

Ward Profile; Aston

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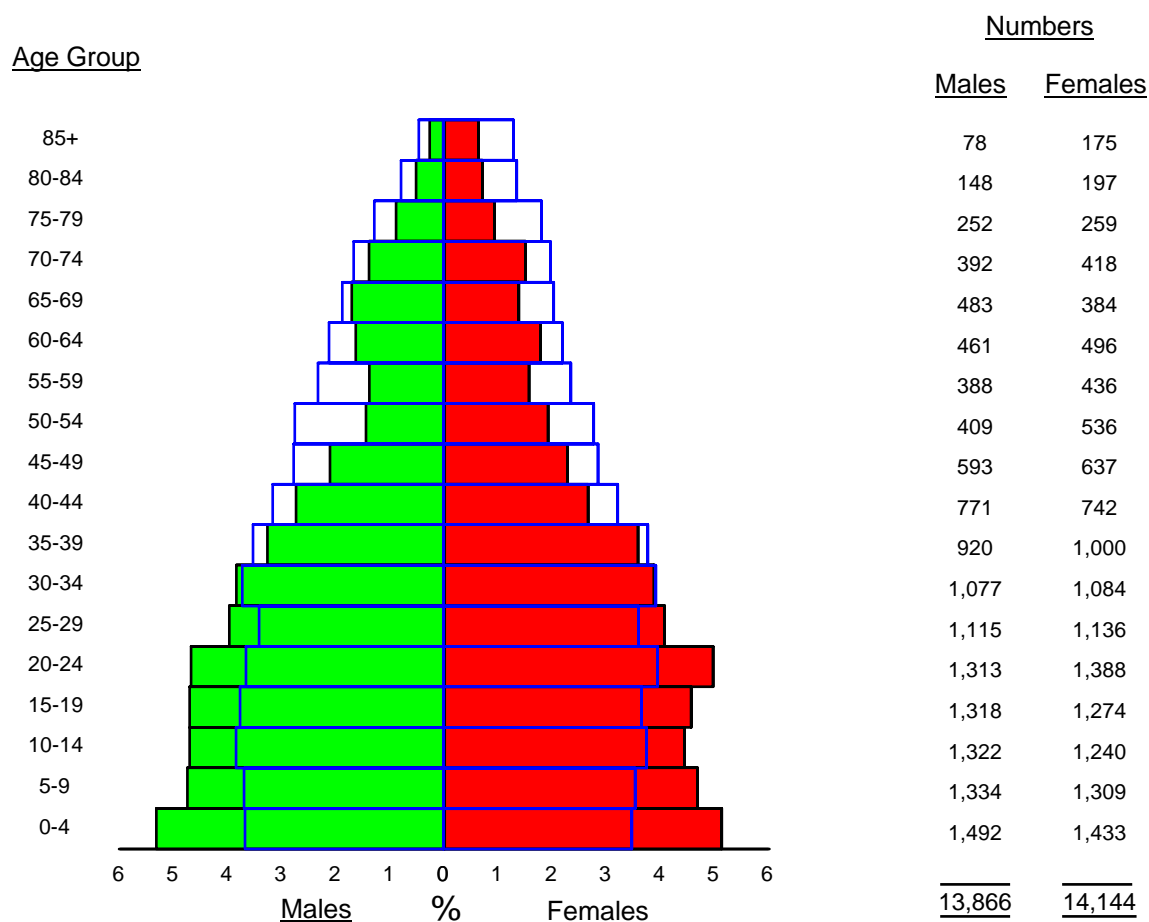
Appendices

Location of Aston Ward.



- ① Aston ward is located in west/central Birmingham.
- ① Aston ward lies within Ladywood district, together with Ladywood, Nechells and Soho wards.

Age and Sex Structure.

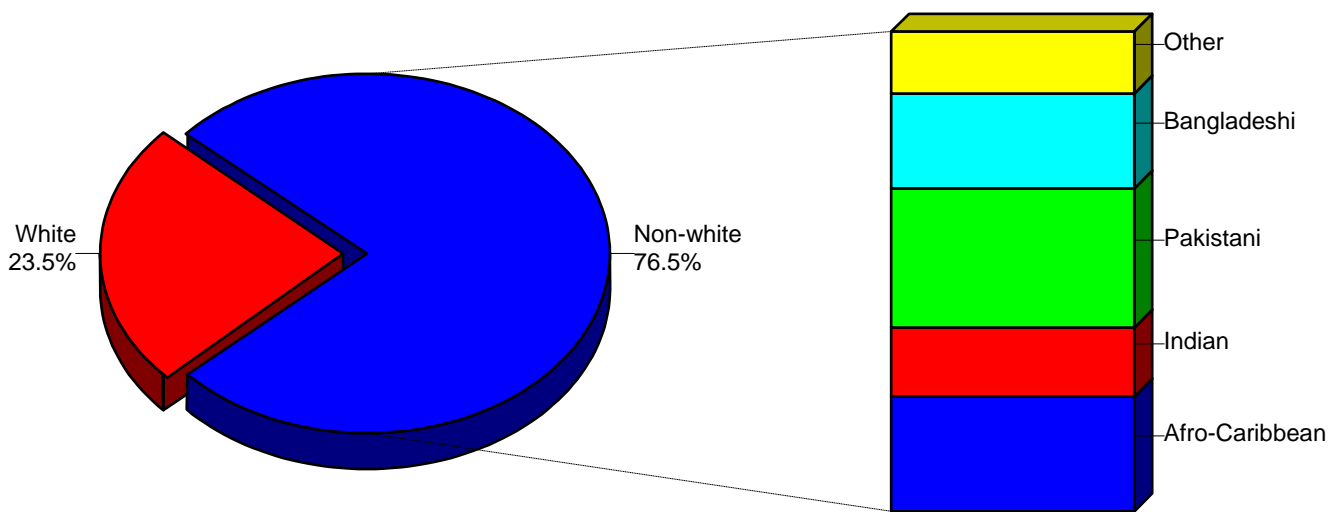


Age Group	Aston Ward	Ladywood District	Birmingham
0 to 4	10.4	8.8	7.2
5 to 14	18.6	15.6	14.8
15 to 24	18.9	20.5	15.0
25 to 44	28.0	29.7	28.3
45 to 64	14.1	15.3	20.1
65 to 74	6.0	6.0	7.6
75 to 84	3.1	3.2	5.2
85+	0.9	0.9	1.7
Total	100.0 %	100.0 %	100.0 %

(2001 Census; ONS)

- ① The population pyramid above shows the age and sex structure of Aston ward as enumerated at the 2001 Census, together with that of Birmingham (blue outline).
- ① Children under school leaving age make up almost a third of the Aston population
- ① Persons of retirement age account for a further 12% of the ward population
- ① Aston ward has a younger population than that of Birmingham as a whole, with relatively more children, and fewer persons of retirement age than the city.

Ethnicity



(n = 27,922)

Ethnic Group	Aston Ward	Ladywood District	Birmingham
White	23.5	36.0	70.3
Afro-Caribbean	18.3	16.7	5.5
Indian	11.0	11.4	5.7
Pakistani	22.2	17.5	10.6
Bangladeshi	15.2	7.2	2.1
Other	9.9	11.2	5.6
Total	100.0 %	100.0 %	100.0 %

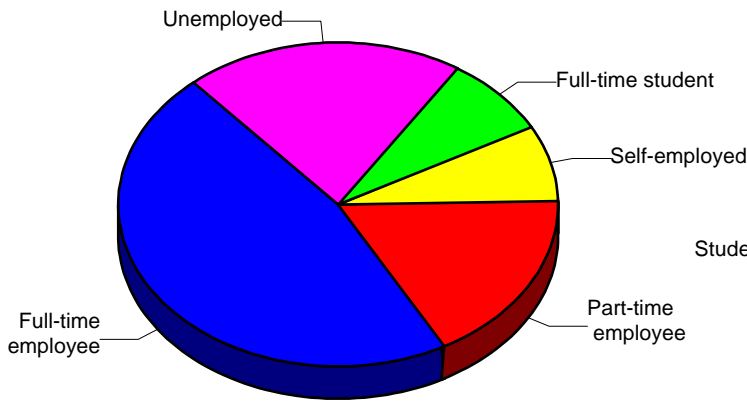
(2001 Census; ONS)

- ① Over three-quarters of the population of Aston ward are of non-white ethnicity.
- ① Persons of Pakistani origin represent the largest non-white group in Aston, followed by persons of Afro-Caribbean, Bangladeshi and Indian ethnicity.
- ① The proportion of non-whites in the Aston population is considerably higher than the proportion for Ladywood district (64%) and more than double the proportion of non-whites for all of Birmingham (30%)
- ① Proportionally, Aston has twice as many Indians and Pakistanis, three times as many Afro-Caribbeans and seven times as many Bangladeshis than Birmingham as a whole.

