and an estimated 900,000 people in the UK live with it. Dementia affects a person's memory, ability to reason and communicate, their personality, ability to carry out everyday tasks such as washing, cooking and

<sup>&</sup>lt;sup>73</sup> Dementia UK. <u>What is dementia?</u>





Dementia or Alzheimers Emergency admissions April 2016 to March 2021 by Locality (age 65+ years)

Figure 41: Emergency hospital admissions for dementia or Alzheimer's for people aged 65+, between April 2016 and March 2021. (NHS Digital HES Inpatients data, 2016/17 - 2020/21).

Figure 41 shows between 2016 and 2021, there were 35,358 emergency hospital admissions for dementia or Alzheimer's for patients aged 65 and over. Of those, 14% (5,080 admissions) were in the West locality, which was the lowest admissions out of all the localities. The North locality had the most admissions with 8,311.

# End of Life Care

The majority of residents who die in Birmingham in any given year are in the 65+ age group. The biggest killers are cancers and cardiovascular diseases; it is therefore important that patients are permitted to die in their chosen place and receive high quality palliative care in their last twelve months of life. There is no data available on whether patients are receiving end of life care (EOLC) in their preferred place. Figure 42 shows the place of death for residents in the West locality.

Between 2018 -2020 there were a total of 21,667 deaths in Birmingham in the 65+ years age group. Of these, 15.7% were reported in the West locality, a total of 3,410 deaths of the West locality residents.

<sup>&</sup>lt;sup>74</sup> National Institute for Health and Care Excellence. <u>Dementia: assessment, management and support for people</u> <u>living with dementia and their carers</u>s.

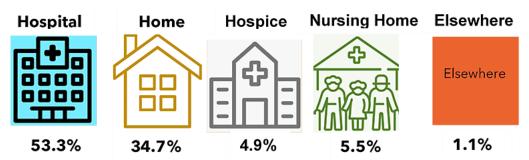


Figure 42: Places where deaths were recorded in the West locality. (Source: ONS Deaths, 2018/20)

More than half the deaths in the West locality were recorded in a hospital (53.3%) and 34.7% at home. Nearly 5% were diagnosed with terminal illnesses and therefore dying in a hospice, 5.5% in a nursing home and 1.1% elsewhere.

# **10.** Disease information from Quality Outcomes Framework

The Quality Outcomes Framework (QOF) is a voluntary system used to reward General Practices (GPs) in England for providing good quality care for certain conditions. QOF indicators measure and monitor how GPs are performing on those conditions. This allows standardisation to be set and help improve the quality of primary care delivered.

QOF monitors the management of some of the most common conditions including<sup>75</sup>,<sup>76</sup>:

- chronic conditions such as asthma, diabetes and chronic kidney disease
- major public health concern such as smoking and obesity,
- preventative services such as cervical screening, blood pressure checks and early cancer diagnosis

A QOF prevalence is the total number of patients on a register, expressed as a percentage of the total number of patients registered with the practice at any one point in time<sup>78</sup>.

### Cardiovascular disease (CVD)

CVD is a general term for conditions affecting the heart or blood vessels. CVD is one of the main causes of death and disability in the UK, but it can often largely be prevented with a healthy lifestyle<sup>77</sup>.

In 2021 a specific QOF for CVD no longer exists as a whole, however, to give a broader picture, the below are some of the main heart related diseases that come under CVD.

<sup>&</sup>lt;sup>75</sup> NHS Digital. <u>Quality Outcomes Framework (QOF)</u>.

<sup>&</sup>lt;sup>76</sup> NHS Digital. <u>Quality Outcomes Framework (QOF) 2020-21 Results.</u>

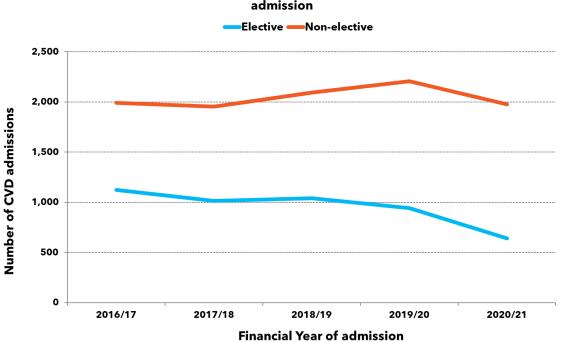
<sup>77</sup> NHS UK. Cardiovascular disease.

### **CVD** - hospital inpatient admissions

Elective admissions refer to planned hospital stay while non-elective is for emergency admissions or unplanned admissions. Apart from cancer, many of the conditions below have low levels of planned hospital admissions compared to emergency admissions which are much greater in some cases.

Emergency hospital admissions are more expensive and often preventable with appropriate primary and community care<sup>78</sup>. Good guality care at the primary level has been linked to reduced emergency hospital admissions and about 14% of nonelective admissions are for conditions that can be managed in primary care. The difference in elective and non-elective admissions is the unmet need.

Emergency hospital admissions had increased by 42% from 2006/07 to 2017/18 making planning and delivery of elective care challenging and unreliable for hospitals. This means sudden and unpredictable emergencies (such as COVID-19) cannot be accommodated without leading to further increases in delays to elective care.



West Locality CVD Inpatients April 2016 to March 2021 by type of admission

Figure 43: CVD admissions for West locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

The West locality accounts for 18% of elective CVD admissions between 2016/17 and 2020/21 and had the lowest number of cases of the five localities (see table 9). Over the last five years, CVD inpatient elective admissions in the West locality had decreased by 43%, from 1,124 elective admissions in 2016/17 to 638 in 2020/21. This was the lowest change of all five localities.

<sup>&</sup>lt;sup>78</sup> Blunt I, Bardsley M and Dixon J (2010). <u>Trends in emergency admissions in England 2004 - 2009. Research report.</u> Nuffield Trust.

