
HEALTH AND POPULATION CHANGE IN TYNE & WEAR 2005

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By

**Amy Proctor
Peter Sturman
Kadhem jallab**

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TYNE & WEAR RESEARCH AND INFORMATION

1st Floor Provincial House

Northumberland Street

Newcastle upon Tyne

NE1 7DQ

Tel: (0191) 277 1912, Fax: (0191) 277 1911

E-MAIL: twri@twri.org.uk

WEBSITE: www.tyne-wear-research.gov.uk

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KEY POINTS

Introduction

- This report presents official (ONS) information on long-term trends in fertility and mortality in Tyne & Wear and its constituent Districts.
- It analyses a nine-year data series (1997-2005, inclusive) and covers fertility amongst women of all ages, those aged under 18 years, 18-34 and 35+, and the share of live births within and outside of marriage. Mortality rates, major causes of death and natural change (i.e. population change arising from live births minus deaths) are also covered. Patterns in Tyne & Wear are compared with regional and national trends (§1).
- An analysis of the Department of Health's 'Community Health Profiles', for the five Tyne & Wear LADs (published for the first time in April 2006) is also included (§10).

Mid-year estimates of population

- Over the last eight years, the population of Tyne & Wear is estimated to have fallen by 15,300 (-1.4%) (1997 to 2005). Population declined in all Tyne & Wear Districts apart from in North Tyneside, where it rose by 1,800 (0.9%) between 1997 and 2005.
- Since 2004, however, the population of Tyne & Wear has grown following a period of year-on-year falls (0.2% growth in 2004 and 0.9% growth in 2005). The exceptionally rapid population growth which occurred in 2005 (up 9,600) was entirely due to net international in-migration (§2).

Fertility

- Since 1992, fertility in Tyne & Wear and its constituent Districts has been low, relative to the region and England & Wales. Indeed, since 2001, the gap between the Tyne & Wear average and the North East and England & Wales averages has widened (§3; Table 3.1).
- At a District level, fertility rates in North Tyneside, Gateshead and South Tyneside have tended to converge towards the England & Wales average since 1996. Newcastle and Sunderland, by contrast, fell well below the national rate (1.70) with nine-year average TFRs of 1.52 and 1.60 respectively. South Tyneside was the only District which had a nine-year average TFR the same as the England & Wales average (1.70). Caution: These falls in Tyne & Wear, and especially Newcastle and Sunderland, may be partly due to the expansion of the universities and also partly due to these districts having higher proportions of young professionals who are postponing childbearing.
- General Fertility Rates are also low in Tyne & Wear and have declined at a faster rate (-3.9%) than that experienced nationally (-2.4%) and in the North East (-1.8%). (§4; Figure 4.1).

Live Births by Age of Mother

- Fertility rates for women aged under 18 (11 to 17 years) fell 8%, women aged 18-34 rose 3% and women aged 35+ years rose 23% growth, in Tyne & Wear between 2001 and 2005.
- For women aged under 18 years, fertility rates fell in three Tyne & Wear Districts but not Sunderland and North Tyneside, where fertility rates rose 25% and 8% respectively between 2001 and 2005. The most substantial falls were in South Tyneside (-43%) and Gateshead (-39%). A more modest fall was apparent in Newcastle (-5%) (§5.1; Figure 5.1).

- For women aged 18-34, fertility rates rose in all Tyne & Wear Districts apart from Newcastle, where fertility rates fell by 10% between 2001 and 2005. This could be due to a higher proportion of young professionals who are choosing not to have children or postpone childbearing. Rises were seen in North Tyneside (16%), Gateshead (8%), Sunderland (7%) and South Tyneside (4%). Women in this age group accounted for 82% of all births (§5.2).
- For women aged 35+, fertility rates rose in all Tyne & Wear Districts between 2001 and 2005. North Tyneside experienced the largest rise (36%). Smaller rises in fertility occurred in Sunderland (25%), Gateshead (20%), Newcastle (19%) and South Tyneside (17%). This suggests an increasing trend for women to delay childbearing until they have established careers, and also childbearing in subsequent relationships (§5.3). Women aged 35+ accounted for 15% of live births between 2001 and 2005, up from 12% between 1996 and 2001.

Live Births by Marital Status

- In 2005, the number of births outside marriage exceeded the number of births within marriage for the sixth consecutive year in both Tyne & Wear and the North East (§6.2).
- Between 1997 and 2005, the average percentage of live births within marriage in Tyne & Wear was markedly lower than in England & Wales (48% compared to 60%). The proportion of live births within marriage also declined at a faster rate (down 7 percentage points) than in England & Wales (down 6 percentage points) over this period (§6.1).

Mortality

- Mortality ratios for both Tyne & Wear and the North East are high, compared to the national average. Between 1997 and 2005, Standardised Mortality Ratios (SMRs) in Tyne & Wear have fluctuated, averaging 114 (E&W = 100).
- Between 1997 and 2005, SMRs deteriorated (rose) in two Tyne & Wear Districts, Sunderland and Newcastle; improved (fell) in North Tyneside and South Tyneside; and remained the same in Gateshead (§7).

Deaths by Cause

- Between 1997 and 2005, there were five major causes of death in Tyne & Wear; circulatory diseases, cancers, respiratory diseases, diseases of the digestive system and injury & poisoning. In Tyne & Wear, they accounted for 86% of all deaths in 2005.
- The major causes were ischaemic heart disease (17%); brain blood vessel diseases (cerebrovascular disease) (9%); cancers of the digestive organs (8%) and cancers of the tracheas, bronchus & lung (8%).

In Tyne & Wear in 2005:

- Circulatory disease was by far the most common cause of death, accounting for 33% of all deaths, slightly less than in the North East (34%) and England & Wales (36%) (§8.1)
- Cancers were responsible for 29% of all deaths in Tyne & Wear, the same as the North East but slightly higher than in England & Wales (27%) (§8.2)
- Respiratory diseases accounted for 15% of all deaths in Tyne & Wear, which was the same as the North East, but slightly higher than in England & Wales (14%) (§8.3)

- Diseases of the digestive system (including chronic liver disease and cirrhosis) were responsible for 6% of all deaths in Tyne & Wear, one percentage point higher than the North East and England & Wales (both 5%) (§8.4).
- Injury & Poisoning and Diseases of the nervous system and sense organs both accounted for 3% of all deaths in Tyne & Wear. This was the same as both England & Wales and the North East (§8.5).

‘Natural Change’ in Population (live births minus deaths)

- Between 1997 and 2005, the decline in population as a result of ‘natural change’ became less marked in Tyne & Wear.
- Since 2002, population decline in Tyne & Wear has reduced and in 2005, Tyne & Wear’s population increased due to natural change for the first time in nine years (+233)¹. This is mainly due to rising birth rates (relative to death rates) in 2005 in Newcastle, Sunderland and North Tyneside (§9).

Health Profiles for Tyne & Wear

- The Department of Health published ‘Community Health Profiles’ for all but 2 of the 388 local authorities in England in April 2006 (available at <http://www.communityhealthprofiles.info/>). The health profiles are based on a number of key indicators and will be updated annually. They are designed to help local authorities highlight health issues and problems related to health or health inequalities.
- The performance of each Local Authority has been evaluated against the England average and assessed as to whether it is performing better, worse, or the same as the England average. Three of the five themes included in the profiles are analysed in this report; ‘the way we live’, ‘how long we live and what we die of’ and ‘health and ill health in our community’.
- A summary table of the findings is presented below (for further details see §10).

Future Health Prospects in Tyne & Wear

- The future health prospects of all Local Authorities in England & Wales have been published in a report by CACI and TNS (Health of the Nation Report, 2006)² (see §11)
- Ranking all Local Authorities on their existing problems, future problems, possible future concerns and general level of healthiness; the Tyne & Wear authorities do not perform particularly well.
- The future health prospects of the five Tyne & Wear authorities are predicted to be poor but are not considered to be as significant as existing problems according to the rankings.

¹ Natural Change figures in this report are based upon Vital Statistics data which records calendar years.

² For further details see <http://www.caci.co.uk/acorn/healthacorn.asp>.

Summary Table of Health Profiles for Tyne & Wear

	North East	Gateshead	Newcastle	North Tyneside	South Tyneside	Sunderland
Life-style- 'The Way we Live'						
People who smoke						
Binge Drinking						
Healthy Eating						
Obese Adults						
Longevity and causes of death- 'How long we live and what we die of'						
Life Expectancy (years)						
Deaths- Smoking						
Early Deaths -heart disease & stroke						
Early Deaths- cancer						
Infant Deaths (under 1 year)						
Road Injuries & deaths						
Health and ill health in our community						
Feeling 'in poor health'						
Mental health treatment						
Alcohol related hospital stays						
Drug misuse treatment						
People with diabetes						
Key to Performance Indicators						
Significantly better than the England average						
Not significantly different from the England average						
Significantly worse than the England average						

Notes: For information on each indicator see Section 10.

Source: Community Health Profiles, 2006, Department of Health.

INTRODUCTION

This report presents information on long-term trends in fertility and mortality in Tyne & Wear and its constituent Districts. It analyses a nine-year data series (1997-2005) and covers fertility amongst women of all ages, those aged under 18 years, 18-34 and 35+³, and the percentage of live births within and outside of marriage. Mortality rates, major causes of death⁴ and natural change (i.e. population change arising from live births minus deaths) are also covered. An analysis of the Department of Health's 'Community Health Profiles', for the five Tyne & Wear LADs (published for the first time in April 2006) is also included. Patterns in Tyne & Wear are compared with regional and national trends.

The source of the data is births and deaths registrations, published annually by the Office for National Statistics (ONS) for Wards, Local Authorities, Health Authorities, Government Office Regions and England & Wales. The data are useful analytically, insofar as they are statistically reliable and a long time-series is available. The Vital Statistics data used in this report is not the only source of information on health. Additional health datasets are available from ONS, the Department for Health and the Health & Safety Executive; a selection of these datasets are listed in Appendix 2.

Total Fertility Rates (TFRs) and General Fertility Rates (GFRs) are reported as key indicators of fertility:

- TFRs estimate the average number of children women will bear if they experience age-specific fertility rates throughout their childbearing years (aged 15-44 years). TFRs are the most statistically robust measure of fertility as they take into account the age-structure of the female population in reproductive years.
- GFRs estimate the number of live births per thousand females of childbearing age (aged 15-44 years). These rates fail to take into account the female population age-structure.

Standardised Mortality Ratios (SMRs) are the standard measure of mortality. SMRs show how mortality in a given area compares to the national level taking into account differences in age- and sex-structure e.g. an SMR of 115 is 15% above the national average. SMRs have value in that they are age- and sex-specific⁵. For example, North Tyneside might have a relatively elderly age-structure. The SMR for the area takes this into account.

Raw data for live births and deaths by Ward⁶ in Tyne & Wear are tabled in the Appendices. These data should be treated with some caution, as numbers of births and deaths are closely related to population size.

Caution on all rates in relation to population:

- All rates in relation to population (1996-2002) are based on revised population estimates⁷, revised in light of ONS's Local Authority Population Studies in 2004⁸. Figures will therefore differ to those reported in previous editions of the report.

³ This is a change in age groups for fertility since the Health and Population Change in Tyne & Wear 2001 report, in which the age groups used were 11-15 yrs, 16-34 yrs, and 35 yrs+. This means there is only a 5 year continuous time-series for the age groups used in this report due to changes in classification.

⁴ There has been a small classification change in the mortality causes since the Health and Population Change in Tyne & Wear 2001 report. There has been the increase of mortality causal groups, due to a splitting of diseases of the nervous system and sense organs, to three groups: diseases of the nervous system, diseases of the eye and adnexa, and diseases of the ear and mastoid process.

⁵ For a more detailed account of the TFR and SMR methodologies, refer to 'Key Population and Vital Statistics', Office for National Statistics, Crown Copyright, www.statistics.gov.uk

⁶ From 2004, data relates to new ward boundaries adopted in June 2004, introducing a discontinuity into the series

⁷ The dates of issue of revised population estimates were: 1996-2000 (7/10/04) and 2001-2002 (9/9/04).