Economic Position.

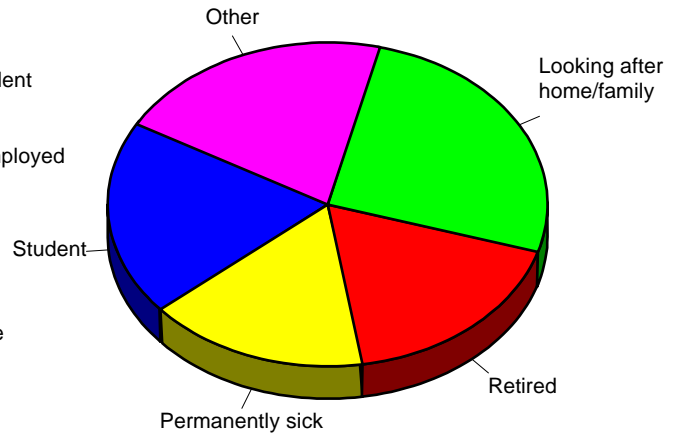
Persons Aged 16 to 74.

Economically Active (47.5%).



(n = 8,687)

Economically Inactive (52.5%).



(n = 9,619)

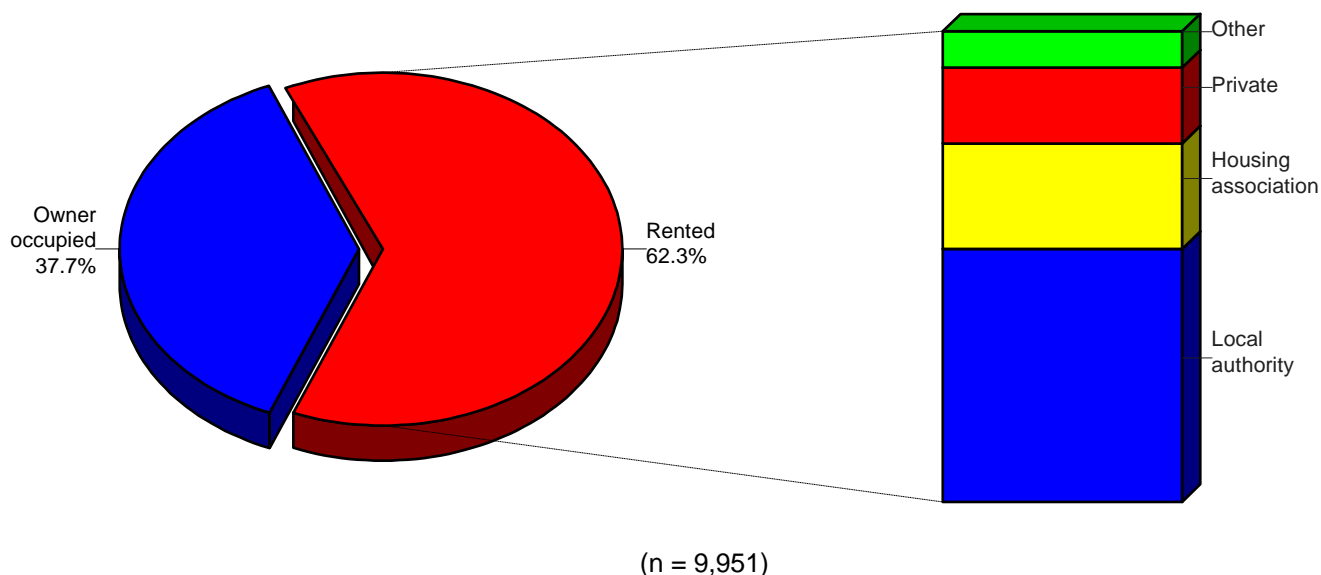
Economic Position	Aston Ward	Ladywood District	Birmingham
Economically Active			
- Full-time employee	46.6	49.6	59.9
- Part-time employee	17.3	15.0	16.5
- Self-employed	7.6	7.3	9.1
- Full-time student	7.9	9.0	5.0
- Unemployed	20.5	19.0	9.5
	(100%)	(100%)	(100%)
Economically Inactive			
- Student	19.8	24.1	18.9
- Permanently sick/disabled	16.3	17.9	16.8
- Retired	17.7	17.9	30.9
- Looking after home/family	25.9	21.3	20.3
- Other	20.2	18.8	13.1
	(100%)	(100%)	(100%)
All Economically Active	47.5	50.7	60.4
All Economically Inactive	52.5	49.3	39.6
All Persons Aged 16 to 74	(100%)	(100%)	(100%)

(2001 Census; ONS)

- ① Under half (48%) of the Aston population aged 16 to 74 were economically active at the time of the 2001 Census, lower than the corresponding proportion for Ladywood district (51%) and well below that of Birmingham (60%).
- ① Although almost three quarters of Aston's economically active population were in some form of employment, the unemployment rate, at 21%, was more than double that of Birmingham.
- ① Within the economically inactive population, Aston has a higher proportion of persons looking after the home/family, and relatively fewer retired persons than Birmingham as a whole.

Household Tenure.

Households.

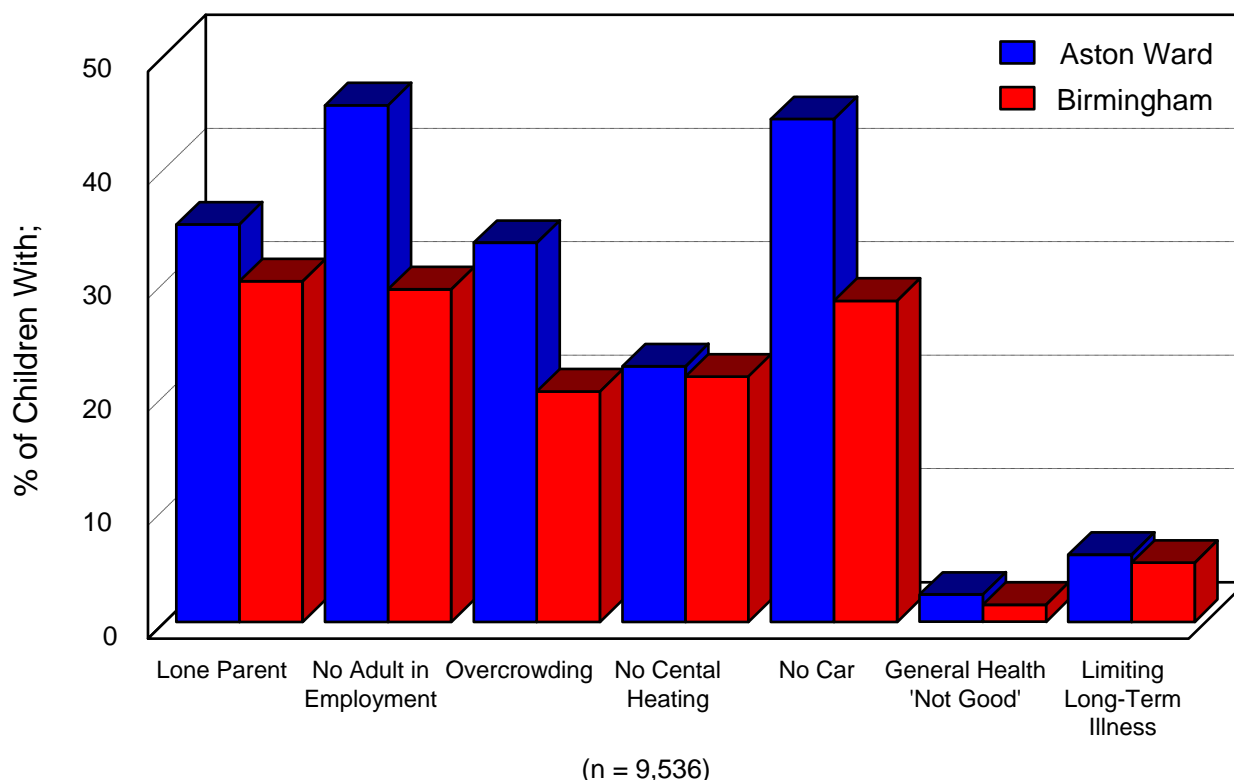


Household Tenure	Aston Ward	Ladywood District	Birmingham
Owner Occupied	37.7	35.2	60.4
Rented From Local Authority	33.5	31.6	19.4
Rented From Housing Association	14.0	18.0	8.4
Privately Rented	10.1	10.7	8.8
Other	4.8	4.4	3.0
Total	100.0 %	100.0 %	100.0 %
% of Households Above Ground Floor	24.9	28.7	14.5

(2001 Census; ONS)

- ① 38% of homes in Aston ward are 'owner occupied' (either owned outright, or currently being purchased), well below the level of owner occupation across all Birmingham (60%).
- ① Aston has higher proportions of households rented from the Local Authority and from housing associations than is found across the city as a whole.
- ① A quarter of Aston's households have their lowest floor above ground floor level, considerably higher than the corresponding proportion for Birmingham.