Non-elective admissions have remained fairly constant, with a 0.8% increase recorded between 2016/17 to 2020/21 (see table 10). There was a large gap between elective and non-elective hospital admissions with about 1,300 more admissions due to non-elective in 2020/21 in the West locality.

•	alovascula					
Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central	1310	1211	1111	1083	473	5188
East	1393	1370	1329	1252	559	5903
North	1299	1112	1261	1202	642	5516
South	1360	1213	1144	933	541	5191
West	1124	1014	1038	943	638	4757

### CVD (Cardiovascular disease) Elective Admissions 2016-2021

Table 9: CVD elective admissions in the West locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

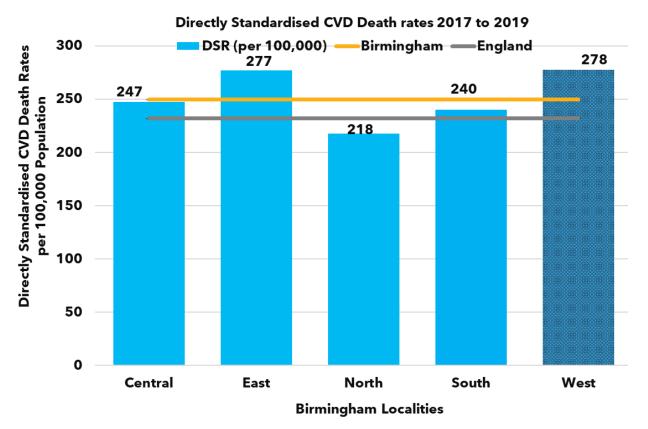
11% of the non-elective CVD admissions in Birmingham were recorded in the West locality, making it the lowest admissions among the five localities.

#### CVD (Cardiovascular disease) Non-elective Admissions 2016-2021

Locality	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central	2044	2021	2309	2486	2161	11021
East	2252	2383	2558	2927	2700	12820
North	2219	2156	2393	2442	2457	11667
South	2122	2139	2167	2230	2109	10767
West	1991	1955	2092	2206	1974	10218

Table 10: CVD non-elective admissions in the West locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

### CVD deaths



Page 62 of 84

Figure 49 illustrates that the directly standardised rate for CVD deaths in the West locality was 278 per 100,000 for 2017-2019. This was higher than both the England (231.8) and the Birmingham (249.6) rates and was the highest rate amongst the localities. Most deaths were found in those aged 65 and over.

### Coronary Heart Disease (CHD)

CHD is the term that describes what happens when the heart's blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries<sup>79</sup>.

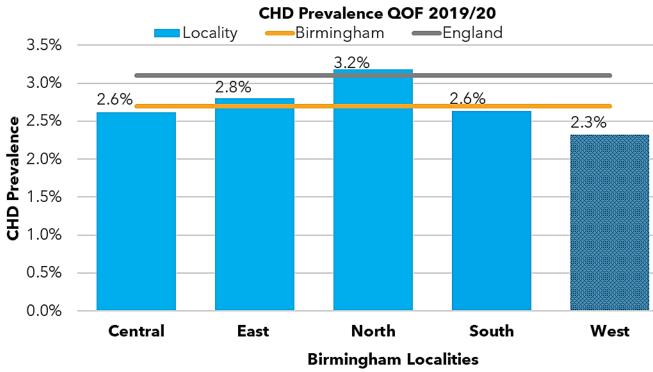


Figure 45: CHD prevalence by Birmingham locality. (Source: QOF 2019-20)

In 2019/20, an estimated 2.3% of the West locality population was on the CHD register, ranked the lowest of all five localities; this is lower than the Birmingham average (2.7%) and the national average (3.1%). The North locality had the highest percentage of people on the register (3.2%) – see figure 43.

### Stroke

There are two main causes of strokes: ischaemic - where the blood supply is stopped because of a blood clot, accounting for 85% of all cases. The second is haemorrhagic - where a weakened blood vessel supplying the brain bursts<sup>80</sup>.

<sup>&</sup>lt;sup>79</sup> NHS UK. <u>Coronary heart disease</u>

<sup>&</sup>lt;sup>80</sup> Mayo Clinic. <u>Stroke</u>

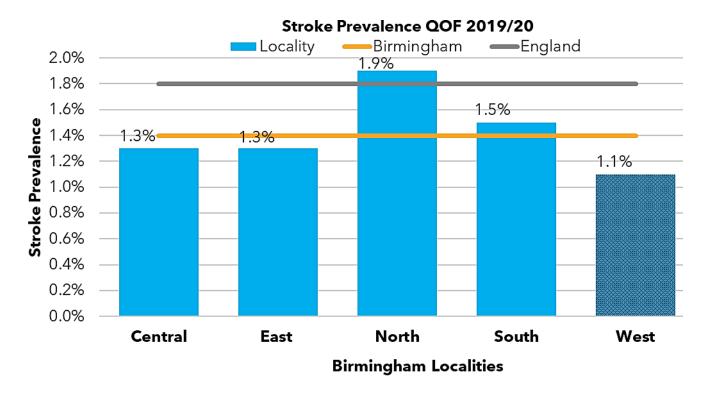


Figure 46: Stroke prevalence by Birmingham locality. (Source: QOF 2019/20)

An estimated 1.1% of the population within the West locality was on the stroke register in 2019/20, ranking the lowest of all five localities. This is lower than the Birmingham average of 1.4% and England average of 1.8%. The North locality had the highest prevalence rate of all Birmingham localities (1.9%) - see figure 44.

### Hypertension

High blood pressure, or hypertension, can–if left untreated–increase the risk of serious problems such as heart attacks and strokes<sup>81</sup>.