⁸ ONS' Local Authority Population Studies (LAPS) revised upwards the Census 2001 population estimates for Newcastle by 6,600 and Sunderland by 3,800. The LAPS were published in 2004.

2. MID-YEAR ESTIMATES OF POPULATION

The Office for National Statistics' Mid-Year Estimates, updated year on year are used as the base for fertility and mortality rates. Table 2.1 presents the mid-year estimates for Tyne & Wear, its constituent Districts, the North East GOR and England & Wales between 1997 and 2005. These are revised population estimates (1997-2002), revised in light of ONS's Local Authority Population Studies.

Within the Tyne & Wear Districts, Sunderland (nine-year average 285,700) and Newcastle (nine-year average 270,700) have the largest populations. Gateshead (nine-year average 192,400) and North Tyneside (nine-year average 191,100) have slightly smaller populations. South Tyneside has the smallest population in Tyne & Wear (nine-year average 152,900).

Over the eight years 1997-2005, the population of Tyne & Wear is estimated to have fallen by 15,300 (-1.4%). Population fell in all the Tyne & Wear Districts between 1997 and 2005, apart from in North Tyneside, where population rose by 1,800 (0.9%). Population in South Tyneside is estimated to have fallen by 2.5%, whilst in Sunderland it is estimated to have fallen by 2.4%. In Gateshead, the population is estimated to have fallen by 2.2% and in Newcastle by 0.6%.

Caution: these ONS estimates may flatter Newcastle due to possible over-statement of international inflows (which may actually be spread across Tyne & Wear).

Since 2004, the population of Tyne & Wear has grown, following a period of year-on-year falls (0.2% growth in 2004 and 0.9% growth in 2005). The exceptionally rapid population growth which occurred in 2005 (up 9,600) was entirely due to net international in-migration⁹. This growth has taken place in Gateshead, Newcastle and Sunderland. In contrast, small population falls were estimated in North Tyneside and South Tyneside.

Table 2.1: Total Population (1997-2005)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
Gateshead	195,900	194,300	193,300	191,900	191,200	190,900	191,000	191,300	191,500	192,400
Newcastle	278,200	274,500	271,000	267,600	266,200	266,000	266,600	269,500	276,400	270,700
North Tyneside	190,500	191,000	190,100	190,700	192,000	191,400	190,800	190,700	192,300	191,100
South Tyneside	155,100	154,400	153,600	153,100	152,800	152,300	151,700	151,500	151,300	152,900
Sunderland	290,800	289,700	287,500	285,700	284,600	283,400	283,100	282,700	283,700	285,700
Tyne & Wear	1,110,500	1,103,900	1,095,500	1,089,100	1,086,800	1,084,000	1,083,200	1,085,600	1,095,200	1,092,600
North East GOR	2,568,100	2,560,900	2,560,300	2,543,400	2,540,100	2,538,000	2,539,400	2,545,100	2,558,300	2,549,300
England & Wales	51,559,600	51,720,100	51,933,500	52,140,200	52,360,000	52,570,200	52,793,700	53,046,200	53,390,200	52,390,400

Note: The 1997 to 2002 mid-year estimates are revised population estimates, revised in light of the local authority population studies

Source: Mid-Year Estimates, ONS, Crown Copyright

In Tyne & Wear, between 1997 and 2005, the overall population fell more than twice as fast as women aged 15-44 (-1.4% compared to -0.6%). Table 2.2 shows women aged 15-44 (used as the base for fertility rates). Newcastle (nine-year average 62,200) and Sunderland (nine-year average 60,400) have the largest populations of women of childbearing age. Gateshead (nine-year average 39,200) and North Tyneside (nine-year average 38,300) have smaller populations, whilst South Tyneside has the smallest average population of 30,300.

The childbearing population, women aged 15-44, fell in three of the five Tyne & Wear Districts between 1997 and 2005. In Sunderland it fell by 3.4%, in Gateshead it fell by 2.8% and in South Tyneside it fell by 2.3%. In Newcastle the child-bearing population rose by 3.6% and in North Tyneside it rose by 0.5%.

⁹ Net international in-migration to Tyne & Wear was 5,300 in 2004, according to the International Passenger Survey (IPS).

Table 2.2: Women Aged 15-44* (1997-2005)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
Gateshead	40,000	39,600	39,700	39,300	39,000	38,900	38,600	38,800	38,900	39,200
Newcastle	63,300	62,200	61,800	60,900	60,800	60,900	61,500	62,800	65,600	62,200
North Tyneside	38,300	38,400	38,200	38,300	38,600	38,400	38,000	37,900	38,500	38,300
South Tyneside	31,000	30,900	30,900	30,700	30,700	30,700	30,500	30,300	30,300	30,700
Sunderland	61,700	61,400	61,000	60,600	60,500	60,000	59,700	59,300	59,600	60,400
Tyne & Wear	234,400	232,400	231,200	229,600	229,500	228,700	228,400	229,300	232,900	230,700
North East GOR	530,700	527,700	525,100	523,300	522,400	520,400	519,000	519,100	522,100	523,300
England & Wales	10,727,000	10,737,300	10,766,700	10,820,800	10,869,500	10,905,300	10,944,000	10,983,700	11,057,600	10,868,000

Notes: The 1997 to 2002 mid-year estimates are revised population estimates, revised in light of the local authority population studies.

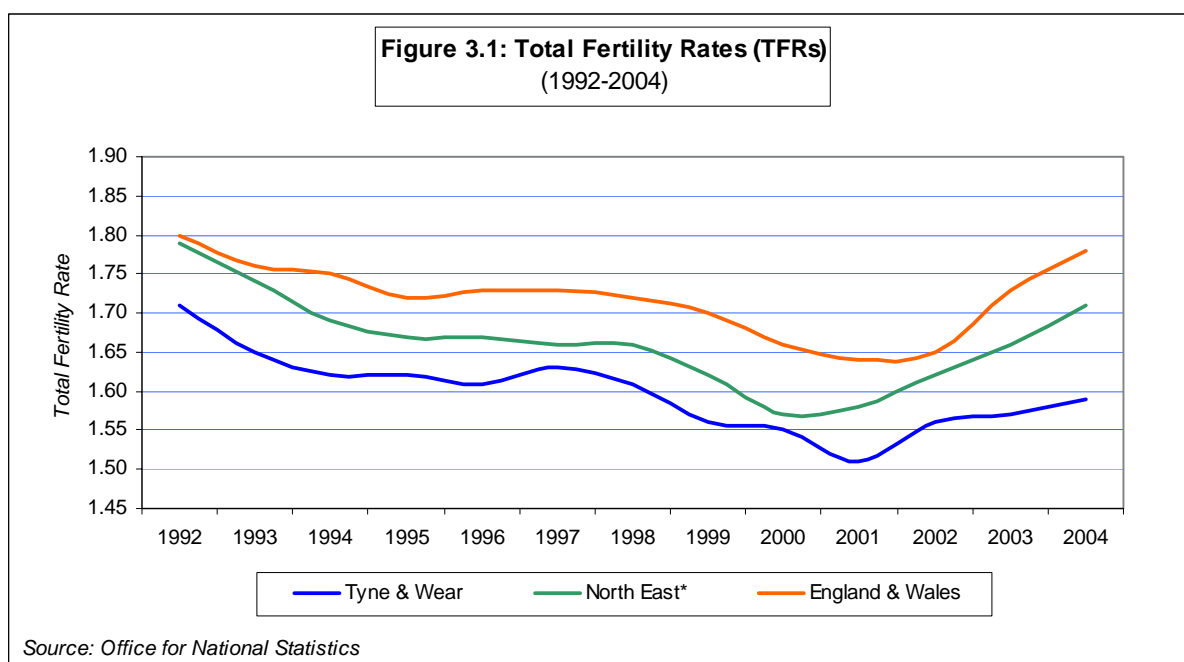
* 'The childbearing population'.

Source: Mid-Year Estimates, ONS, Crown Copyright

3. TOTAL FERTILITY RATES (TFRs)

Total Fertility Rates (TFRs) are a standard measure of fertility. TFRs represent the average number of live births a woman will bear throughout her lifetime. They are the most statistically robust measure of fertility, as they take into account the population age-structure of women in their reproductive years. Data for 2005 are currently unavailable, therefore TFRs between 1992 and 2004 are considered.

Figure 3.1, displaying TFRs between 1992 and 2004, reveals persistently low TFRs for Tyne & Wear, compared to England & Wales. TFRs averaged 1.58 between 1996 and 2004, whereas in England & Wales the average was 1.70. Fertility in Tyne & Wear has also been persistently lower than in the region (Northern region until 1995, thereafter North East). This gap, however, narrowed sharply in 2000, but has widened further since 2001.



Note: * Government Office Regions (GORs), replaced Standard Statistical Regions (SSRs) in 1996. The North East GOR excludes Cumbria.

Between 1996 and 2004, fertility in Tyne & Wear declined 1.2% in contrast to a comparatively large increase in fertility nationally and regionally (2.9% and 2.4% respectively) (Table 3.1).

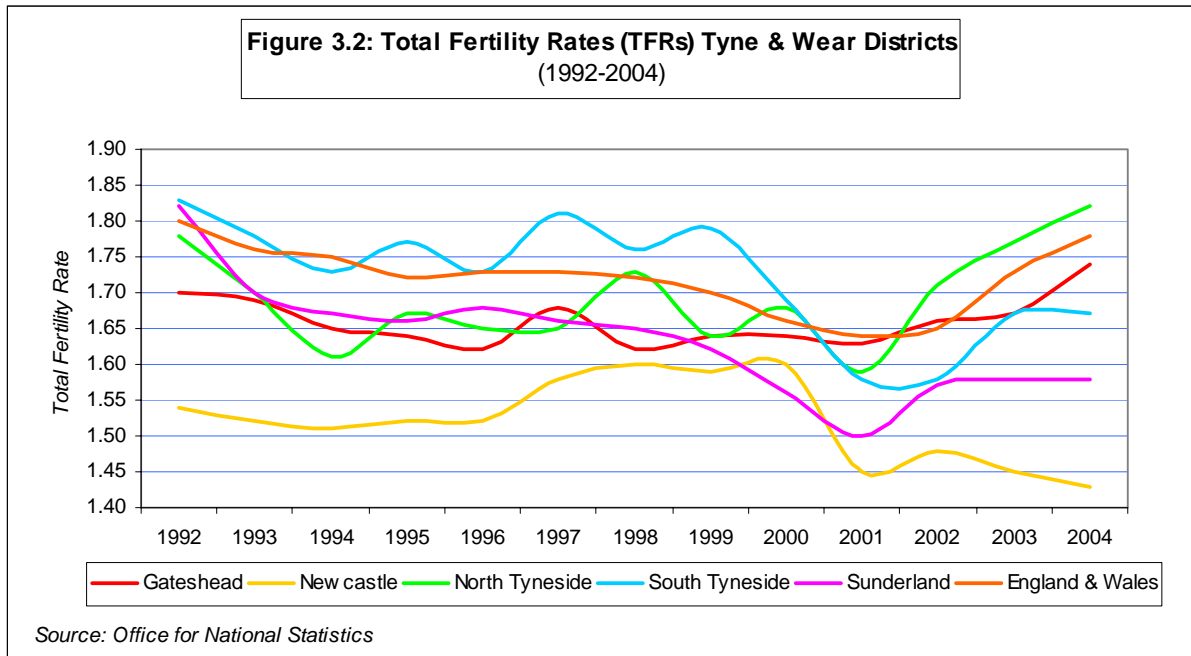
Table 3.1: Total Fertility Rates (TFRs)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	Average 1996-2004
Gateshead	1.62	1.68	1.62	1.64	1.64	1.63	1.66	1.67	1.74	1.66
Newcastle	1.52	1.58	1.60	1.59	1.60	1.45	1.48	1.45	1.43	1.52
North Tyneside	1.65	1.65	1.73	1.64	1.68	1.59	1.71	1.77	1.82	1.69
South Tyneside	1.73	1.81	1.76	1.79	1.69	1.58	1.58	1.67	1.67	1.70
Sunderland	1.68	1.66	1.65	1.62	1.56	1.50	1.57	1.58	1.58	1.60
Tyne & Wear	1.61	1.63	1.61	1.56	1.55	1.51	1.56	1.57	1.59	1.58
North East*	1.67	1.66	1.66	1.62	1.57	1.58	1.62	1.66	1.71	1.64
England & Wales	1.73	1.73	1.72	1.70	1.66	1.64	1.65	1.73	1.78	1.70

Note: * Government Office Regions (GORs), replaced Standard Statistical Regions (SSRs) in 1996. The North East GOR excludes Cumbria.