Dependent Children.

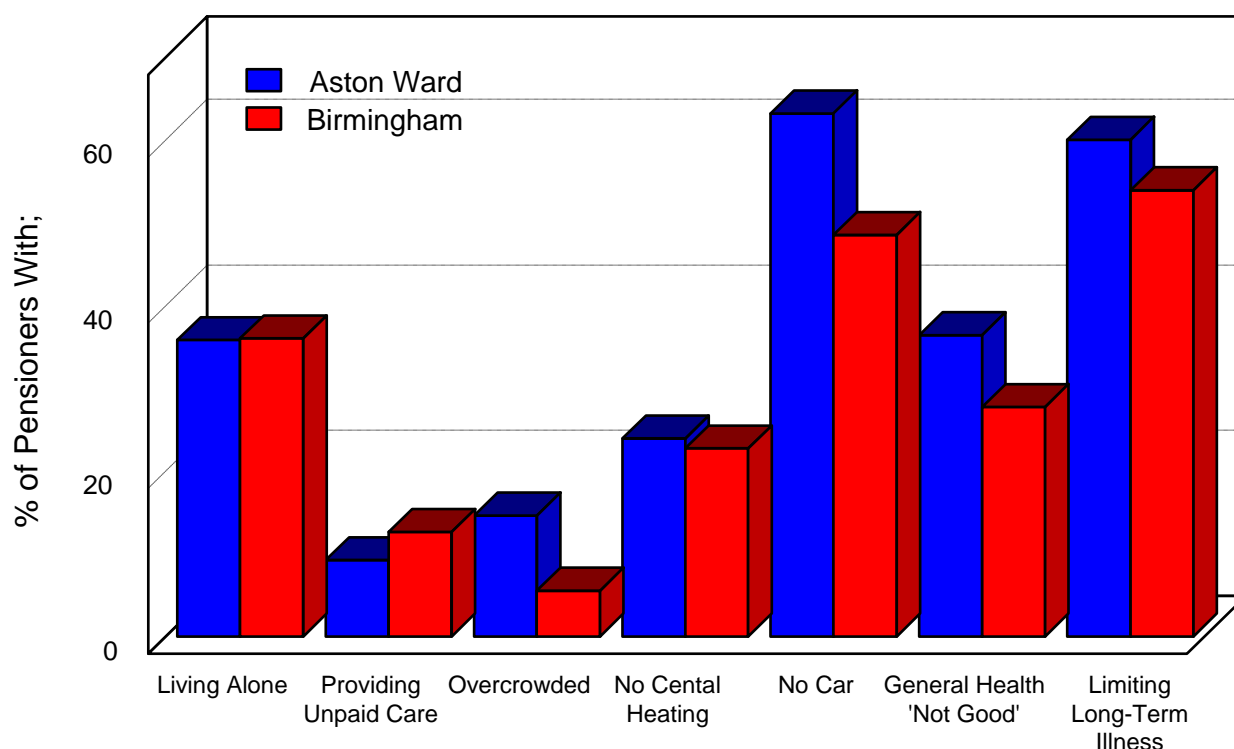


Percentage of Children With;	Aston Ward	Ladywood District	Birmingham
Lone Parent	35.0	40.9	30.0
No Adult in Employment	45.5	44.3	29.3
Overcrowding	33.4	30.4	20.3
No Central Heating	22.5	22.1	21.6
No Car	44.3	45.6	28.3
General Health 'Not Good'	2.4	2.1	1.5
Limiting Long-Term Illness	5.9	5.8	5.2

(2001 Census; ONS)

- ① Slightly over one-third of dependent children in Aston ward live in single parent households, higher than the corresponding proportion for Birmingham, but lower than the figure for Ladywood district.
- ① Almost half of Aston's children live in households where there is no adult in employment, over 50% higher than the figure for Birmingham as a whole.
- ① A third of children in Aston live in overcrowded households and almost half live in households that do not own a car. Both of these figures are over 50% higher than the corresponding proportions for all Birmingham.
- ① Although relatively small proportions of children report poor general health or limiting long-term illness, the figures are again higher than those for the whole of Birmingham.

Persons of Pensionable Age.



(n = 3,247)

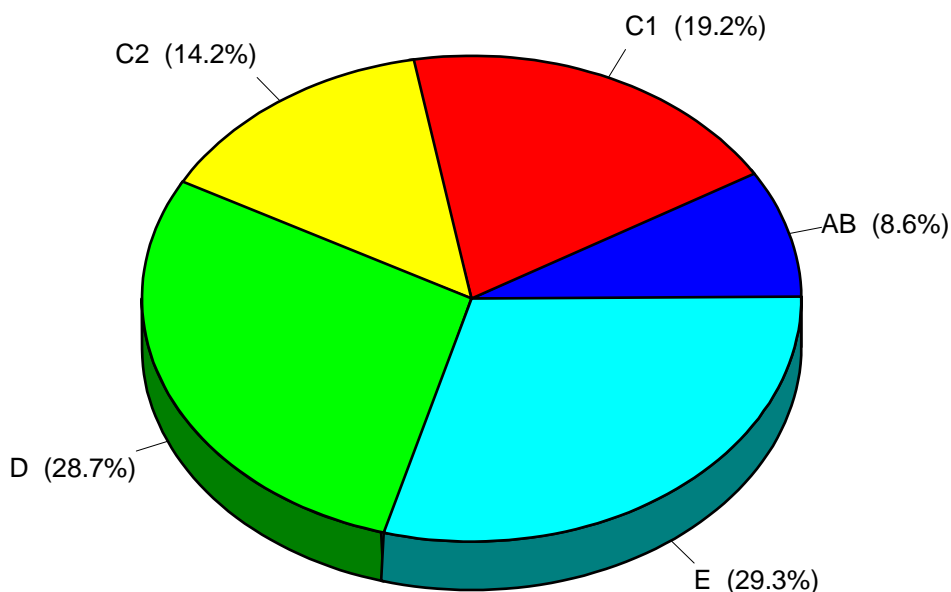
Percentage of Pensioners With;	Aston Ward	Ladywood District	Birmingham
Living Alone	35.8	40.2	36.0
Providing Unpaid Care	9.2	9.7	12.6
Overcrowded	14.6	13.4	5.5
No Central Heating	23.9	22.4	22.7
No Car	63.2	66.0	48.5
General Health 'Not Good'	36.4	35.4	27.7
Limiting Long-Term Illness	60.0	60.2	53.9

(2001 Census; ONS)

- ① Just over a third of all persons of pensionable age in Aston ward live alone - similar to the figure for Birmingham, but lower than the corresponding proportion for Ladywood district.
- ① Almost two-thirds of Aston's pensioners live in households with no car, and more than one in seven live in overcrowded households - considerably higher than the corresponding proportions for all Birmingham.
- ① Higher proportions of pensioners living in Aston report poor general health or limiting long-term illness than their counterparts across the city.

Occupational Social Grade.