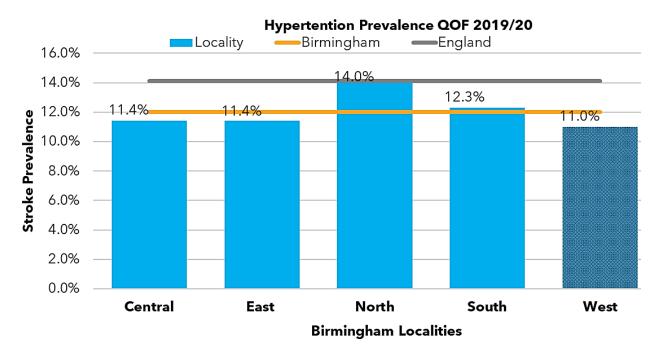


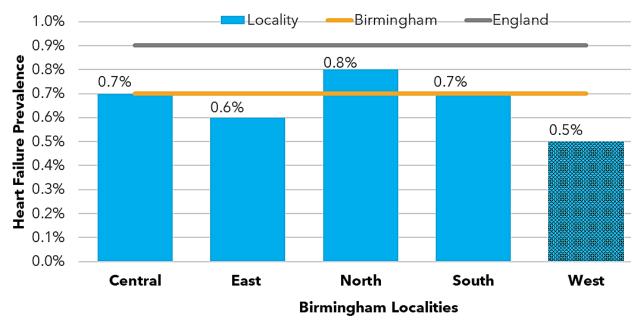
Figure 47: Hypertension prevalence by Birmingham locality. (Source: QOF 2019/20)

Figure 45 shows that around 11% of the West locality (ranking the lowest of all five localities) population was on the hypertension register in 2019/20; this was similar to the Birmingham rate of 12%, but lower than the England rate of 14%. The North locality had the highest prevalence rate of all Birmingham localities (14%).

<sup>2. &</sup>lt;sup>81</sup> Mayo Clinic. <u>High blood pressure dangers: Hypertension's effects on your body</u>

### Heart failure

Heart failure occurs when the heart is unable to pump blood around the body properly. It usually happens because the heart has become too weak or stiff<sup>82</sup>.



Heart Failure Prevalence QOF 2019/20

Figure 48: Heart failure prevalence by Birmingham locality. (Source: QOF 2019/20).

Figure 46 illustrates that the West locality had around 0.5% of its registered population on the heart failure register in 2019/20 (ranking the lowest of all five localities). This was lower than the Birmingham rate of 0.7% and the England rate of 0.9%. The North locality had the highest prevalence rate of all Birmingham localities (0.8%).

<sup>&</sup>lt;sup>82</sup> NHS.<u>Heart Failure</u>

## Atrial Fibrillation (AF)

Atrial fibrillation is a heart condition that causes an irregular and often abnormally fast heart rate that can lead to blood clots in the heart<sup>83</sup>.

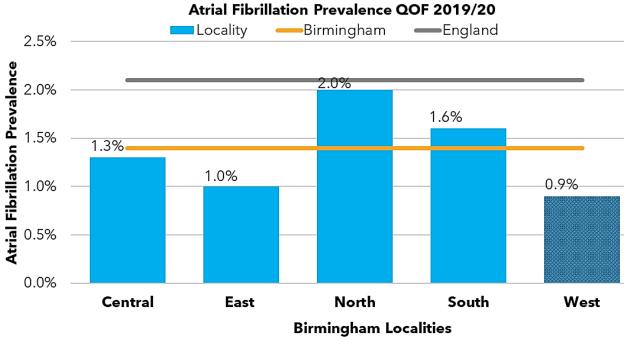


Figure 49: Atrial Fibrillation prevalence by Birmingham locality. (Source: QOF 2019/20)

Figure 47 shows that the West locality had around 0.9% of its registered population on the AF register in 2019/20, ranking the lowest of all five localities. This was lower than the Birmingham rate of 1.4% and England rate of 2.1%. The North locality had the highest prevalence rate of all Birmingham localities (2%).

### Diabetes

Diabetes is a lifelong disease that causes a patient's blood sugar levels to be too high. There are 2 main types of diabetes:

- type 1 diabetes where the body's immune system attacks and destroys the cells that produce insulin.
- type 2 diabetes where the body doesn't produce enough insulin, or the body's cells don't react to insulin.

Type 2 diabetes is far more common than type 1. In the UK, around 90% of all adults with diabetes have type 2.

<sup>&</sup>lt;sup>83</sup> NHS. <u>Atrial fibrillation</u>

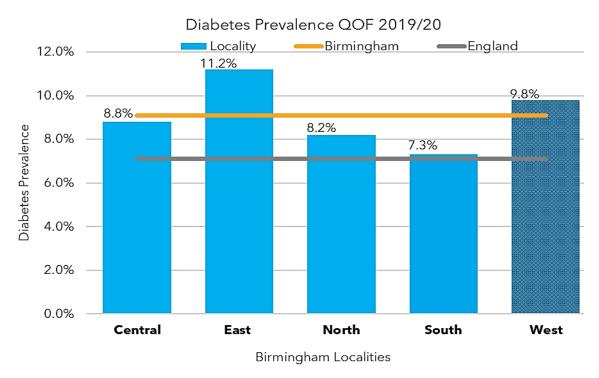


Figure 50: Diabetes prevalence by Birmingham locality. (Source: QOF 2019/20)

Figure 50 illustrates the recorded prevalence of Diabetes. It is estimated that during 2019/20, the West locality had around 9.8% of its registered population on the diabetes register, the second highest of all five localities. This was higher than the Birmingham rate of 9.1%, and the England rate of 7.1%. The East locality had the highest prevalence rate of all Birmingham localities (11.2%).

In the West locality, the prevalence of diabetes differs to all other diseases. The West locality had the lowest prevalence of all other diseases, however the second highest for diabetes. This may be linked to the ethnic makeup of the locality being profoundly Asian and Black.