Source: Office for National Statistics, Crown Copyright

Since 1996, fertility rates in three Districts have tended to converge towards the England & Wales rate (Figure 3.2). This happened in North Tyneside, Gateshead and South Tyneside, though in South Tyneside the rate has stabilised recently. In Newcastle and Sunderland, by contrast, fertility remains well below the England & Wales rate (Average TFRs E&W 1.70 compared to 1.52 in Newcastle and 1.60 in Sunderland).



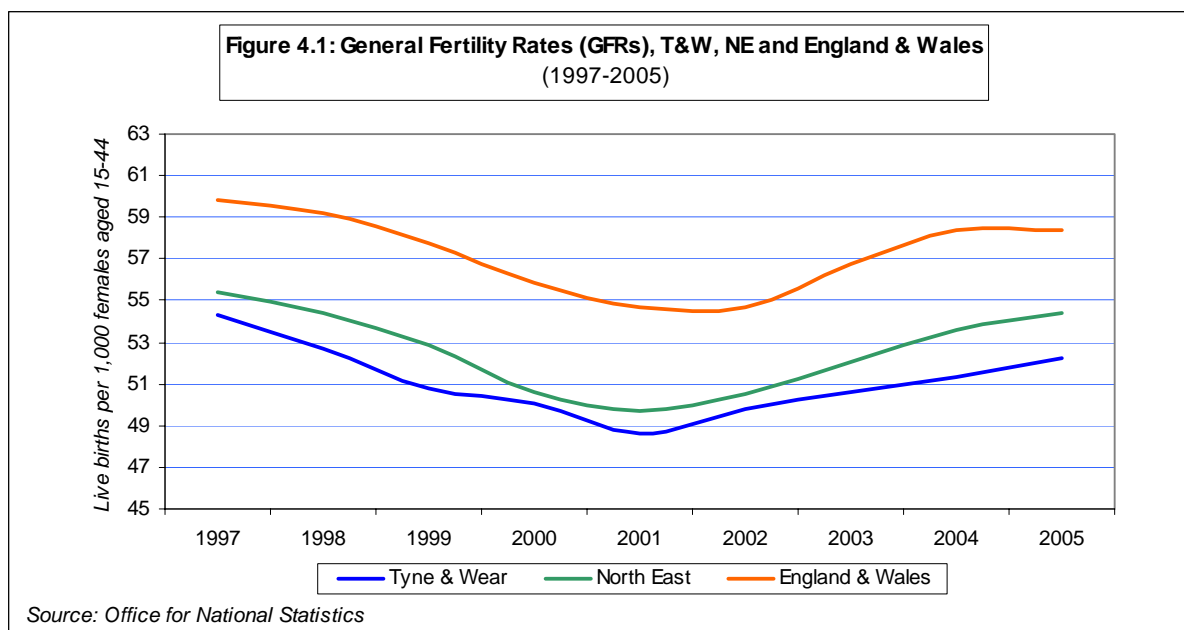
Between 1996 and 2004, TFRs declined in Sunderland (-6.0%), Newcastle (-5.9%) and South Tyneside (-3.5%). By contrast TFRs rose in North Tyneside (10.3%) and Gateshead (7.4%).

4. GENERAL FERTILITY RATES (GFRs)

General Fertility Rates (GFRs) are another standard measure of fertility. These rates are the number of live births in a single year per thousand women of childbearing age (15-44). They are less robust than TFRs, as they fail to take age-structure into account.

Similar to TFRs, GFRs show fertility in Tyne & Wear to be below national and regional rates (Figure 4.1 and Table 4.1). Between 1997 and 2005, the average GFR in Tyne & Wear was 51 (per 1,000 women aged 15-44), whereas in England & Wales the nine-year average was 57 and in the North East, 53.

Moreover, between 1997 and 2005 the decline in GFRs in Tyne & Wear (-3.9%) was greater than that experienced nationally (-2.4%) and in the North East (-1.8%).



At District level, GFRs were lower in all Tyne & Wear Districts than the national rate in 2005 apart from in North Tyneside; where the GFR was 2 (per 1,000 women) above the national average (60) (Figure 4.2 and Table 4.1). GFRs were particularly low in Newcastle (nine-year average 48, compared to 57 in England & Wales). GFRs were also low in Sunderland and South Tyneside (nine-year averages of 50 and 51 respectively). Although the nine-year average GFRs for Gateshead (54) and North Tyneside (55) were higher, rates remained below the national rate.

Between 1997 and 2005 GFRs in all Districts fell, apart from in North Tyneside, where the GFR rose 6.8%. The rate of decline in all other Districts exceeded the national rate of decline (-2.4%). South Tyneside's rate of decline was fastest (-11.6%), followed by Gateshead (-6.1%) and Newcastle (-5.9%). The decline in Sunderland was slower at -3.7%.

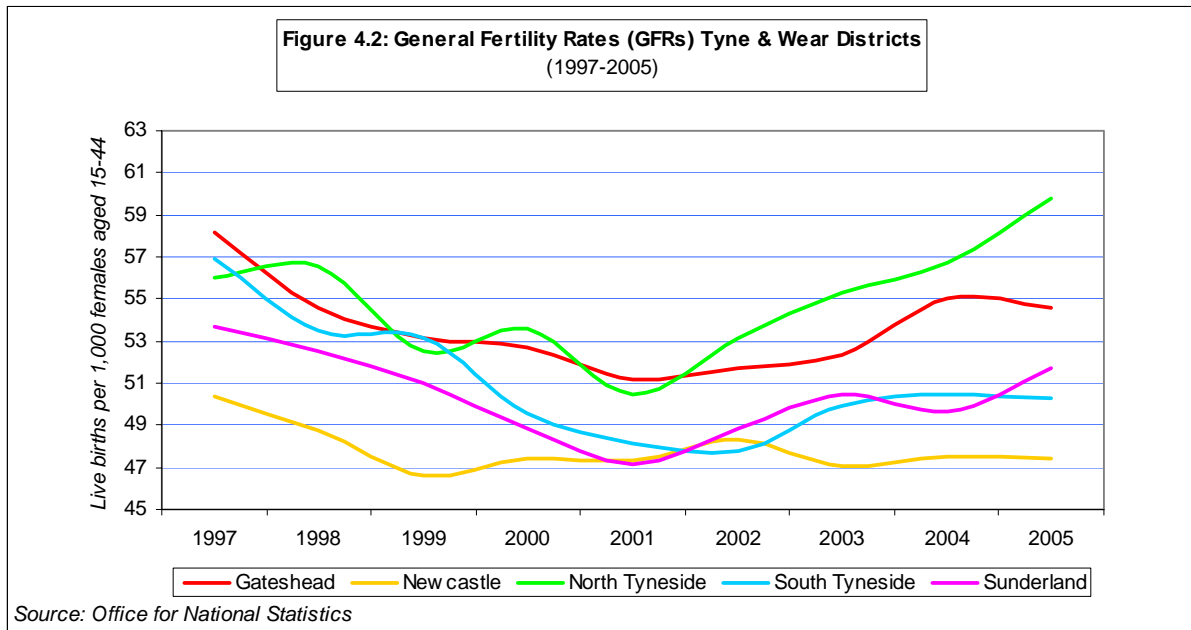


Table 4.1: General Fertility Rates (GFRs)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1997-2005
Gateshead	58	55	53	53	51	52	52	55	55	54
Newcastle	50	49	47	47	47	48	47	48	47	48
North Tyneside	56	57	53	54	50	53	55	57	60	55
South Tyneside	57	53	53	50	48	48	50	51	50	51
Sunderland	54	52	51	49	47	49	50	50	52	50
Tyne & Wear	54	53	51	50	49	50	51	51	52	51
North East	55	54	53	51	50	50	52	54	54	53
England & Wales	60	59	58	56	55	55	57	58	58	57

Note: GFRs are rounded to the nearest whole number

Source: Office for National Statistics, Crown Copyright

5. LIVE BIRTHS BY AGE OF MOTHER

Between 2001 and 2005, the average number of births per annum in Tyne & Wear was 11,555 (11,968 in 2005). Live births by age of mother cover three standard age groups: Under 18 years (11-17 years), 18-34 years and 35+ years old.

5.1 Mothers Aged under 18 years

Young mothers accounted for 3.4% of births (average of 388 pa), from 2001-2005 in Tyne & Wear. (Table 5.1). In Newcastle, the five-year average rate of 8.9 live births per 1,000 females aged under 18 years (11-17 years) was the highest of all Tyne & Wear Districts. Sunderland had the next highest average fertility rate of 8.5 births per 1,000 females aged under 18 years. North Tyneside (7.9), South Tyneside (7.5) and Gateshead (7.1) had lower five-year average rates.

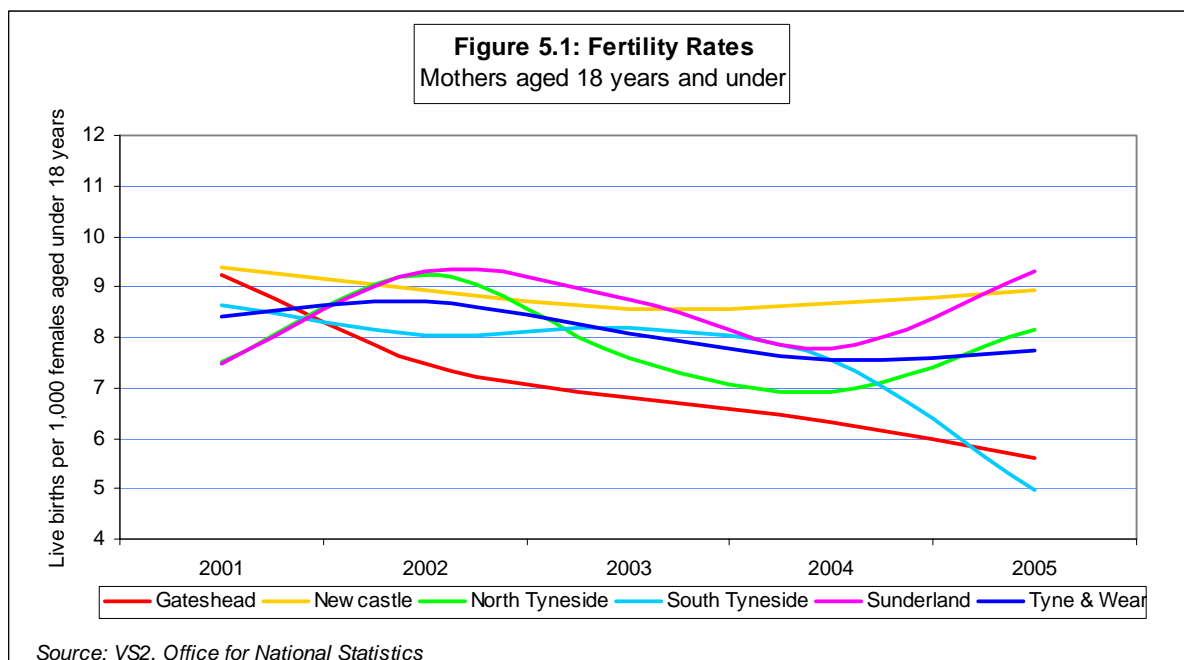
Table 5.1: Live Births (Mothers Aged under 18)*

	2001		2002		2003		2004		2005		Average 2001-2005	
	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate
Gateshead	77	9.2	62	7.5	57	6.8	52	6.3	46	5.6	59	7.1
Newcastle	103	9.4	99	8.9	94	8.6	95	8.7	97	8.9	98	8.9
North Tyneside	63	7.5	78	9.2	64	7.6	58	6.9	68	8.1	66	7.9
South Tyneside	63	8.6	59	8.0	59	8.2	53	7.5	34	5.0	54	7.5
Sunderland	99	7.5	123	9.3	116	8.7	102	7.8	120	9.3	112	8.5
Tyne & Wear	405	8.4	421	8.7	390	8.1	360	7.5	365	7.7	388	8.1

Note: *The rate is calculated as the number of live births per 1,000 females aged under 18 years (Aged 11-17 years)

Source: VS2, Office for National Statistics, Crown Copyright

Fertility rates for females aged under 18 years appear to have diverged between 2004 and 2005 in the Tyne & Wear Districts (Figure 5.1). While Sunderland, Newcastle and North Tyneside's rates appear to be rising, in Gateshead and South Tyneside rates continue to fall.