All people Aged 16+ in Households



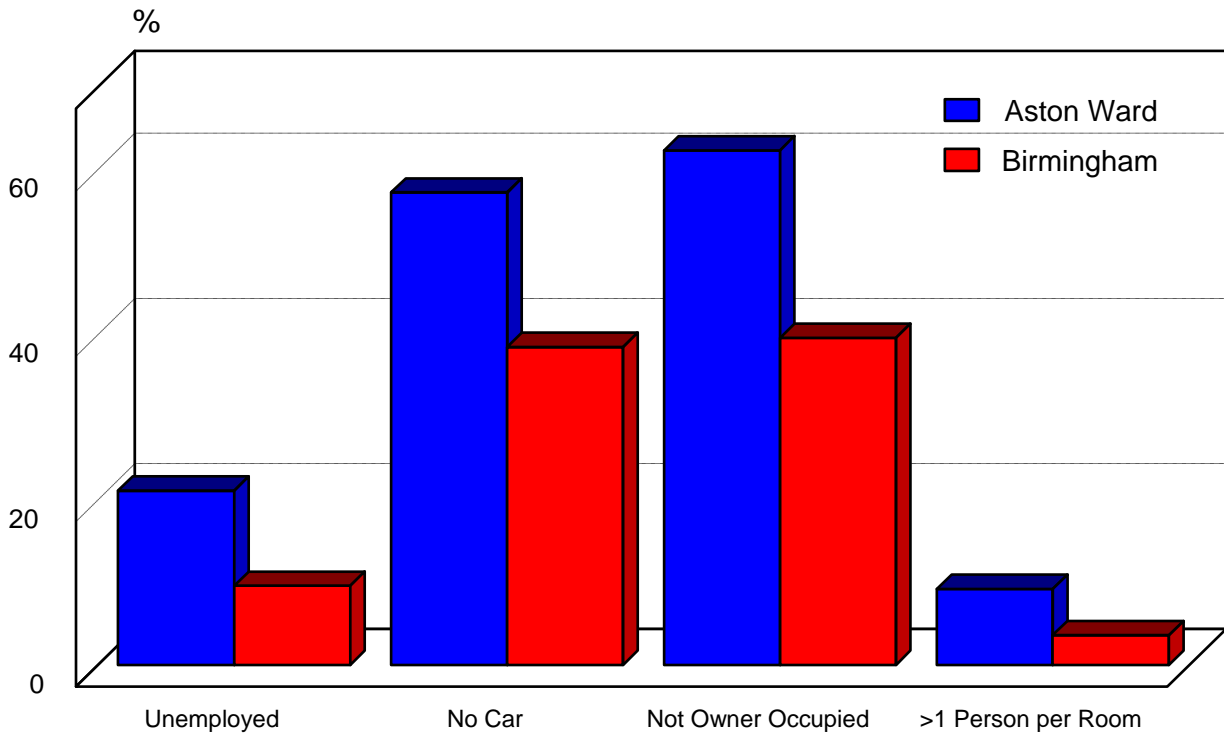
(n = 19,060)

Approximated Social Grade	Aston Ward	Ladywood District	Birmingham
AB; Higher and intermediate managerial/administrative/professional	8.6	10.9	17.0
C1: Supervisory, clerical, junior managerial/administrative/professional	19.2	20.4	26.4
C2; Skilled manual workers	14.2	13.9	14.6
D; Semi-skilled and unskilled manual workers	28.7	28.2	21.6
E; On state benefit, unemployed, lowest grade workers	29.3	26.6	20.4

(2001 Census; ONS)

- ① Aston ward has smaller proportions of persons engaged in managerial, administrative and professional occupations than their counterparts across the city as a whole.
- ① Compared with Birmingham, Aston has a relatively higher proportion of people working in semi-skilled and unskilled occupations, and also a higher proportion who are unemployed and/or on state benefit.

Townsend Score.



Townsend Score Components

Percent	Aston Ward	Ladywood District	Birmingham
Economically Active Persons Unemployed	21.1	19.4	9.6
Households Without a Car	57.2	58.1	38.5
Households Not Owner Occupied	62.3	64.8	39.6
Households With >1 Person Per Room	9.2	6.1	3.6
Townsend Score	6.1	5.2	0.0
Rank*	2 (out of 40)	1 (out of 11)	

* 1 = most deprived

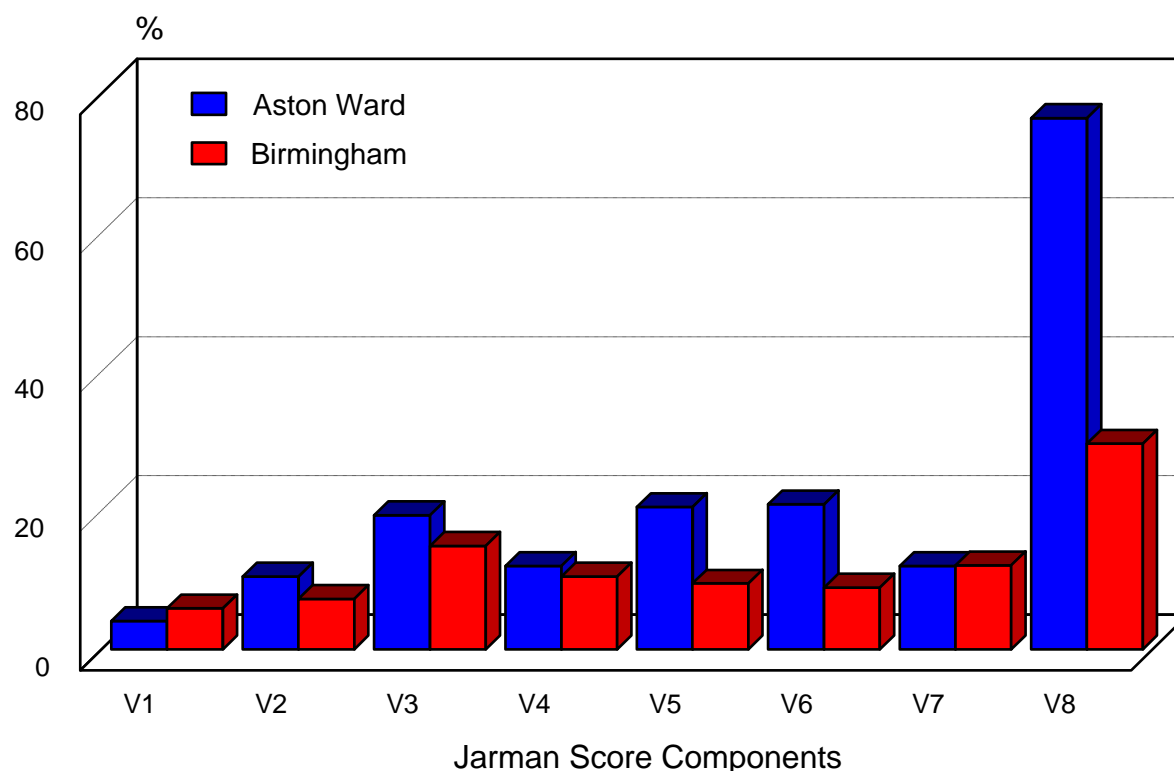
(2001 Census; ONS)

① The Townsend Score is a four component ranking index designed to measure relative deprivation and is particularly appropriate for use in urban areas. The higher the Townsend Score, the greater the degree of deprivation in an area relative to other areas.

① Households in Aston ward fare considerably worse than Birmingham households across all four components, resulting in a high Townsend Score for the ward.

① As measured by the Townsend Score, Aston ward has the second highest level of deprivation out of the 40 wards in Birmingham, while Ladywood district ranks as the most deprived of Birmingham's 11 districts.

Jarman 8 Score.



Percent	Aston Ward	Ladywood District	Birmingham
V1; Lone Pensioners	4.1	4.8	5.9
V2; Under 5's	10.5	9.3	7.3
V3; Persons in Single Parent Households	19.3	21.2	14.9
V4; Persons in Unskilled Households	12.0	12.5	10.5
V5; Economically Active Persons Unemployed	20.5	19.0	9.5
V6; Persons in Households With >1 Person Per Room	20.9	15.1	8.9
V7; Persons Changed Address in Last Year	12.0	16.4	12.1
V8; Persons in Non-White Ethnic Groups	76.5	64.0	29.6
Jarman 8 Score	18.8	19.6	0.0
Rank*	2 (out of 40)	1 (out of 11)	

* 1 = highest GP workload

(2001 census; ONS)

- ① The Jarman 8 Score is a multi-component ranking index designed to predict relative family doctor workloads. Patients in areas with high Jarman 8 Scores are more likely to require care from their G.P. than those in areas with low scores.
- ① Aston ward performs worse (higher GP workload) than Birmingham across six of the eight components, and better across two components (lone pensioners and persons changed address in the last year), resulting in a high Jarman 8 Score for the ward.
- ① Of the 40 wards in Birmingham, Aston ward has the second highest Jarman 8 Score, while Ladywood district has the highest score out of Birmingham's 11 districts.