Diabetes has one of the highest prevalence of all the diseases within the QOF register partly because type 2 is associated with lifestyle but also because the disease has such a profound effect on a patient's life once identified. This lifelong disease can lead to nerve damage, heart disease, stroke, kidney and eye problems.

We know that there are many people living with diabetes that have been undetected or are left undiagnosed, for example people are not picked up by their local GPs or registered with a GP. People that are left undiagnosed, can show signs of complications by the time they get diagnosed. Therefore, early diagnosis and effective management of the diabetes is crucial in reducing the risk of developing life-changing complications such as heart disease, stroke, kidney failure, blindness and amputation<sup>84</sup>.

### **Diabetes - Hospital Admissions**

<sup>&</sup>lt;sup>84</sup> Diabetes UK. <u>Are you one of the thousands in UK with undiagnosed diabetes?</u>

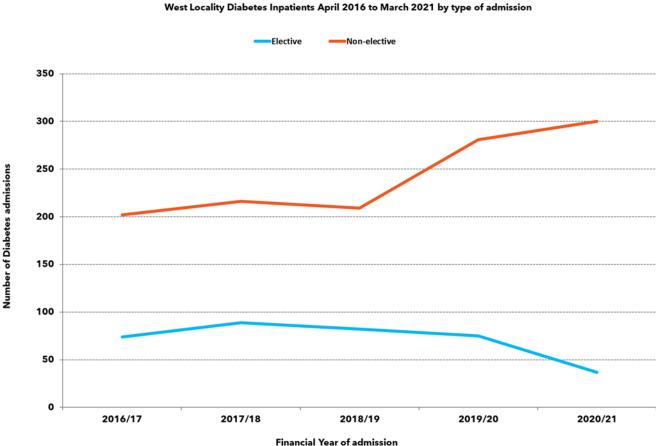


Figure 51: Diabetes inpatients for the West locality. (Source: NHS Digital HES 2016/17 to 2020/21)

Figure 51 shows non-elective admissions for diabetes were consistently higher than the elective admissions for the West locality over the period 2016/17 to 2020/21 with the gap increasing in later years. This data was recorded where the ICD-10<sup>85</sup> codes are E10-E14, which describe complications due to diabetes.

Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central	221	234	230	114	62	861
East	44	54	66	60	34	258
North	22	29	76	35	18	180
South	286	255	267	151	68	1027
West	74	89	82	75	37	357

#### **Diabetes Elective Admissions 2016-2021**

Table 11: Number of elective admissions for diabetes inpatients for each locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

Over the last five years, 13% of all diabetes elective admissions across Birmingham were recorded in the West locality, making it the locality with the third lowest elective admissions for diabetes. The North saw the lowest elective admissions. Between 2016/17 and 2020/21, there was a 50% decrease in elective diabetes admissions, in the

<sup>&</sup>lt;sup>85</sup> International Statistical Classification of Disease and Related Health Problems, 10<sup>th</sup> Revision (ICD-10) is medical classification list by the World Health Organization. For more details, please see the glossary.

West locality. Of all diabetes hospital admissions since 2016/17 to 2020/21, 32% were elective admissions.

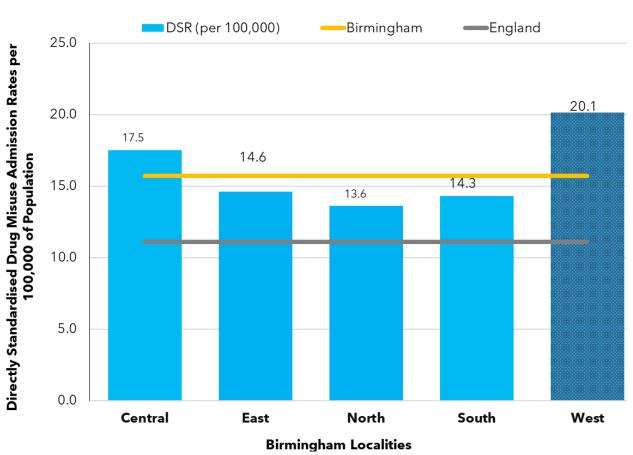
Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central	193	207	245	234	203	1082
East	267	224	279	293	289	1352
North	171	180	232	241	183	1007
South	180	206	192	234	237	1049
West	202	216	209	281	300	1208

### **Diabetes Non-elective Admissions 2016-2021**

Table 12: Number of non-elective admissions for diabetes inpatients by locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

Over the last five years in Birmingham, 21% of the non-elective diabetes inpatient admissions were recorded in the West locality, making it the locality with the second highest non-elective diabetes admissions (see table 12). Between 2016/17 and 2020/21, there was a 49% increase in non-elective admissions in the West locality.

### **Diabetes Deaths**



### Directly Standardised Diabetes Death rates 2017 to 2019

Figure 52: Directly standardised rate of diabetes deaths by Birmingham locality. (Source: ONS Deaths 2017-2019)

The death rate per 100,000 of the population for diabetes compared to other conditions remains low across Birmingham, with diabetes very rarely being recorded as

the underlying cause of death. The West locality had a directly standardised rate of 20.1 diabetes deaths per 100,000, which is higher than both the national average of 11.1 and the Birmingham rate of 15.7 and indeed is the highest rate amongst the localities. Most of the deaths were in those aged 65 years and over (see figure 52).

## Respiratory

Respiratory illness affects the lungs and result in difficulty breathing. This may be the result of smoking, infections or genetics. Lung disease can affect any part of the respiratory system. Diseases that affect the airways include chronic obstructive pulmonary diseases (COPD)–this includes emphysema and chronic bronchitis–and asthma.