Since 2001, the overall youth (11-17 years) fertility rate trend has been downwards in Tyne & Wear, down 10%. Fertility rates fell most substantially in South Tyneside (-42.5%) and Gateshead (-39.2%). Newcastle experienced a more modest decline in its fertility rate (-4.9%). In Sunderland and North Tyneside, fertility rates actually rose (by 24.6% and 8.4% respectively).

5.2 Mothers Aged 18-34 years

The vast majority of births (82.3%) are to women aged 18-34, averaging 9,514 per year between 2001 and 2005 (Table 5.2).

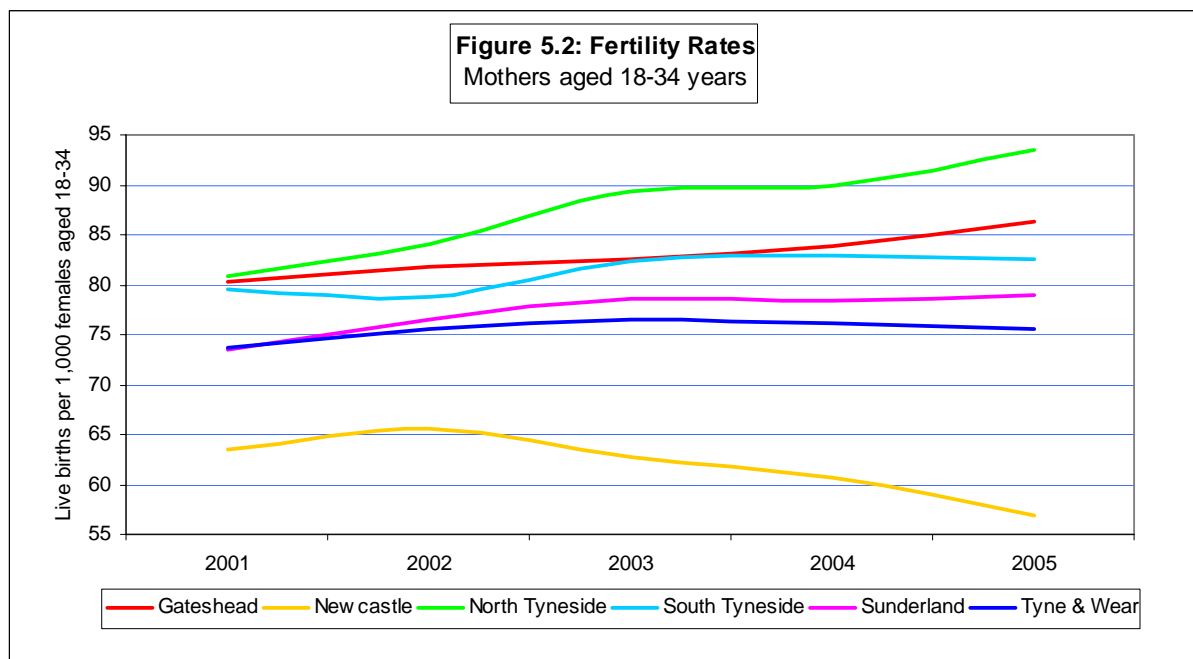
Table 5.2: Live Births (Mothers Aged 18-34)*

	2001		2002		2003		2004		2005		Average 2001-2005	
	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate
Gateshead	1,643	80.2	1,652	81.7	1,653	82.6	1,690	83.8	1,740	86.3	1,676	82.9
Newcastle	2,339	63.6	2,416	65.6	2,357	62.8	2,363	60.7	2,379	56.9	2,371	61.9
North Tyneside	1,628	80.9	1,665	84.0	1,734	89.3	1,741	89.9	1,856	93.5	1,725	87.5
South Tyneside	1,230	79.5	1,201	78.8	1,247	82.4	1,259	82.9	1,282	82.6	1,244	81.2
Sunderland	2,437	73.5	2,477	76.4	2,531	78.5	2,500	78.4	2,551	78.9	2,499	77.1
Tyne & Wear	9,277	73.7	9,411	75.7	9,522	76.6	9,553	76.0	9,808	75.6	9,514	75.5

Note: *The rate is calculated as the number of live births per 1,000 women aged 18-34 years

Source: VS2, Office for National Statistics, Crown Copyright

Between 2001 and 2005 fertility rates for women aged 18-34 were highest in North Tyneside (five-year average rate of 88 live births per 1,000 women aged 18-34) (Figure 5.2). Gateshead, South Tyneside and Sunderland had slightly lower average rates of 83, 81 and 77 live births per 1,000 women aged 18-34 respectively. Fertility in Newcastle was substantially lower, averaging 62 live births per 1,000 women aged 18-34. This could be the result of women choosing to focus on their careers and delay childbearing till later. It could also be due to the expansion of the universities.



Fertility rates rose between 2001 and 2005 for women aged 18-34 by 2.6% in Tyne & Wear. The fastest rise occurred in North Tyneside (15.6%). The rise in North Tyneside could be the result of new family housing being built in the District. Rises were also seen in Gateshead (7.6%), Sunderland (7.4%) and South Tyneside (3.8%). By contrast, Newcastle's fertility rate fell by 10.4% between 2001 and 2005.

The overall rise in fertility from 2001-05 is in opposition to an earlier trend of declining fertility rates. This earlier trend was attributed to the effect of a large number of women choosing to have fewer children, or choosing not to raise families, possibly in order to pursue careers. This could remain a factor in relation to trends in Newcastle. As Section 5.3 indicates, a fall in fertility rates in women aged 18-34 in Newcastle could be the displacement effect of more women choosing to have children later in life.

Within this age group, there has been a trend towards later childbearing. In 2004, ONS reported that the fertility rate of women aged 30-34 overtook that of women aged 25-29 for the first time in England & Wales¹⁰. The average (mean) age of women giving birth remained at 29.4 years, while the average age for women at first birth increased to 27.5 years.

¹⁰ ONS News Release, 15th December 2005 available at: <http://www.statistics.gov.uk/pdfdir/birthstats1205.pdf>

5.3 Mothers Aged 35+ years

Live births by mothers aged 35 or over accounted for 14% of all births between 2001 and 2005 in Tyne & Wear. During this period, Newcastle had relatively high fertility rates for women aged 35-44, averaging 24 live births per 1,000 (Table 5.3 and Figure 5.3). This could be a displacement effect of women aged 18-34 in Newcastle choosing to postpone childbearing until they have established careers. By contrast, Sunderland (16) and South Tyneside (18) had low average rates. North Tyneside (21) and Gateshead (21) had average fertility rates slightly below Newcastle, but above the Tyne & Wear average rate (20 live births per 1,000 women aged 35+).

Between 2001 and 2005, fertility rates for women aged 35+ rose in Tyne & Wear 23%. Fertility rates rose in all Districts, with North Tyneside having the largest rise (35.7%). Smaller rises in fertility occurred in Sunderland (25%), Gateshead (20%), Newcastle (19%) and South Tyneside (17%).

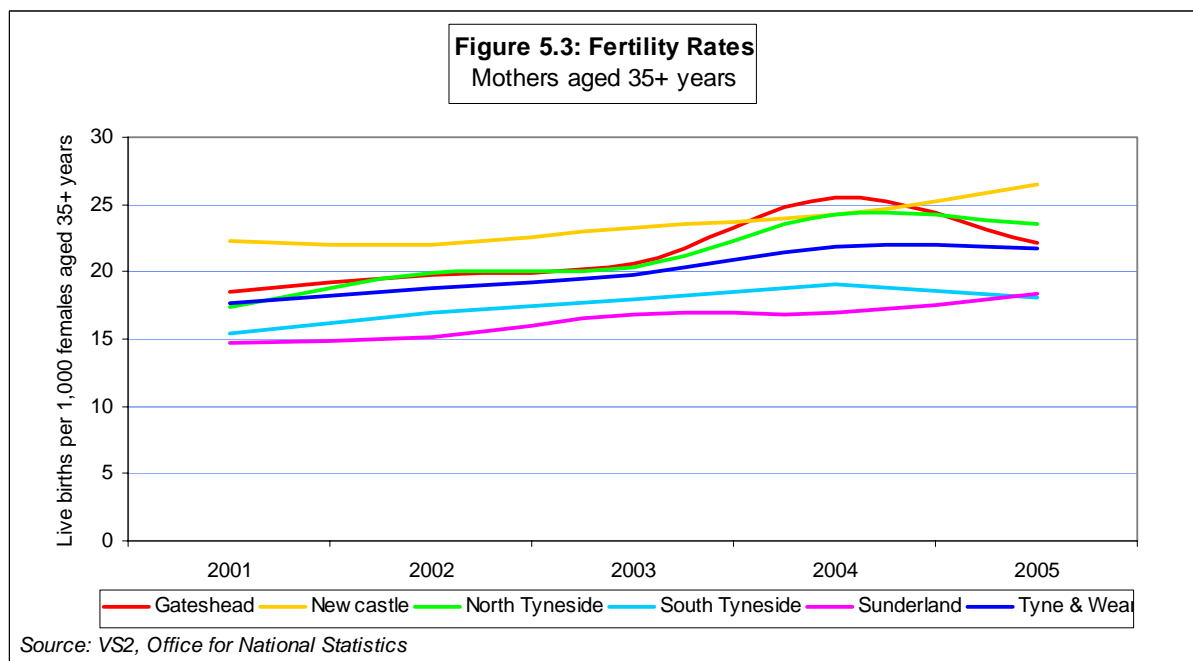
Rises in fertility for this age group are most likely the effect of women delaying childbearing until they have established careers and of childbearing in subsequent relationships. At a national level, changing fertility patterns in the UK have been characterised by rising mean age at first birth and of higher levels of childlessness (nearly one in five women in their mid forties in 2005 were childless)¹¹.

Table 5.3: Live Births (Mothers Aged 35+)*

	2001		2002		2003		2004		2005		Average 2001-2005	
	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate	no.	rate
Gateshead	275	18.5	298	19.7	310	20.7	386	25.6	332	22.1	320	21.3
Newcastle	433	22.3	426	22.1	444	23.2	460	24.2	503	26.5	453	23.7
North Tyneside	258	17.3	299	19.9	303	20.3	361	24.2	350	23.5	314	21.1
South Tyneside	186	15.4	207	17.0	217	17.9	228	19.0	213	18.1	210	17.5
Sunderland	317	14.7	330	15.1	365	16.8	369	17.0	397	18.3	356	16.4
Tyne & Wear	1,469	17.7	1,560	18.7	1,639	19.8	1,804	21.8	1,795	21.8	1,653	20.0

Note: *The rate is calculated as the number of live births per 1,000 women aged 35-40+ years

Source: VS2, Office for National Statistics, Crown Copyright



¹¹ ONS News Release, 15th December 2005 available at: <http://www.statistics.gov.uk/pdfdir/birthstats1205.pdf>

6. LIVE BIRTHS BY MARITAL STATUS

In 2005, the majority of births in Tyne & Wear (55%) and the North East (55%) were outside marriage, compared to 43% in England & Wales.