Key Socio-Demographic Indicators and Rankings.

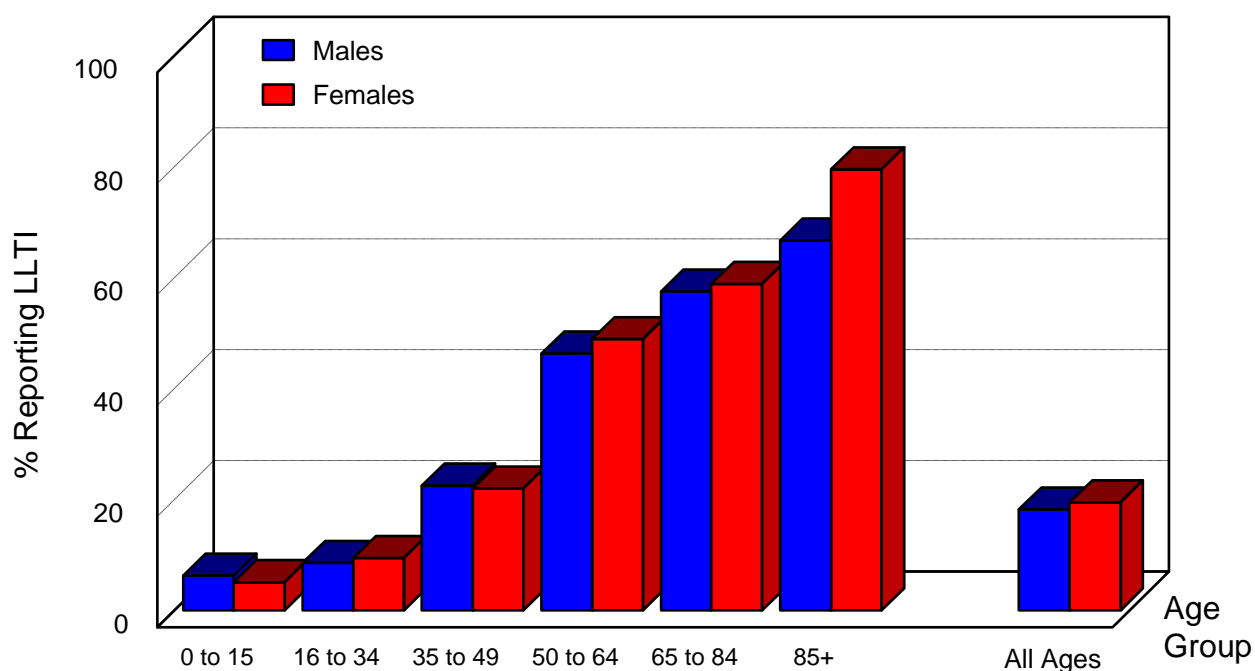
	Aston Ward	Ladywood District	Birmingham
Population			
- % aged 0 to 15	30.9 (4)	26.5 (3)	23.5
- % aged 60/65+	11.7 (36)	11.8 (11)	16.7
Ethnicity			
- % persons of non-white ethnicity	76.5 (3)	64.0 (1)	29.7
Unemployment			
- % economically active persons aged 16-74 unemployed	20.5 (1)	19.0 (1)	9.5
Households			
- % not owner occupied	62.3 (3)	64.8 (1)	39.6
- % above ground floor level	24.9 (4)	28.7 (1)	14.5
- % with more than 1 person per room	9.2 (4)	6.1 (3)	3.6
- % with no car	57.2 (3)	58.1 (1)	38.5
Dependent Children			
- % living in lone parent households	35.0 (11)	40.9 (1)	30.0
- % living in households with no adult in employment	45.5 (4)	44.3 (1)	29.3
Persons of Pensionable Age			
- % living alone	35.8 (24)	40.2 (1)	36.0
- % with poor general health	36.4 (4)	35.4 (1)	27.7
- % with limiting long-term illness	60.0 (7)	60.2 (1)	53.9
Deprivation Scores			
- Townsend Score	6.1 (2)	5.2 (1)	0.0
- Jarman 8 Score	18.8 (2)	19.6 (1)	0.0

() Birmingham ward/district rank

Wards ranked 1 to 40; 1 = highest
Districts ranked 1 to 11; 1 = highest

For indicator definitions see appendices

Limiting Long-Term Illness.



Numbers.

Males	276	387	494	574	717	42	2,490
Females	212	442	522	723	716	116	2,731

% With Limiting Long-Term Illness

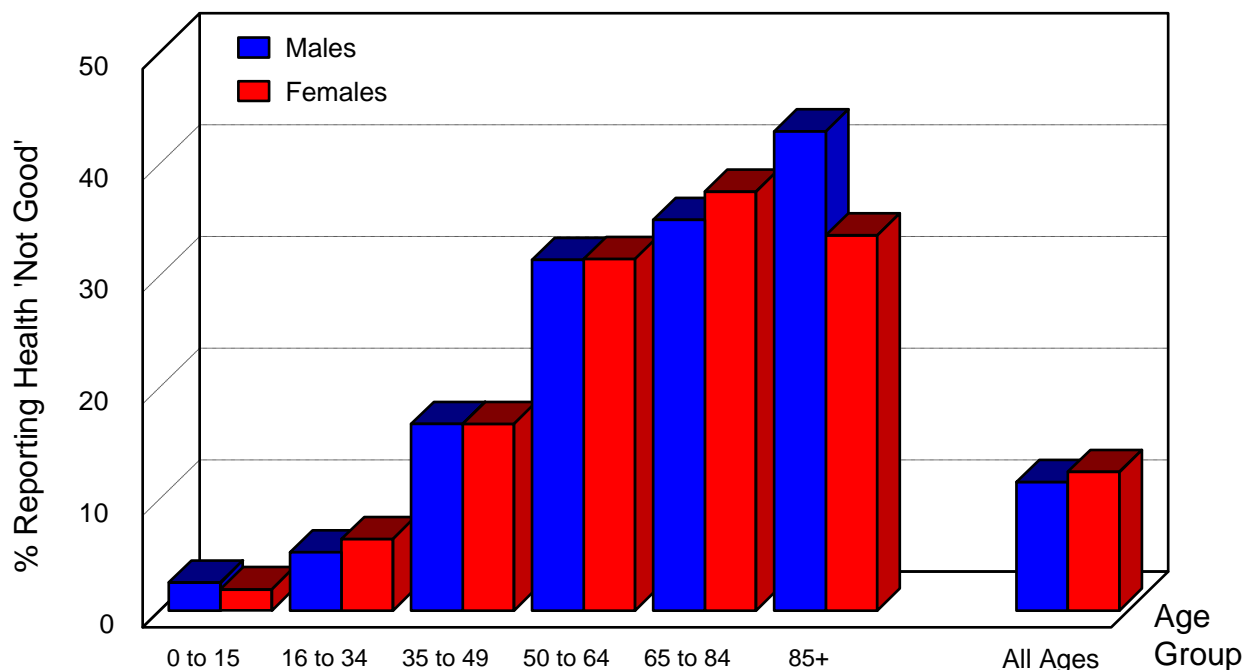
Age Group	Aston Ward	Ladywood District	Birmingham
0 to 15	5.7	6.0	5.3
16 to 34	9.0	9.9	7.9
35 to 49	22.3	23.3	16.4
50 to 64	47.7	46.5	32.7
65 to 84	58.2	58.4	52.2
85+	75.6	73.0	73.4
Total*	126.6	128.2	100.0

* Age standardised; Birmingham = 100

(2001 Census; ONS)

- ① The proportion of people in Aston ward reporting themselves as being restricted by limiting long-term illness rises markedly with age, ranging from under 6% in the 0 to 15 age group to over 75% for those aged 85+.
- ② Overall, almost one in five of the Aston population are restricted by limiting long-term illness, with women reporting a slightly higher aggregate rate than men.
- ③ Aston's limiting long-term illness rates are higher than the corresponding Birmingham rates across all age groups, resulting in a standardised all age rate for the ward which is almost 27% higher than that of Birmingham.

General Health.



Numbers.