### **Respiratory Hospital Admissions**

Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central Elective	643	652	683	609	271	2858
East Elective	793	782	855	787	462	3679
North Elective	609	524	632	688	250	2703
South Elective	535	558	631	557	228	2509
West Elective	594	599	737	632	265	2827

### **Respiratory Elective Admissions 2016-2021**

Table 13: Number of elective admissions for respiratory diseases by Birmingham locality (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

Between 2016/17 to 2020/21, 19% of all respiratory elective admissions across Birmingham were recorded in the West locality, making it the locality with the third highest number of elective cases for respiratory admissions across the five localities in Birmingham (see table 13). Between 2016/17 and 2020/21, elective admissions for the West fell by 55%, from 594 to 265.

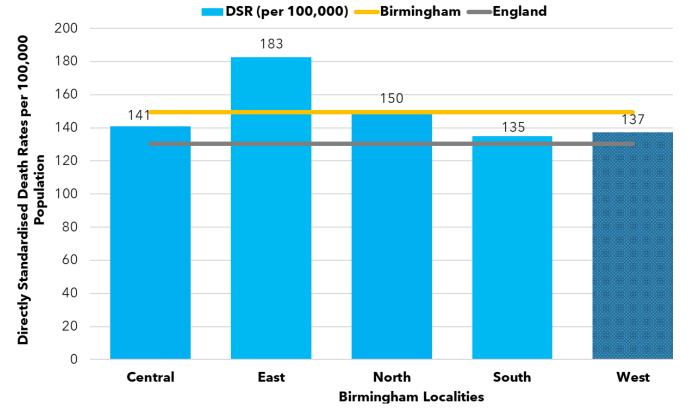
### **Respiratory Non-elective Admissions 2016-2021**

Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central locality	3577	3769	4193	4180	1700	17419
East locality	4281	4599	5380	5666	2335	22261
North locality	3892	4176	4446	4553	1934	19001
South locality	3544	3763	3993	4142	1856	17298
West locality	3817	3899	4113	4378	1698	17905

Table 14: Number of non-elective admissions for respiratory diseases by Birmingham locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

The West locality accounted for 19% of the total non-elective respiratory admissions in Birmingham and ranked the third highest for non-elective admissions of all five localities. Between 2016/17 and 2020/21, non-elective admissions fell by 56% in the West locality (see table 14).

### **Respiratory Deaths**



## Directly Standardised Respiratory Diseases Death rates 2017 to 2019

Figure 53: Directly standardised respiratory deaths rate by Birmingham locality. (Source: ONS Deaths 2017-19)

The death rate for respiratory related illnesses within the West locality (137 per 100,000) was the second lowest out of the localities and lower than the Birmingham rate (149) but higher than the national rate (130) for 2017/19 (see figure 53). The rates shown are for all ages but the majority of deaths from respiratory diseases are for those patients aged 75 and older.

### Chronic Obstructive Pulmonary Disease (COPD)

COPD is the name for a group of lung conditions that cause breathing difficulties. It includes:

- emphysema damage to the air sacs in the lungs
- chronic bronchitis long-term inflammation of the airways

COPD develops overtime and affects mostly those who are 40 years of age or older and smoke. However younger adults can develop COPD, but it is rare. The breathing problems tend to get gradually worse over time and can limit your normal activities, although treatment can help keep the condition under control<sup>86</sup>.

<sup>&</sup>lt;sup>86</sup> Healthline. <u>COPD: What's Age Got to Do with It?</u>

### **COPD** prevalence

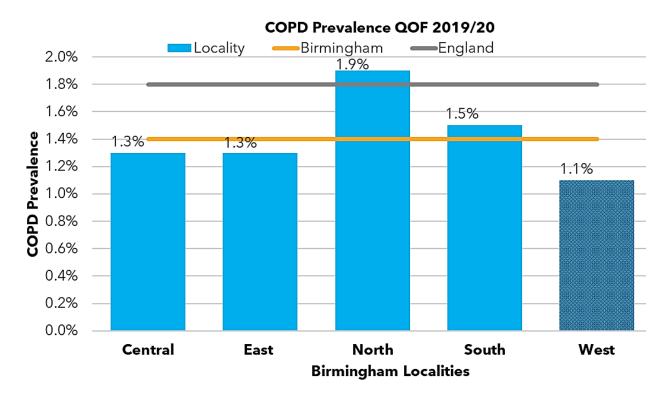


Figure 54: COPD Prevalence by Birmingham locality. (Source: QOF 2019/20)

An estimated 1.1% of those in the West locality were registered as having COPD during 2019/20. This was lower than the Birmingham rate of 1.4%, and the England rate of 1.8%. The North locality had the highest prevalence rate of all Birmingham localities (1.9%) - see figure 54.

### Asthma Prevalence

Asthma is a common, long term lung condition that causes occasional breathing difficulties. Although asthma can occur at any age, it is more common in those under 40.

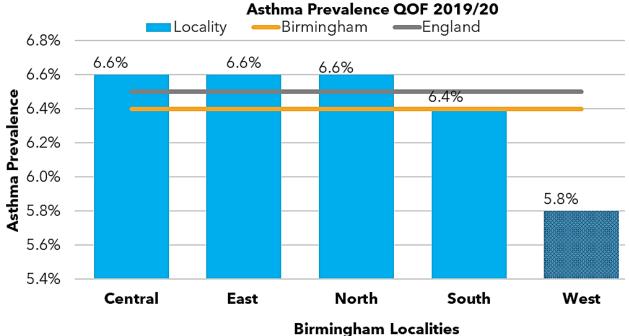


Figure 55: Asthma Prevalence by Birmingham locality. (Source: QOF 2019/20)

In 2019/20, the West locality had around 5.8% of its registered population on the asthma register. This was lower than the Birmingham rate and England rate of 6.5%. The North, East and Central localities all had a higher prevalence at 6.6% (see figure 55).

#### Cancer

Cancer is a condition where cells in a specific part of the body grow and reproduce uncontrollably. The cancerous cells can invade and destroy surrounding healthy tissue, including organs. Cancer sometimes begins in one part of the body before spreading to other areas. This process is known as metastasis<sup>87</sup>.