6.1. Live Births Within Marriage

For the period between 1997 and 2005, the average percentage of live births within marriage in Tyne & Wear was markedly lower than in England & Wales (Table 6.1 and Figure 6.1). Tyne & Wear was 12 percentage points below the national average (48%, E&W 60%), with the proportion declining at a slightly faster rate (down 7 percentage points) than in England & Wales (down 6 percentage points).

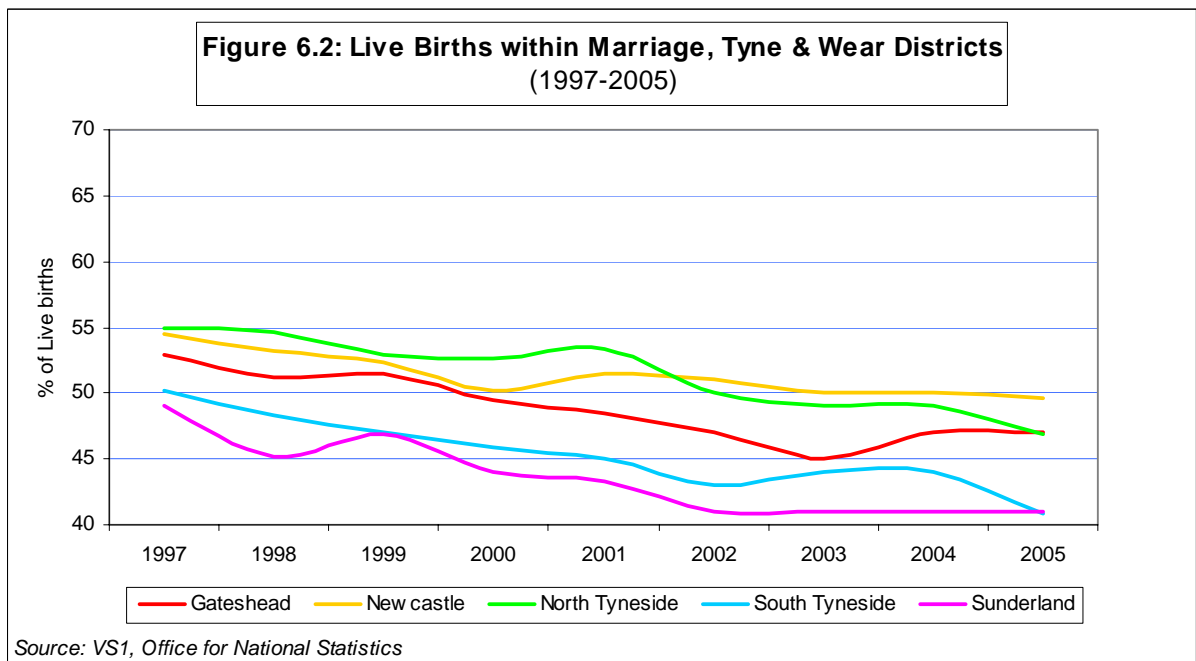
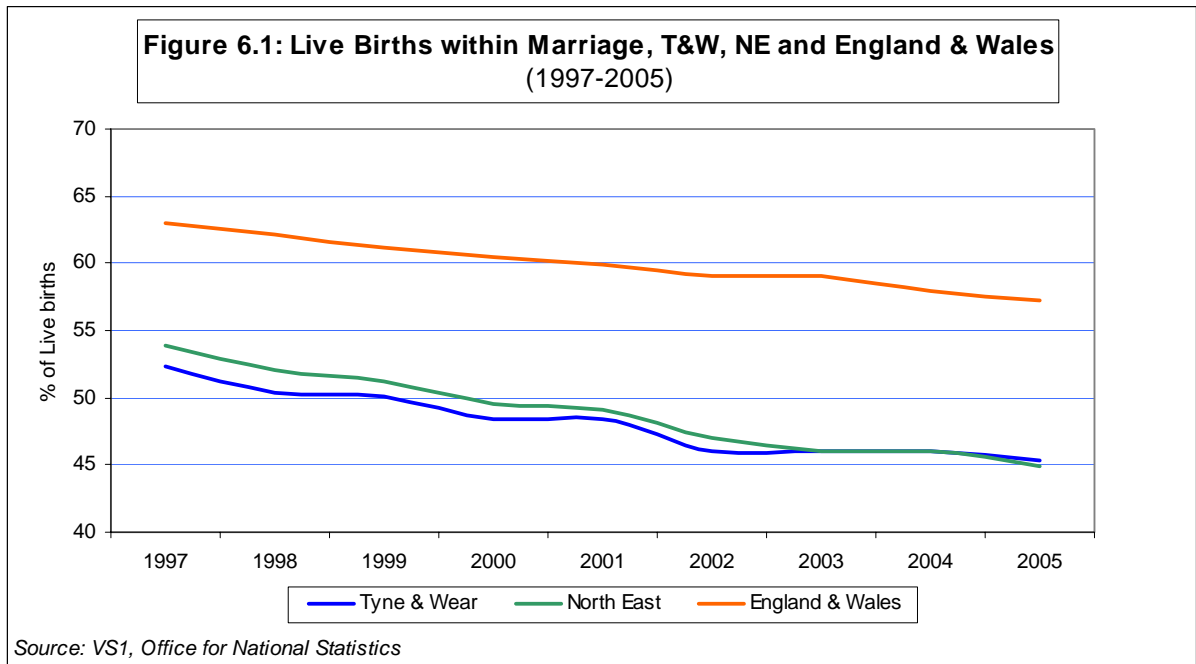
The proportion of live births within marriage between 1997 and 2005 was lower in all Tyne & Wear Districts than the national average. North Tyneside and Newcastle both had the highest average proportion of live births within marriage at 51%. This was still, however, 9 percentage points below the national average. The average proportion of live births within marriage in Gateshead was slightly lower at 49%. South Tyneside (45%) and Sunderland (44%) had the lowest averages (Table 6.1 and Figure 6.2).

The proportion of live births within marriage fell in all Tyne & Wear Districts between 1997 and 2005. The largest fall of 9 percentage points was seen in South Tyneside. In North Tyneside and Sunderland, the proportion fell by 8 percentage points and in Gateshead by 6 points. Newcastle showed the most moderate decline of 4 percentage points.

Table 6.1: Percentage of Live Births Within Marriage

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1997-2005
Gateshead	53	51	51	50	48	47	45	47	47	49
Newcastle	54	53	52	50	52	51	50	50	50	51
North Tyneside	55	55	53	53	53	50	49	49	47	51
South Tyneside	50	48	47	46	45	43	44	44	41	45
Sunderland	49	45	47	44	43	41	41	41	41	44
	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1997-2005
Tyne & Wear	52	50	50	48	48	46	46	46	45	48
North East	54	52	51	49	49	47	46	46	45	49
England & Wales	63	62	61	61	60	59	59	58	57	60

Source: VS1, Office for National Statistics, Crown Copyright



6.2 Live Births Outside of Marriage

In 2005, the number of births outside of marriage exceeded the number of births within marriage for the sixth consecutive year in both Tyne & Wear and the North East.

Between 1997 and 2005, the average proportion of live births outside of marriage in Tyne & Wear was 52%, 12 percentage points above the England & Wales average (40%) (Table 6.2 and Figure 6.3). The proportion rose by 7 percentage points in Tyne & Wear and by 6 percentage points in England & Wales during this period.

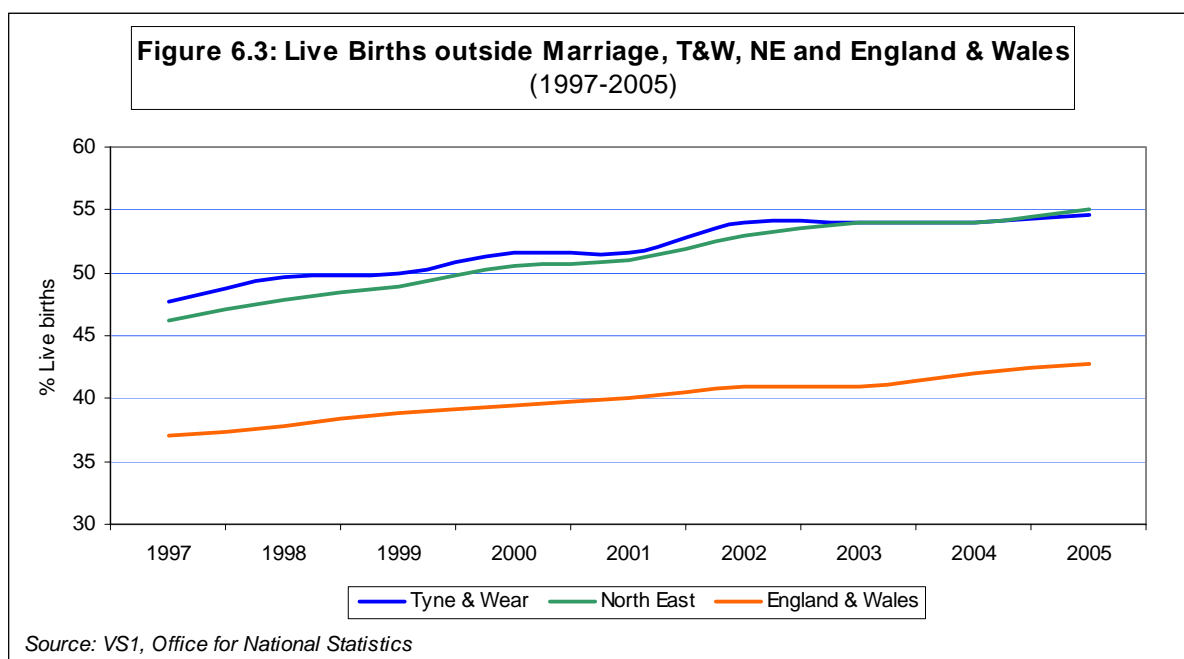
At District level, Sunderland (nine-year average 56%) and South Tyneside (nine-year average 55%) had the largest proportions of live births outside of marriage. Gateshead has a nine-year average of 51%. Newcastle and North Tyneside both had the lowest average proportions of live births outside marriage, both at 49%. (Table 6.2 and Figure 6.4).