Males	111	237	365	389	437	27	1,566
Females	80	298	396	465	456	49	1,744

% With General Health 'Not Good'

Age Group	Aston Ward	Ladywood District	Birmingham
0 to 15	2.2	2.1	1.6
16 to 34	5.8	6.5	4.6
35 to 49	16.7	16.6	11.0
50 to 64	31.4	31.4	20.3
65 to 84	36.3	35.5	26.9
85+	36.4	40.9	37.7
Total*	143.4	144.2	100.0

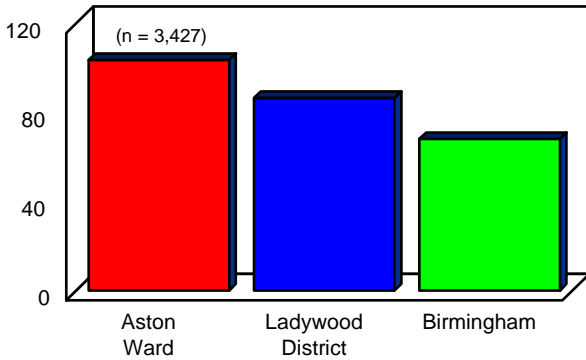
* Age standardised; Birmingham = 100

(2001 Census; ONS)

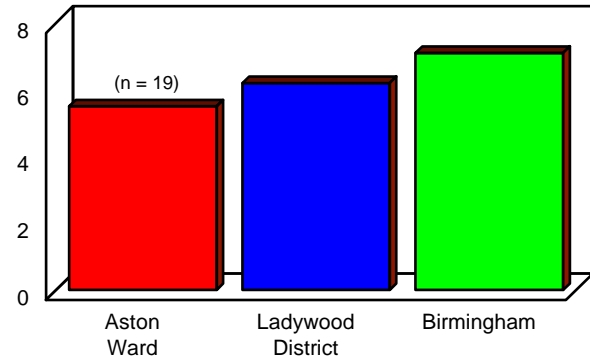
- ① The proportion of people in Aston ward reporting their general health as 'not good' rises sharply with age, increasing from just 2% in the 0 to 15 age group, up to 36% for those aged 65+.
- ① Almost one in eight of all Aston residents considered their general health status to be 'not good', with women reporting a slightly higher aggregate rate than men.
- ① The percentages of Aston ward residents reporting poor general health are higher than the corresponding Birmingham figures for all but the oldest age group. Overall, the age standardised total rate for Aston ward is over 40% higher than the Birmingham rate.

Births.

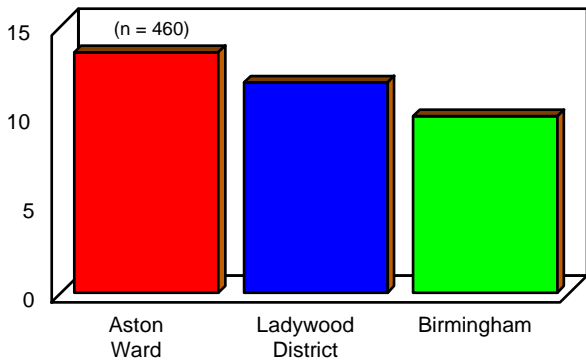
General Fertility Rate.



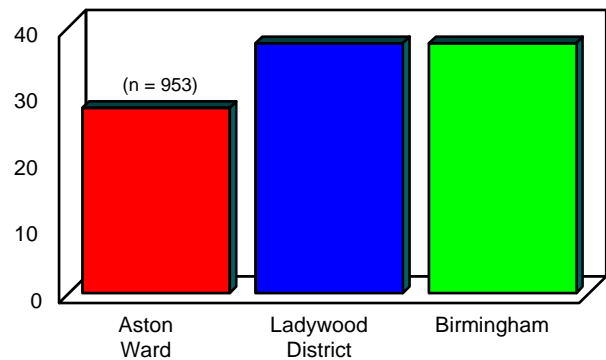
Stillbirth Rate.



% Livebirths Under 2500g



% Births Outside Marriage



	Aston Ward	Ladywood District	Birmingham
General Fertility Rate	103.5	86.4	68.0
Stillbirth Rate	(5.5)	6.2	7.1
% Live-births Under 2500g	13.5	11.8	9.9
% Births Within Marriage	72.2	62.5	62.5
% Births Outside Marriage;			
- Sole Registration	11.6	14.1	10.1
- Joint Registration	16.2	23.4	27.4

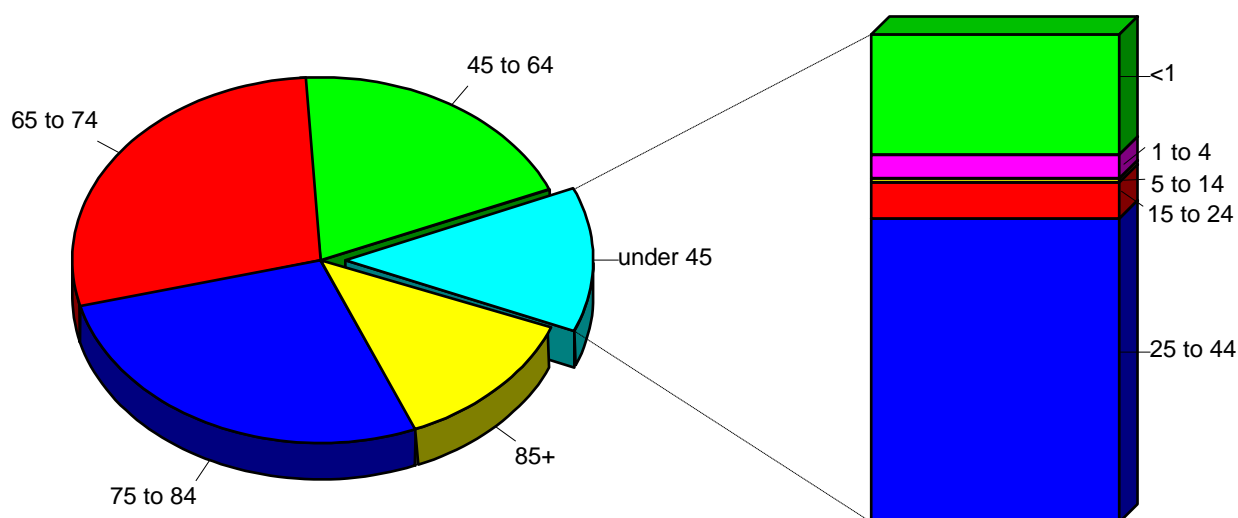
() rate calculated from fewer than 20 events

(Birth registration data, 1999-2003; ONS)

- ① Between 1999 and 2003, Aston ward averaged 685 births per year, resulting in a General Fertility Rate of 104 births per year per 1,000 women aged 15-44, over 50% higher than the all Birmingham rate.
- ① The stillbirth rate for Aston was lower than the Birmingham rate, though the small numbers involved make comparisons unreliable.
- ① Births to women living in Aston ward were 35% more likely to be of low birth weight than births to women across Birmingham as a whole.
- ① Fewer births in Aston ward occurred outside of marriage than in either Ladywood district or Birmingham.
Most births which did occur outside of marriage were registered by both the mother and father.

Deaths by Age.

Deaths By Age.



Numbers.

Deaths 1999-2003	Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 to 74	75 to 84	85+	All Ages
Observed	30	6	1	9	76	189	271	262	120	964
Expected*	30	4	3	12	48	136	225	278	199	934

* From Birmingham mortality rates

Standardised Mortality Ratios.