There are over 200 known cancers each diagnosed and treated differently. One in two people will develop some form of cancer during their lifetime. In the UK, the four most common types of cancer are:

- breast cancer
- lung cancer
- prostate cancer
- bowel cancer

<sup>&</sup>lt;sup>87</sup> NHS. <u>Overview Cancer</u>

### **Cancer Prevalence**

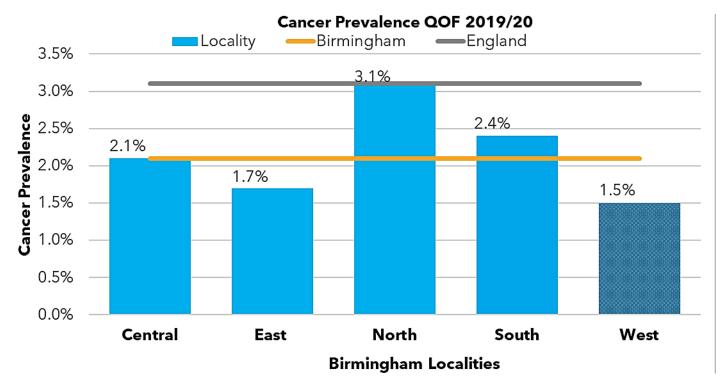
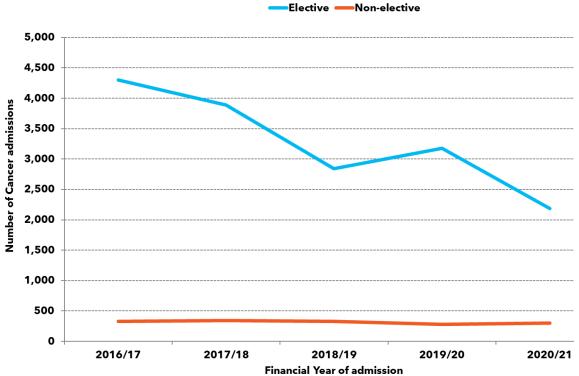


Figure 56: Cancer prevalence by Birmingham locality. (Source: QOF 2019/20)

During 2019/20, the West locality was estimated to have around 1.5% of its registered population on the cancer register, the lowest of all the localities. This was lower than the Birmingham rate of 2.1%, and lower than the England rate of 3.1%. The North locality had the highest prevalence rate of all Birmingham localities (3.1%) - see figure 56.

## Cancer - hospital admissions

The treatment of cancer requires regular attendance at either an outpatient or inpatient facility to receive necessary drugs, as such, numbers of admissions are high. In 2020/21, 14% of all Birmingham cancer admissions (elective and non-elective) came from residents of the West locality. Elective admissions in the West locality gradually declined between 2016/17 and 2018/19 by 34%. After which, elective admissions than remained about the same for a year. Between 2019/20 and 2020/21 elective admissions declined by 31% - see figure 57 below.



#### West Locality Cancer Inpatients April 2016 to March 2021 by type of admission

Figure 57: Cancer inpatients by type of admission for the West locality. (Source: NHS Digital HES 2016/17-2020/21)

Cancer Elective Admissions 2016 - 2021							
Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total	
Central	3349	3164	2656	3004	2213	14386	
East	5584	5564	5937	6255	4633	42359	
North	7583	8012	7472	7500	5447	36014	
South	3654	3203	2695	2697	1848	14097	
West	4300	3886	2842	3174	2185	16387	

#### Cancer Elective Admissions 2016 - 2021

Table 15: Number of elective admissions for cancer inpatients by Birmingham locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

The West locality accounted for 13% of all cancer elective admissions across Birmingham. This locality had the third highest number of recorded elective cases across the five localities in Birmingham (see table 15).

Elective admissions have declined over the last five years except for 2019/20 where there was an increase of 348 admissions. Of all cancer hospital admissions since 2016/17 to 2020/21, 89% were elective admissions and this is different to the other diseases mentioned within this report where most inpatient admissions are non-elective.

In 2020/21 elective admissions reduced by 49% compared to 2016/17 from 4,300 to 2,185 in the West locality.

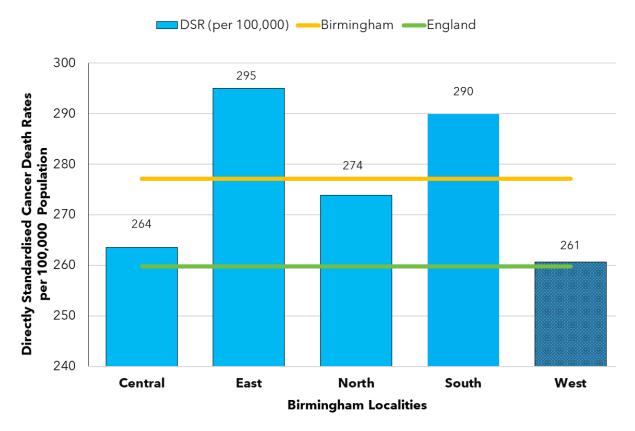
Year	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Central	348	301	295	303	318	1565
East	252	310	300	327	349	1538
North	344	356	331	384	383	1798
South	386	381	354	338	325	1784
West	326	339	328	279	301	1573

#### **Cancer Non elective Admissions 2016-2021**

Table 16:Number of non-elective admissions for cancer inpatients by Birmingham locality. (Source: NHS Digital HES Inpatients 2016/17 to 2020/21)

The West locality also accounted for 19% of the total non-elective cancer admissions in Birmingham and ranked the third highest for non-elective admissions alongside the Central and East localities. Between 2016/17 and 2020/21, non-elective admissions reduced by 7% from 326 to 301 in the West locality (see table 16).