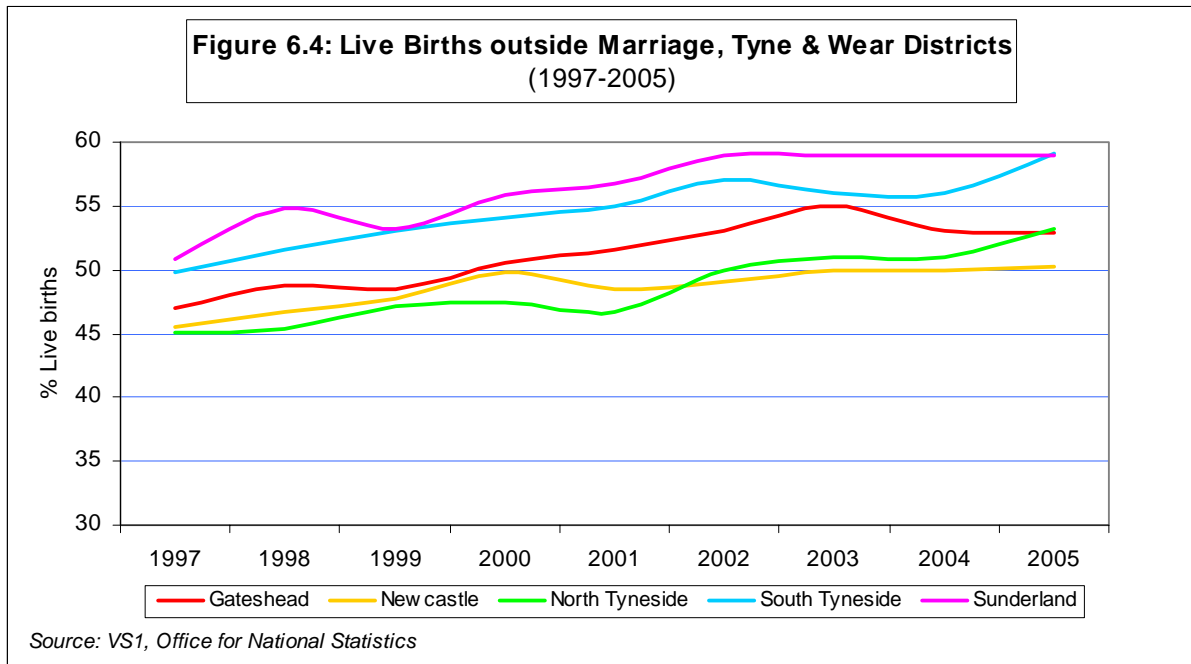
The proportion of live births outside of marriage increased in all Tyne & Wear Districts between 1997 and 2005. South Tyneside's rise of 9 percentage points was the largest among the Districts. In both North Tyneside and Sunderland, the proportion rose by 8 percentage points. Gateshead (6 points) and Newcastle (4 points) showed relatively moderate rises.

Table 6.2: Percentage of Live Births Outside of Marriage

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1997-2005
Gateshead	47	49	49	50	52	53	55	53	53	51
Newcastle	46	47	48	50	48	49	50	50	50	49
North Tyneside	45	45	47	47	47	50	51	51	53	49
South Tyneside	50	52	53	54	55	57	56	56	59	55
Sunderland	51	55	53	56	57	59	59	59	59	56
Tyne & Wear	48	50	50	52	52	54	54	54	55	52
North East	46	48	49	51	51	53	54	54	55	51
England & Wales	37	38	39	39	40	41	41	42	43	40

Source: VS1, Office for National Statistics, Crown Copyright





7. MORTALITY RATIOS

7.1 Standardised Mortality Ratios (SMRs)

Standardised Mortality Ratios (SMRs) are defined as ‘observed deaths expressed as a percentage of expected deaths, where expected deaths is the number that would occur if the population of the area experienced sex and age mortality rates of England & Wales¹²’.

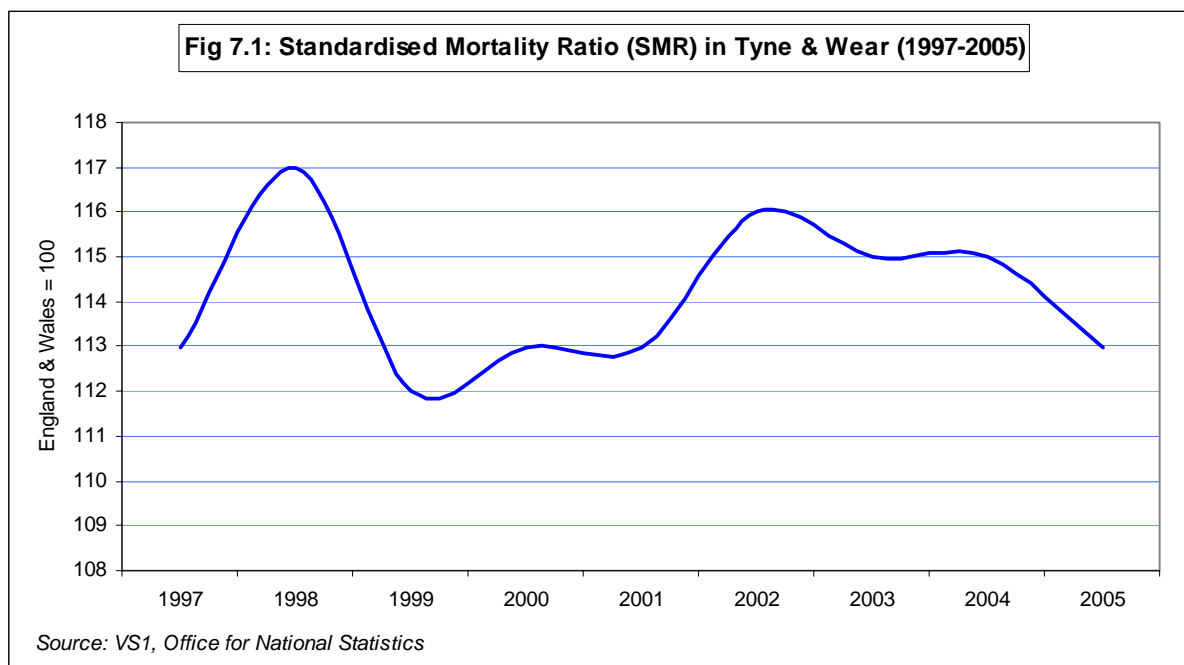
Both Tyne & Wear and the North East, relative to England & Wales, have extremely high mortality ratios (Table 7.1 and Figure 7.1 and Figure 7.2). Since 1997, in Tyne & Wear, SMRs have fluctuated, averaging 114 and peaking at 117 in 1998. SMRs in the North East also peaked in 1998 at 116 (see Appendix 3 for details of SMRs in other regions/districts in England).

Table 7.1: Standardised Mortality Rates (SMRs) (1997-2005)

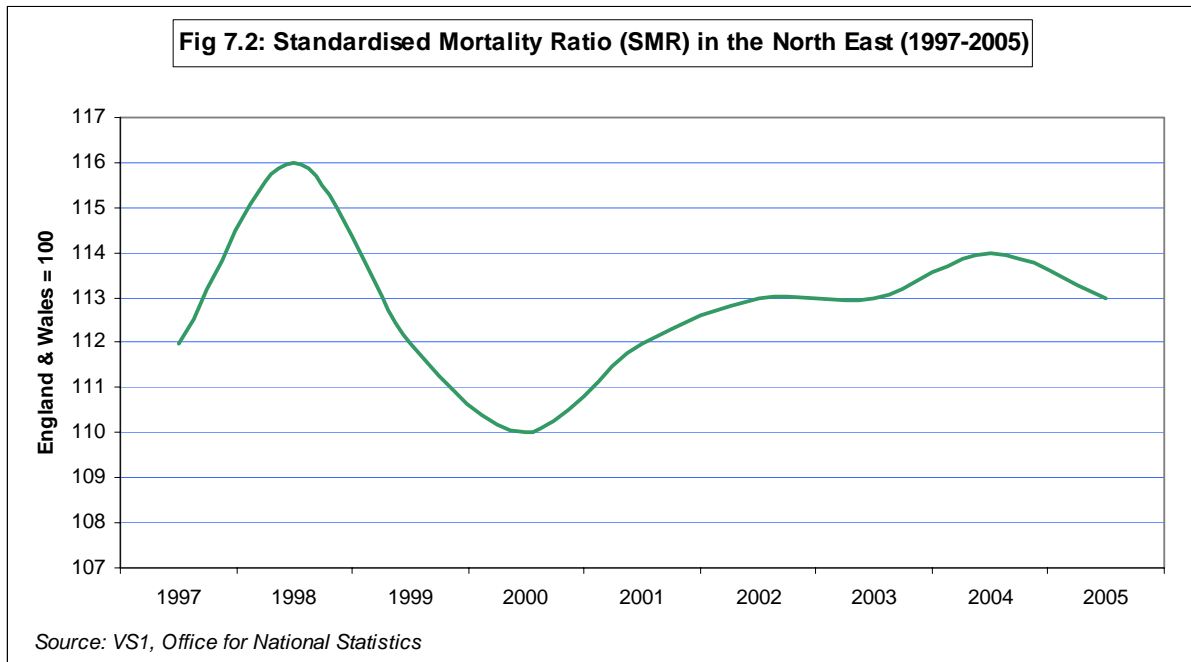
	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
Gateshead	116	123	115	118	119	114	117	115	116	117
Newcastle	110	115	111	111	111	116	113	109	111	112
North Tyneside	108	110	101	102	105	113	109	114	104	108
South Tyneside	119	115	113	112	109	113	117	119	118	114
Sunderland	112	121	119	119	120	121	120	120	117	119
Tyne & Wear	113	117	112	113	113	116	115	115	113	114
North East	112	116	112	110	112	113	113	114	113	113
England, Wales & Elsewhere*	100	100	100	100	100	100	100	100	100	100

Note: England & Wales is the national standard for 1996. Thereafter, the standard also includes figures for 'Elsewhere', defined as those people who are not residents of England & Wales, but unfortunately died whilst visiting England & Wales.

Source: Population Trends 112, 116 & 120, and VS1, ONS, Crown Copyright

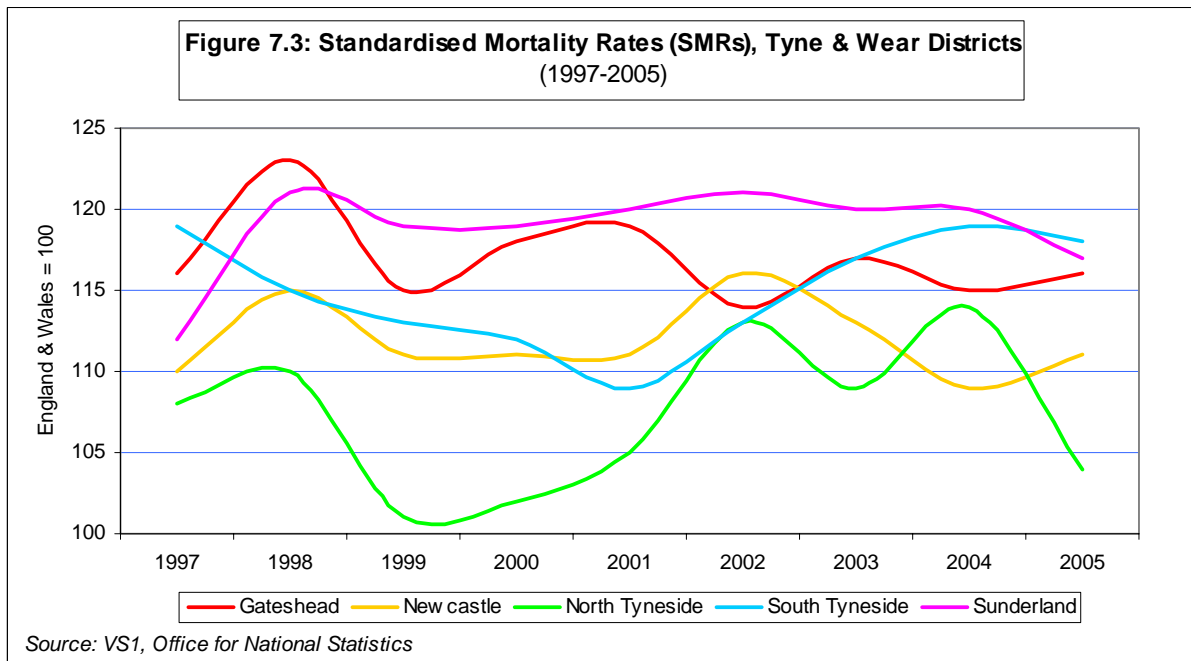


¹² As defined in ‘Key Population and Vital Statistics’, Office for National Statistics, Crown Copyright. See also Introduction within this report (§1).



Within Tyne & Wear, between 1997 and 2005, the average SMR was nearest 100 in North Tyneside at 108 (8 points above the national average) (Table 7.1 and Figure 7.3). The nine-year average SMRs in Newcastle and South Tyneside were 112 and 114 respectively. The average SMRs were high in Gateshead and Sunderland at 117 and 119 respectively.