Age at Death	Aston Ward	Ladywood District	Birmingham
Under 1	100.0	134.9	100.0
1 to 4	(147.8)	173.9	100.0
5 to 14	(30.2)	(95.9)	100.0
15 to 24	(74.8)	108.7	100.0
25 to 44	159.1	157.4	100.0
45 to 64	138.9	153.6	100.0
65 to 74	120.5	117.0	100.0
75 to 84	94.4	108.6	100.0
85 +	60.4	87.9	100.0
All Ages*	106.6	119.3	100.0

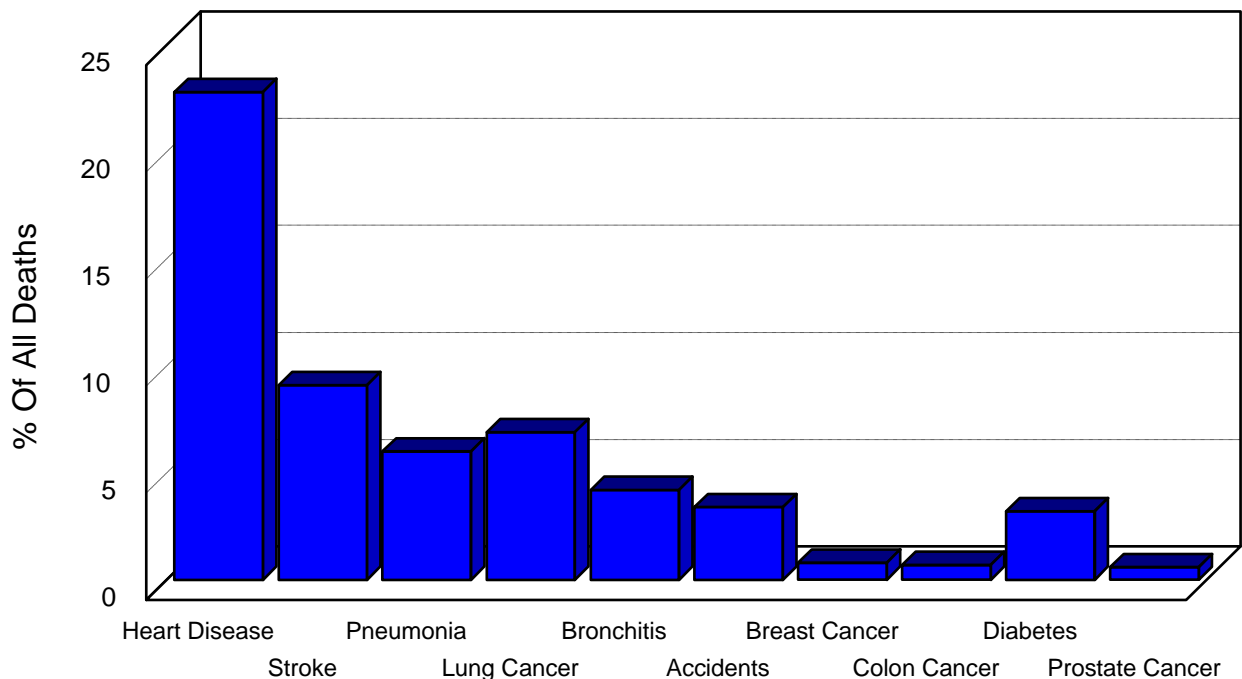
() ratio calculated from fewer than 20 events

(Death registration data, 1999-2003; ONS)

* Age standardised; Birmingham = 100

- ① Between 1999 and 2003, Aston ward averaged approximately 190 deaths per year. Over two-thirds of these deaths occurred at age 65 and above, while deaths below age 25 were relatively rare.
- ② Aston ward had higher numbers of deaths than would have been expected from Birmingham mortality rates between ages 25 and 74, resulting in a total age standardised mortality ratio (SMR) almost 7% higher than that of Birmingham.
- ③ Aston ward had lower mortality rates than Ladywood district across most age groups, with the result that Aston's all age SMR was over 10% lower than that of the district.

Leading Causes Of Death.



Number of Deaths: 1999-2003.

Observed	220	88	58	67	41	33	8	7	31	6
Expected*	218	85	61	53	32	27	17	14	13	14

* From Birmingham mortality rates

Standardised Mortality Ratios.

Cause of Death	Aston Ward	Ladywood District	Birmingham
Heart Disease	105.8	126.2	100.0
Stroke	108.5	120.2	100.0
Pneumonia	98.6	116.7	100.0
Lung Cancer	133.1	122.8	100.0
Bronchitis	138.3	138.1	100.0
Accidents	130.0	142.0	100.0
Breast Cancer	(51.3)	70.4	100.0
Colon Cancer	(46.4)	72.7	100.0
Diabetes	241.8	166.6	100.0
Prostate Cancer	(53.0)	76.6	100.0
All Other Causes	102.3	115.6	100.0
ALL CAUSES	106.6	119.3	100.0

All rates age standardised; Birmingham = 100

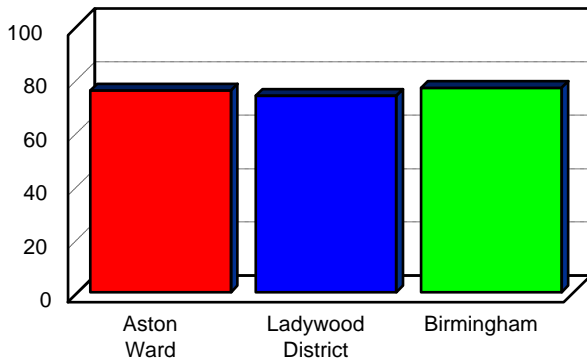
(Death registration data, 1999-2003; ONS)

() ratio calculated from fewer than 20 events

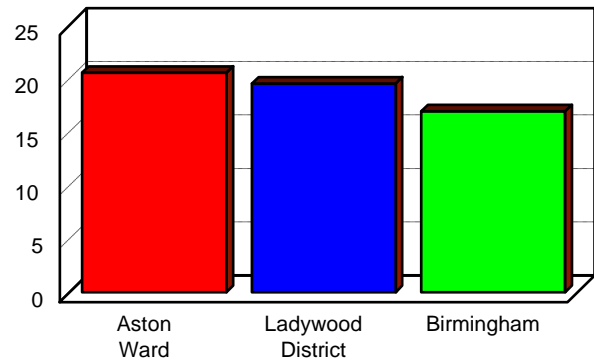
- ① Between 1999 and 2003, the 10 leading causes of death listed above accounted for almost 60% of all deaths in the Aston ward population.
- ① 32% of all deaths were due to diseases of the circulatory system (heart disease and stroke), while the four types of cancer listed (lung, breast, colon and prostate) accounted for a further 9%.
- ① Compared with Birmingham, Aston SMRs were particularly high for diabetes, bronchitis, lung cancer and accidents, and low for cancers of the colon, breast and prostate, though for several of these

Life Expectancy.

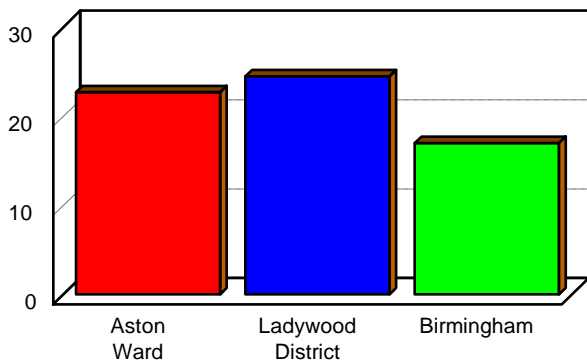
Life Expectancy at Birth.



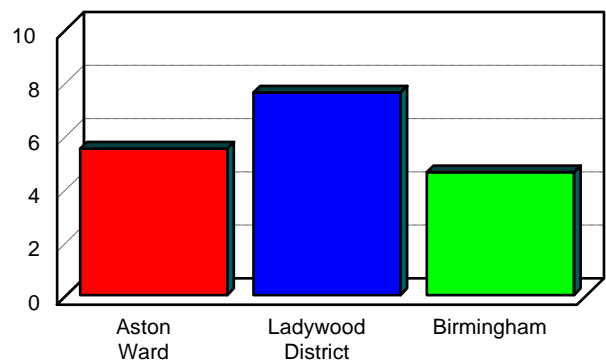
Years of Life With Disability.



% Dying Before Age 65.



Potential Years of Life Lost.



	Aston Ward	Ladywood District	Birmingham
Life Expectancy at Birth (Years)	75.6	73.6	76.5
Years of Life With Disability (Limiting Long-Term Illness)	20.5	19.5	16.9
Years of Life With Poor Health (General Health 'Not Good')	12.9	12.4	9.4
% Dying Before Age 65	22.7	24.5	17.0
Potential Years of Life Lost	5.5	7.6	4.6

(Birth and death registration data, 1999-2003, 2001 Census ONS)

- ① For the period 1999 to 2003, the average life expectancy at birth for persons living in Aston ward was estimated to be 75.6 years, slightly lower than the corresponding figure for Birmingham, but higher than that for Ladywood district.
- ① Aston residents are estimated to spend more years of life with disability and poor health than persons living in either Ladywood district or in Birmingham.
- ① It is estimated that more than one in five Aston residents die before age 65, considerably higher than the proportion for all Birmingham, but slightly lower than the figure for Ladywood district.
- ① Taking the highest life expectancy of all the wards in Birmingham as the benchmark (Sutton New

Key Health Indicators and Rankings.