#### **Cancer deaths**



#### Directly Standardised Cancer Death rates 2017 to 2019

Figure 58: Directly standardised cancer death rates by Birmingham locality. (Source: ONS Deaths 2017-19)

During 2017/19, cancer across all ages accounted for 6,685 (26.4%) deaths across Birmingham. During this time, the disease was the city's biggest killer. Figure 58 shows that the West locality had a death rate of 261 per 100,000 of the population, the lowest rate of the five localities and lower than Birmingham (277) and the England (260) rates. When looking at the crude rate, the West locality accounted for 1,048 deaths (16%), the least total number of cancer deaths in Birmingham. The North locality had the highest number with 1,553 (23%) deaths.

# **11.** Accident and Emergency (A&E) Hospital Attendances

Accident and Emergency attendances provide insight of A&E activity, including the pressure on these services. This data is essential for determining average wait times to access emergency care, quality of service delivery, and other factors that are relevant to understanding and addressing healthcare issues within the population.

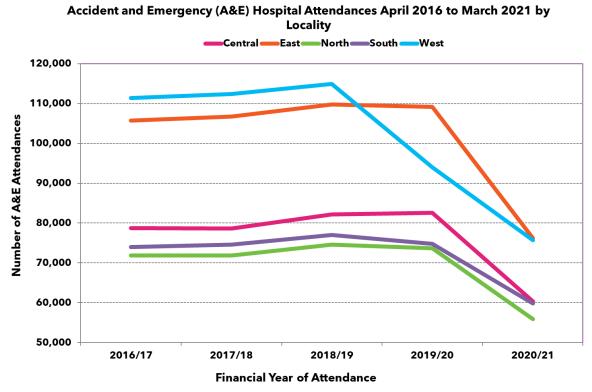
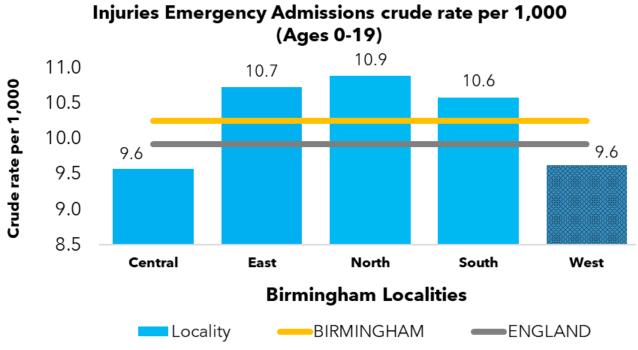


Figure 59: A&E attendance by locality. (Source: NHS Digital HES A&E 2016/17 to 2020/21 data)

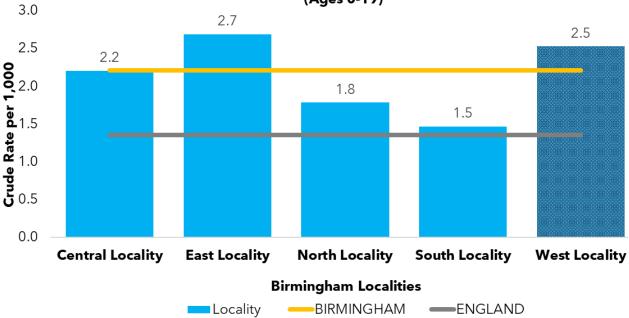
In 2016/17, there were 441,540 A&E attendances in Birmingham. This decreased to 327,808 attendances in 2020/21, a 26% reduction across the city. Figure 59 shows A&E attendances remained fairly stable between 2016/17 - 2018/19, after which the West locality was the first to start to see a decline, followed by the remaining four localities in 2019/20. This is likely to be linked to COVID-19.

The West locality accounted for 24% of A&E attendances in Birmingham, and along with the East locality, had the highest A&E attendance rates of all five localities between 2016/17 to 2020/21. A&E cases in the West locality had decreased by 19% from 111,365 to 75,662 between 2019/20 and 2020/21. This was the lowest change seen in A&E attendances across Birmingham; the East locality had the biggest change (30%).



*Figure 60:* Injuries emergency admissions crude rate per 1,000 (Aged 0-19) by Birmingham locality. (Source: NHS Digital HES data 2018/19 to 2020/21 data and ONS populations for 2018 to 2020)

Between 2018/19 to 2020/21, the injuries emergency admissions crude rate per 1,000, among children aged 0-19 in the West locality was 9.6, which was lower than both the Birmingham rate of 10.1 and the England average of 9.9 (Figure 60). Compared to other localities, this made the West along with the Central locality the lowest injury emergency admissions rates per 1,000 for those aged 0-19.



2018/19 to 2020/21 Asthma Emergency Admissions Crude rate per 1,000 (Ages 0-19)

*Figure 61:* Asthma Emergency admissions crude rates per 1,000 (ages 0-19) by Birmingham locality. (Source: NHS Digital HES A&E 2018/19 to 2020/21 data)

Between 2018/19 to 2020/21, the asthma emergency admissions crude rate per 1,000, among children aged 0-19 in the West locality was 2.5. This was higher than both the England rate of 1.4 and the Birmingham rate of 2.2. Compared to other localities, this made the West the locality with the second highest asthma emergency admission rates per 1,000 for this age group.

# 12. Conclusion -

The West locality makes up just over a fifth of the Birmingham population and over three quarters of those were aged under 45 years. About two-fifths of the West locality population are of Asian ethnic backgrounds and over a third of White ethnicity. More than half of the population live in areas ranked among the 10% most deprived areas in England.

COVID-19 vaccine uptake had been very poor with the West locality the worst in Birmingham for all three doses. Less than half the people in the West locality felt safe going out after dark, much worse than the rest of Birmingham. Violent crime admission rates were the worst in Birmingham and still much higher than England.