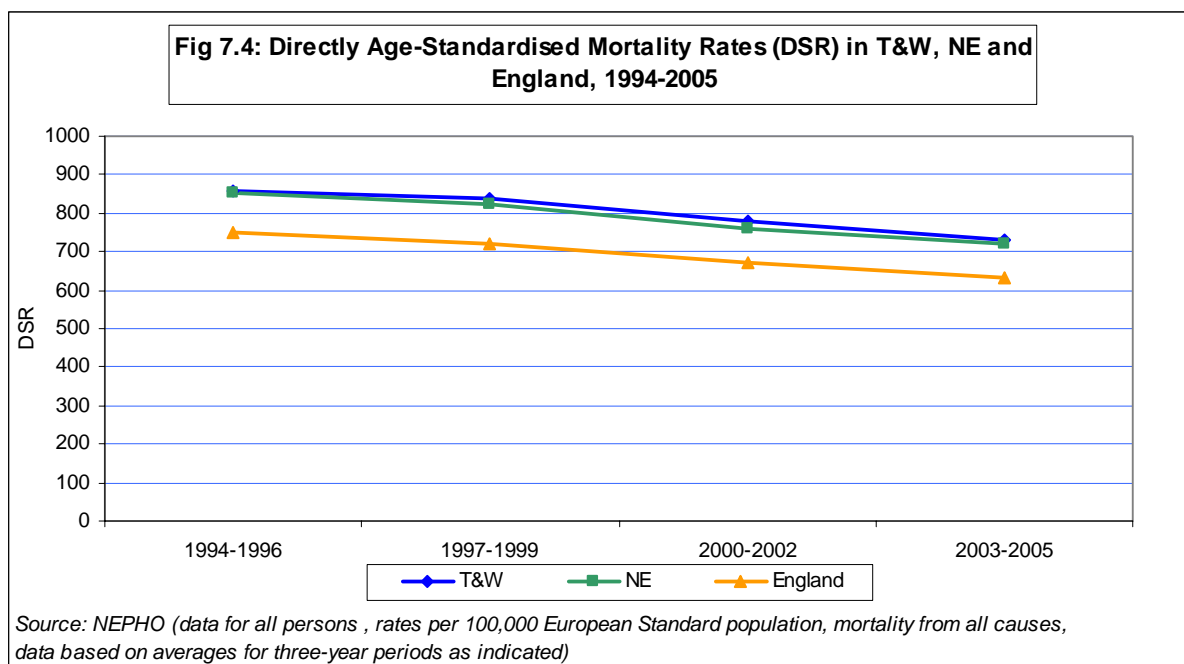
Between 1997 and 2005, SMRs rose (deteriorated) in only two Tyne & Wear Districts, Sunderland and Newcastle. There was no change in Gateshead's SMR, however SMRs did improve (fall) in North Tyneside and South Tyneside.



7.2 Directly Standardised Mortality Rates (DSRs)¹³ [Age-Standardised Mortality Rates]

Directly Standardised Mortality Rates (DSRs) give an indication of the number of deaths that would occur in a standard population¹⁴, if the population had the same age-specific death rates¹⁵ of the local area (also referred to as Age Standardised Mortality Rates). DSRs differ from SMRs because rates are applied to the same population, so they enable comparisons to be made between areas and over time.

Between 2003 and 2005, there were 729.19 deaths for every 100,000 people in Tyne & Wear, compared to 718.91 in the North East and 633.46 in England (Figure 7.4). DSRs have fallen in all three areas since 1994. Tyne & Wear has a slightly higher DSR than the North East, both of which have on average, nearly 100 deaths more per hundred thousand than in England.



7.3 Linking Mortality and Health

There are a number of public health factors which could negatively impact upon mortality rates in Tyne & Wear and the North East, including (higher levels of) smoking, drinking and less exercise. Some of these issues are discussed below.

In a recent briefing on **alcohol and health in Europe**¹⁶, the North East of England Office (in Brussels) reported that the North East has a higher proportion of residents who drink more than recommended daily limits or binge drink than in England generally. It also reports that these trends are reflected in alcohol-related mortality and morbidity within the region:

- The NE is said to have a greater proportion of alcohol-related deaths than in England generally
- The NE is also said to have a higher rate for admissions to hospital due to alcohol-related causes than any other region in the country except for the North West

¹³ Data on DSRs obtained by TWRI from the North East Public Health Observatory (NEPHO)

¹⁴ The European Standard population is used in this report.

¹⁵ Rates are calculated per 100,000.

¹⁶ Briefing: Alcohol and Health in Europe, 15th November 2006

The **prevalence of smoking** in the North East is discussed in a recent paper published by the North East Public Health Observatory (NEPHO)¹⁷ and commissioned by Smoke Free North East (SFNE). Current (2003) data shows smoking prevalence in the North East of about 26% in men (about the national average) and 29% in women (5 percentage points above the national average) (Table 7.2).

Table 7.2: Smoking prevalence (%) in the North East and England

	1998	1999	2000	2001	2002	2003 (weighted)
North East						
Males	30	24	26	27	29	26
Females	32	29	33	32	33	29
Total	31	27	30	30	31	28
England						
Males	28	27	27	26	28	27
Females	27	26	22	25	26	24
Total	28	27	24	25	28	25

Source: Health Survey for England (HSE)

At a Local Authority level, NEPHO uses Acxiom commercial data¹⁸ for 2004. This provides estimates of smoking prevalence (%) in the North East by Local Authority. In Tyne & Wear; South Tyneside is estimated to have the highest smoking prevalence at 28.8%, followed by Sunderland (27.7%), Newcastle (26.8%) and Gateshead (26.6%). North Tyneside has the lowest level at 25.0%.

The **relationship between deprivation and mortality** is long established. In a study reporting on recent patterns of mortality and deprivation, people living in more deprived areas were found to have higher mortality rates than those living in less deprived areas in England & Wales between 1999 and 2003¹⁹ (ONS, 2006). Key findings included:

- The death rate for males (all ages) in the most deprived wards in England & Wales was 1.7 times higher, and for females 1.5 times higher than in the least deprived wards
- Mortality rates for both sexes increased with deprivation for all circulatory diseases, ischemic heart disease, stroke, all cancers, lung cancer respiratory diseases and accidents
- Death rates for those living in the most deprived fifth of wards were generally highest in the North East and North West. These areas were found to have the biggest differences in mortality rates between the least and most deprived wards.

Data on **physical activity** is available at a national level only, through the 'Focus on Health: 2006' report²⁰. This shows:

- Men's participation in any sport or recreational activity decreased from 58% in 1990 to 50% in 2002 in Great Britain
- Women's participation in any sport or recreational activity experienced a smaller decrease, from 39% in 1990 to 37% in 2002 in Great Britain

¹⁷ North East Public Health Observatory Occasional Paper No.23 August 2006 'The Prevalence of Smoking in the North East'

¹⁸ Acxiom data from the National Shoppers Survey has been purchased by the Association of Public Health Observatories (APHO). This will be use in local authority Health Profiles from 2007.

¹⁹ 'Mortality by deprivation and cause of death in England & Wales, 1999-2003' (ONS Health Statistics Quarterly, v. 32, pp. 19-34)

²⁰ 'Focus on Health: 2006' published by ONS in 2006. Available at: http://www.statistics.gov.uk/downloads/theme_compendia/foh2005/Health_FullReport.pdf

- In 2003, 39% of English men and 26% of women met the recommendations set down by the Chief Medical Officer to achieve at least 30 minutes a day of at least moderate-intensity physical activity on five or more days of the week
- Seven in ten boys and six in ten girls in England in 2002 met the Chief Medical Officer's recommendation of 60 minutes of at least moderate-intensity physical activity each day.

8. DEATHS BY CAUSE

Overall, the number of deaths (by all causes) fell by 11% (1,489) between 1997 and 2005 in Tyne & Wear. The total number of deaths, from all causes, in 2005 was 11,735. Circulatory disease, cancer, respiratory disease, diseases of the digestive system and 'external causes of morbidity and mortality' (injury and poisoning) were the five largest causes of death in Tyne & Wear between 1997 and 2005. These five causes accounted for 86% of all deaths in 2005.

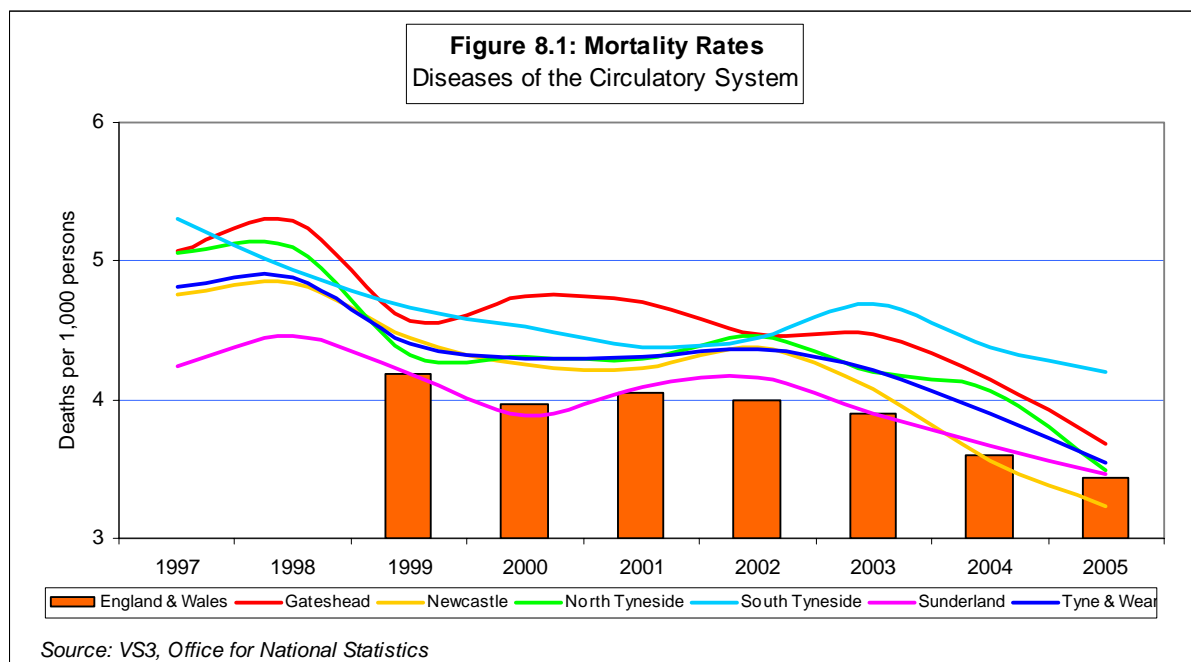
Differences in mortality and life expectancy at birth exist across the European Union²¹. Total life expectancy at birth ranges from 71-80 years (Latvia – Spain)²². Between genders, women live from 4-11 years longer than men (UK – the Baltic States). There are also differences across the EU in terms of healthy life years; men can expect to live 85% of life in good health whereas women can expect to live 80% in good health.

8.1 Circulatory Diseases

In 2005, circulatory disease (failure of the heart and blood vessels) accounted for 33% (3,888) of all deaths in Tyne & Wear. In the North East, 34% of all deaths were attributed to circulatory diseases, whilst in England & Wales the figure was slightly higher at 36%. In the EU-25, diseases of the circulatory system were the major cause of death in 2003, accounting for 41% of all deaths (45% for women and 37% for men)²³.

Circulatory diseases were by far the largest cause of death in Tyne & Wear between 1997 and 2005. Mortality rates were highest in South Tyneside and Gateshead (nine-year averages of 4.6 deaths per 1,000 persons). North Tyneside (average rate of 4.4) and Newcastle (average rate of 4.2) had slightly lower average rates. Sunderland had the lowest average rate of 4.0 deaths per 1,000 persons.

The **number** of deaths caused by circulatory diseases fell by 27% (-1,451 deaths) in Tyne & Wear Districts between 1997 and 2005. The fastest decline in mortality **rates** were apparent in Newcastle (-32%), North Tyneside (-31%) and Gateshead (-27%). Mortality rates fell at a slower rate in South Tyneside (-21%) and Sunderland (-18%).