	Aston Ward	Ladywood District	Birmingham
Limiting Long-Term Illness			
- % of persons with limiting long-term illness	18.9 (26)	20.4 (2)	19.2
- age standardised illness rate	126.6 (5)	128.2 (1)	100.0
General Health			
- % persons with 'not good' general health	12.0 (7)	12.9 (1)	10.8
- age standardised 'not good' health rate	143.4 (5)	144.2 (1)	100.0
Births			
- general fertility rate	103.5 (4)	86.4 (3)	68.0
- stillbirth rate	5.5 (30)	6.2 (7)	7.1
- % of livebirths <2500g	13.5 (1)	11.8 (1)	9.9
- % births outside marriage	27.8 (28)	37.5 (7)	37.5
Deaths by Age			
- SMR; all ages	106.6 (15)	119.3 (1)	100.0
- SMR; <65 years	136.6 (5)	151.4 (1)	100.0
Leading Causes of Death			
- SMR; heart disease	105.8 (15)	126.2 (1)	100.0
- SMR; stroke	108.5 (14)	120.2 (2)	100.0
- SMR; lung cancer	133.1 (5)	122.8 (2)	100.0
- SMR; accidents	130.0 (6)	142.0 (1)	100.0
Life Expectancy (LEX)			
- life expectancy at birth (years)	75.6 (27)	73.6 (11)	76.5
- % of LEX with disability	27.2 (4)	26.5 (1)	22.1
- % of LEX with poor health	17.1 (4)	16.8 (1)	12.3
- % dying before age 65	22.7 (5)	24.5 (1)	17.0

() Birmingham ward/district rank

Wards ranked 1 to 40; 1 = highest

Districts ranked 1 to 11; 1 = highest

For indicator definitions see appendices

Appendices

Profile Topics; Technical Notes.

Data Extraction

Census data for 2004 wards and constituencies was aggregated from Census Output Areas using lookup tables provided by ONS. The figures presented in the profile topics may thus differ slightly from data extracted directly from later ward data sets (not available at the time of production of this profile).

Limiting Long-Term Illness/General Health

As limiting long-term illness and general health status are strongly associated with age it is necessary to standardise the all age figures in order to remove the effects of differences in age structure between the ward, district and city. To achieve this the European standard population age structure was taken as 'standard' and the following direct method of standardisation used;

- a) Age-specific rates were calculated for the ward, district and city.
- b) These rates were multiplied by the appropriate European standard populations and summed to produce comparable age standardised total rates.
- c) The total rates were 'rebased' to give a city rate of 100.

Townsend Score.

The method of calculation is as follows;

- a) The following variables were extracted from the 2001 Census for each ward in Birmingham;
 - V1 = % economically active residents aged 16-59/64 who are unemployed
 - V2 = % private households which do not possess a car
 - V3 = % private households which are not owner-occupied
 - V4 = % private households with more than one person per room
- b) The distributions of the extracted variables were 'normalised' using the following transformations;
 - N1 = LN(V1+1)
 - N2 = LN(V2+1)
 - N3 = SQRT(V3)
 - N4 = LN(V4+1)
- c) The variables were standardised by subtracting the mean and dividing by the standard deviation;
 - S1 = (N1 - mean of N1)/ S.D. of N1
 - S2 = (N2 - mean of N2)/ S.D. of N2
 - S3 = (N3 - mean of N3)/ S.D. of N3
 - S4 = (N4 - mean of N4)/ S.D. of N4
- d) The Townsend Score was calculated by summing the standardised variables;
 - i.e. Townsend Score = S1 + S2 + S3 + S4

Townsend Scores for districts and Birmingham were derived by averaging the scores of their constituent wards.

Jarman 8 Score.

The method of calculation is as follows;

a) The following variables were extracted from the 2001 Census for each ward in Birmingham;

- V1 = Lone pensioners as % of all residents in households
- V2 = Under 5's as % of all residents in households
- V3 = Persons in single parent households as % of all residents in households
- V4* = Persons in households headed by a person in socio-economic group 11 (unskilled) as % of all residents in households
- V5* = Unemployed as % of economically active residents aged 16 and over
- V6 = Persons in households with more than one person per room as % of all residents in households
- V7 = Persons changed address in last year as % of all residents
- V8 = Persons in non-white ethnic groups as % of all residents

(* These exact definitions were not available from 2001 Census output, thus 'routine occupations' and 'unemployed as % of economically active residents aged 16 to 74' were used instead)

b) All variables are 'normalised' by transforming them with $\text{LN}(V+1)$, e.g. $N1 = \text{LN}(V1+1)$

c) The variables are standardised by subtracting the mean and dividing by the standard deviation;

$$\text{e.g. } S1 = (N1 - \text{mean of } N1) / \text{S.D. of } N1$$

d) The Jarman 8 Score is calculated by calculating a weighted sum of the standardised variables;

$$\text{i.e. Jarman 8 Score} = (6.62*S1) + (4.64*S2) + (3.01*S3) + (3.74*S4) + (3.34*S5) \\ + (2.88*S6) + (2.68*S7) + (2.50*S8)$$

Jarman 8 Scores for districts and Birmingham were derived by averaging the scores of their constituent wards.

Births.

$$\text{General Fertility Rate} = \frac{1000 \times \text{births per year}}{\text{females aged 15-44}}$$

$$\text{Stillbirth Rate} = \frac{1000 \times \text{number of stillbirths}}{\text{number of livebirths} + \text{stillbirths}}$$

Deaths by Age.

Age specific death rates were calculated by dividing the number of deaths (1999 to 2003) by the population at risk (2001 Census) for each age band, and rebasing so that Birmingham = 100 in each case.

All age standardisation and rebasing was performed using the European standard population age structure as 'standard' in the same manner as described for limiting long-term illness/general health.

The 'expected' numbers of deaths were derived by multiplying the ward population by the Birmingham death rate for each age band, and summing to give the total. Note that the total numbers of observed and expected deaths will not exactly match the all age SMR due to the different populations age structures employed in the calculations.

Leading Causes of Death.

The causes of death employed are grouped according to the short mortality lists of ICD9 and ICD10, and represent the 10 most common causes of death in Birmingham between 1999 and 2003.

The complete headings and ICD9/10 codes of the top ranking deaths are as follows;

<u>Mortality Heading.</u>	<u>ICD 9 Codes.</u>	<u>ICD 10 Codes.</u>
1) Ischaemic and other heart diseases	410-414, 420-423, 425-429	I20-25, I30-33, I39-52
2) Cerebrovascular disease	430-438	I60-69
3) Pneumonia	480-486	J12-18
4) Malignant neoplasm of trachea, bronchus and lung	162	C33-34
5) Bronchitis, emphysema and asthma	490-494	J40-47
6) Accidents and adverse effects	E800-E949	V01-X59, Y85-86
7) Malignant neoplasm of female breast	174	C50
8) Malignant neoplasm of colon	153	C18
9) Diabetes mellitus	250	E10-14
10) Malignant neoplasm of prostate	185	C61

Rebased age standardised cause specific death rates were calculated using the European standard population age structure as 'standard' in the same manner as described for limiting long-term illness/general health. A separate calculation was performed for each cause of death.

The 'expected' numbers of deaths for each cause were derived by multiplying the ward population by the Birmingham death rate for each age band (0-4, 5-14, 15-24, 25-44, 45-64, 65-74, 75-84, 85+), and summing to give the total. Note that the total numbers of observed and expected deaths will not exactly match the cause specific SMRs due to the different populations age structures employed in the calculations.

Life Expectancy

Standard abridged life table methods (using age bands 0, 1-4, 5-9, ..., 85-89, 90+) were used to calculate life expectancy at birth employing birth and death data from 1999-2003, and population data from the 2001 Census. Percentage dying before age 65 was also extracted from the life table calculations.

Years of life with disability/poor health were derived by utilising the limiting long-term illness and general health items from the 2001 Census in conjunction with the life table calculations. Age-specific prevalences of disability (limiting long-term illness) and poor health (general health 'not good') were used to partition out the expected number of years lived in each age interval in the life tables into years with and without disability and poor health. The cumulative sums of years with disability/poor health were then used to derive the total years of life expectancy with disability/poor health.

Potential years of life lost were calculated from the difference in life expectancy for each ward/district and the ward/district with the highest life expectancy in Birmingham.