Life expectancy is still higher in females than males with the female life expectancy higher than that for Birmingham. Male life expectancy, on the other hand, was lower than both Birmingham and England. This is largely driven by a very high infant mortality rate where it makes up nearly two-fifths of excess years of life lost in Ladywood and over a fifth in Perry Barr. Lung and coronary heart diseases are other leading causes attributed to deaths under 75s. The rate of teenage conception is better than both Birmingham and England, however, the West had poor outcomes in school attainment with over a quarter of residents with no qualifications.

In summary, the West's profile differs to that of the Birmingham profile, with high levels of inequality compared to both Birmingham and England for many indicators. The Birmingham Joint Health and Wellbeing strategy aims to close this inequity gap working as a partnership across the city, tackling structural barriers to improve quality of life and health outcomes.

# 1. Appendix A

## Glossary

A **ward** is a geographical unit used to elect local government councillors in metropolitan and non-metropolitan districts, unitary authorities, and the London boroughs in England.

A **constituency** is a body of citizens (called **constituents**) who are represented by an elected representative at the House of commons, which is the democratically elected house of the UK Parliament, responsible for making laws and checking the work of Government.

A **locality** is a geographical area which consists of two or more neighbourhoods, with each neighbourhood adjoining at least one other in the area, to make up communities which form the locality.

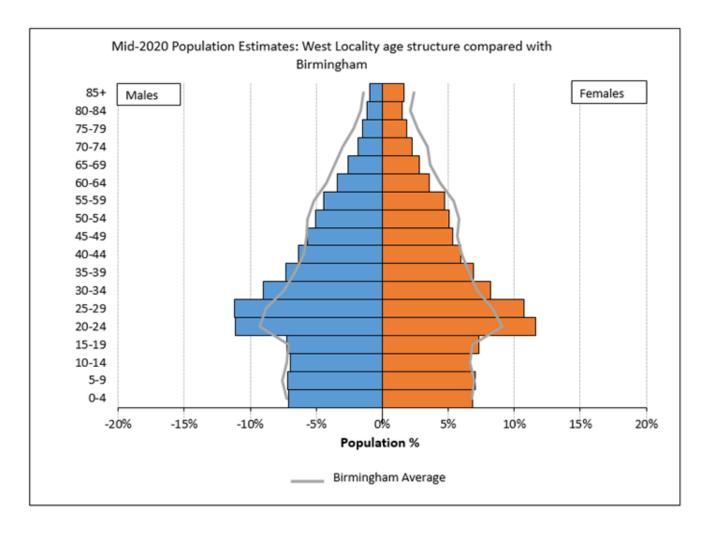
**Absolute poverty -** Refers to conditions where individual or household incomes are below levels required to meet basic living needs, such as housing, feeding, health care, security, access to safe water, etc.

**QOF:** The Quality and Outcomes Framework (QOF) is **a system designed to remunerate general practices for providing good quality care to their patients**, and to help fund work to further improve the quality of health care delivered. It is a fundamental part of the General Medical Services (GMS) Contract, introduced in 2004.

**Elective Admissions** - They are referred to as planned admissions, i.e., admissions in which the decision to admit the patients were made prior to the admission of the patient, by healthcare providers. These could be through bookings or routine admissions

**Non-elective admissions** – They are referred to as unplanned admissions, i.e., admissions in which there were no prior decisions made by the healthcare providers to admit the patients, decisions to admit them were made on instantaneous or emergency basis.

**ICD-10** - refers to the 10<sup>th</sup> revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), which are medical classification list provided by the World Health Organization (WHO), consisting of codes for diseases, signs and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases.



*Figure 62: West Locality Population Pyramid - the age structure of people living in the West locality in comparison to Birmingham by males and females. (Mid-2020 Population Estimates)* 

Constituency	White	Mixed	Asian	Black	Other ethnic group
EDGBASTON	<u>68.7%</u>	<u>5.2%</u>	<u>16.4%</u>	<u>7.7%</u>	<u>2.1%</u>
ERDINGTON	<u>73.1%</u>	<u>5.6%</u>	<u>10.4%</u>	<u>10.2%</u>	<u>0.8%</u>
HALL GREEN	<u>35.5%</u>	<u>3.8%</u>	<u>49.5%</u>	<u>6.1%</u>	<u>5.0%</u>
HODGE HILL	<u>35.7%</u>	<u>4.2%</u>	<u>49.8%</u>	<u>8.4%</u>	<u>2.0%</u>
LADYWOOD	<u>27.3%</u>	<u>5.9%</u>	<u>40.5%</u>	<u>22.6%</u>	<u>3.6%</u>
NORTHFIELD	<u>85.8%</u>	<u>4.7%</u>	<u>4.2%</u>	<u>4.4%</u>	<u>0.8%</u>
PERRY BARR	<u>39.7%</u>	<u>4.1%</u>	<u>38.8%</u>	<u>15.2%</u>	<u>2.1%</u>
SELLY OAK	<u>77.6%</u>	<u>4.4%</u>	<u>12.4%</u>	<u>4.5%</u>	<u>1.2%</u>
SUTTON COLDFIELD	<u>88.7%</u>	<u>2.2%</u>	<u>6.7%</u>	<u>2.0%</u>	<u>0.5%</u>
YARDLEY	<u>65.6%</u>	<u>4.1%</u>	<u>23.7%</u>	<u>5.3%</u>	<u>1.3%</u>

Table 17: Ethnicity breakdown by constituencies (Source: 2011 Census)

Ethnic group breakdowns by constituencies. For the West locality, the make-up of each constituency:

**Ladywood** has a population of 126,969 of which 40.5% (51,422) are of Asian ethnicity. The second biggest ethnicity is White, which makes up 27.3% of Ladywoods population followed by the Black ethnicity at 22.6%.

**Perry Barr** has a population of 107,341 of which 39.7% (42,614) are of White ethnicity, closely followed by the Asian population with 38.8%.