Caution: Scale starts at 3 per 1,000.

²¹ For more detailed data and maps on mortality and healthcare see European Commission & Eurostat publication 'Regions: Statistical Yearbook 2006' which contains data for 2000-2004

²² North East of England Office report from EU Brussels Office Working Group on Health (20th November 2006)

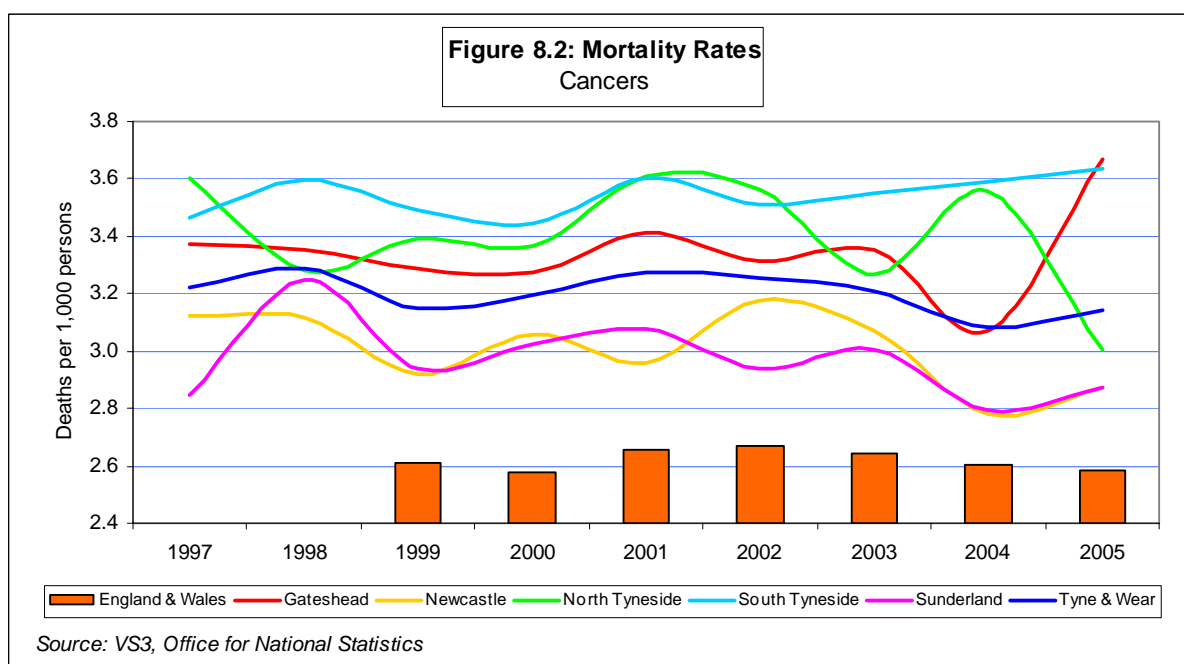
²³ 'Regions: Statistical Yearbook 2006' (EC & Eurostat., 2006)

8.2 Cancers

In 2005, 29% (3,442) of all deaths in Tyne & Wear and the North East were due to cancer. This was slightly higher than England & Wales (27%). Death rates in all five Tyne & Wear Districts were above the average for England & Wales in 2005 (2.58 per 1,000 persons), with Sunderland and Newcastle's rates closest to the England & Wales average (both 2.88). Deaths from cancer were the second most frequent cause of death in the EU-25 after circulatory disease, accounting for 25% of all deaths in 2003 (22% for women and 29% for men)²⁴.

Cancers were the second largest cause of death in Tyne & Wear between 1997 and 2005. Mortality rates were highest in South Tyneside (nine-year average of 3.5 per 1,000 persons) (Figure 8.2). Gateshead and North Tyneside had slightly lower average mortality rates (3.4 deaths per 1,000 persons). Newcastle and Sunderland had the lowest mortality rates due to cancer (nine-year averages of 3.0 deaths per 1,000 persons).

The **number** of deaths attributable to cancer fell (-4%) in Tyne & Wear between 1997 and 2005. Cancer mortality **rates** declined in North Tyneside (-17%) and Newcastle (-8%) between 1997 and 2005 but rose in South Tyneside (+5%) and Sunderland (+1%). In Gateshead, mortality rates due to cancer rose (+9%) between 1997 and 2005, with an oddly sharp rise recorded in 2005.



Caution: Scale starts at 2.4 per 1,000.

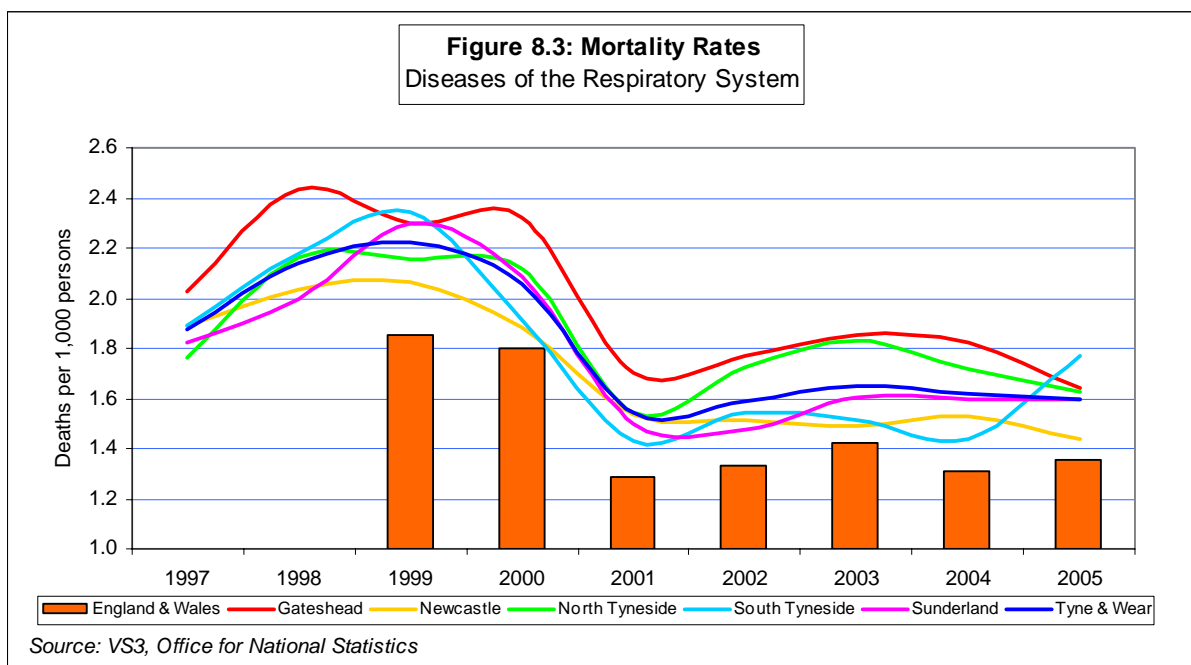
²⁴ Regions: Statistical Yearbook 2006' (EC & Eurostat., 2006)

8.3 Respiratory Diseases

In 2005, 15% (1,746) of all deaths in Tyne & Wear were as a result of respiratory diseases. This was the same as in the North East (15%), but slightly higher than in England & Wales (14%).

Respiratory diseases (for example pneumonia, bronchitis and emphysema) were the third-largest cause of death in Tyne & Wear between 1997 and 2005. Mortality rates were highest in Gateshead (nine-year average of 2.0 deaths per 1,000 persons) (Figure 8.3). North Tyneside had a slightly lower average mortality rate of 1.9 deaths per 1,000, followed by South Tyneside and Sunderland (nine-year averages of 1.8 deaths per 1,000). Newcastle had the lowest mortality rate (nine-year average of 1.7).

The **number** of deaths attributable to respiratory diseases fell (-16%) in Tyne & Wear between 1997 and 2005. Mortality **rates** for diseases of the respiratory system fell in all Tyne & Wear Districts, most significantly in Newcastle (-24%) and Gateshead (-19%). In Sunderland, mortality rates fell by 12%. The smallest declines in mortality rates were experienced in North Tyneside (-7%) and South Tyneside (-6%).



Caution: Scale starts at 1.0 per 1,000.

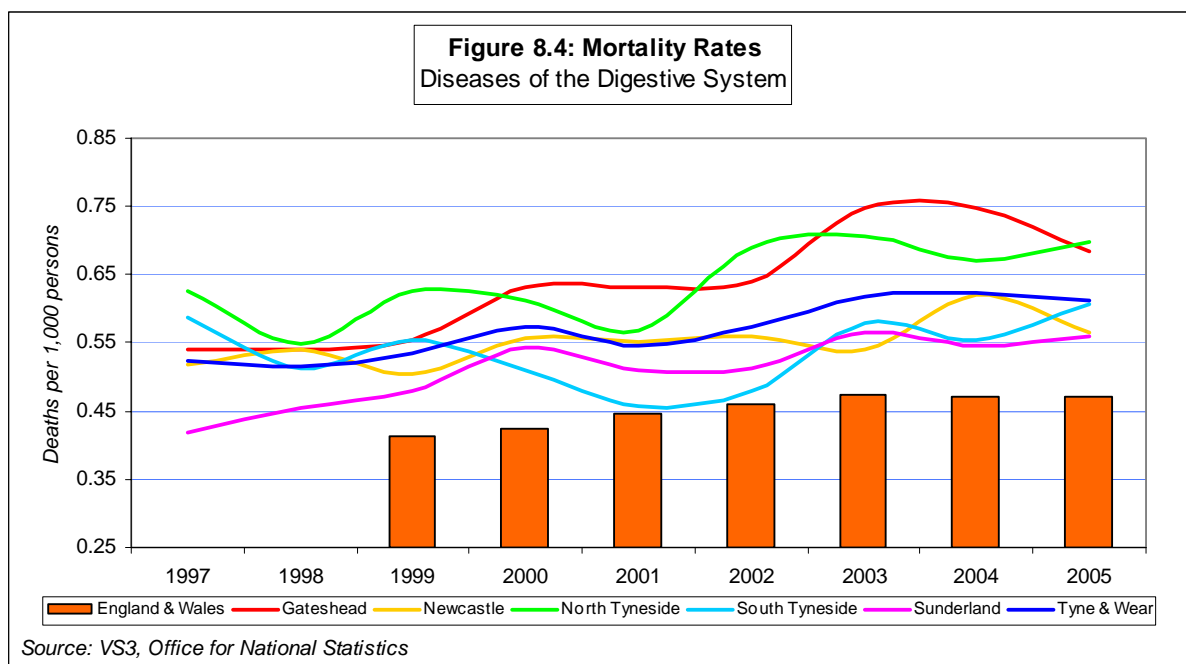
8.4 Diseases of the Digestive System

In 2005, 6% (672) of all deaths in Tyne & Wear were as a result of diseases of the digestive system. This was one percentage point higher than the North East and England & Wales (both 5%). One important causal factor may well be heavy alcohol consumption (see Section 7 for more detail).

Diseases of the digestive system (e.g. ulcer of stomach & duodenum and chronic liver disease & cirrhosis) were the fourth-largest cause of death in Tyne & Wear between 1997 and 2005.

In all Tyne & Wear Districts, except for South Tyneside and Sunderland the average mortality rate due to diseases of the digestive system, between 1997 and 2005, was 0.6 deaths per 1,000 persons. In South Tyneside and Sunderland, the rate was slightly lower at 0.5 deaths per 1,000 persons. (Figure 8.4)

The **number** of deaths attributable to diseases of the digestive system **rose (15%)** in Tyne & Wear between 1997 and 2005. At District level, mortality **rates** rose in all five Districts. The most notable rises were in Sunderland (34%) and Gateshead (26%). Smaller rises were experienced in North Tyneside (12%) and Newcastle (9%). South Tyneside experienced the smallest rise in mortality rate due to diseases of the digestive system (4%).

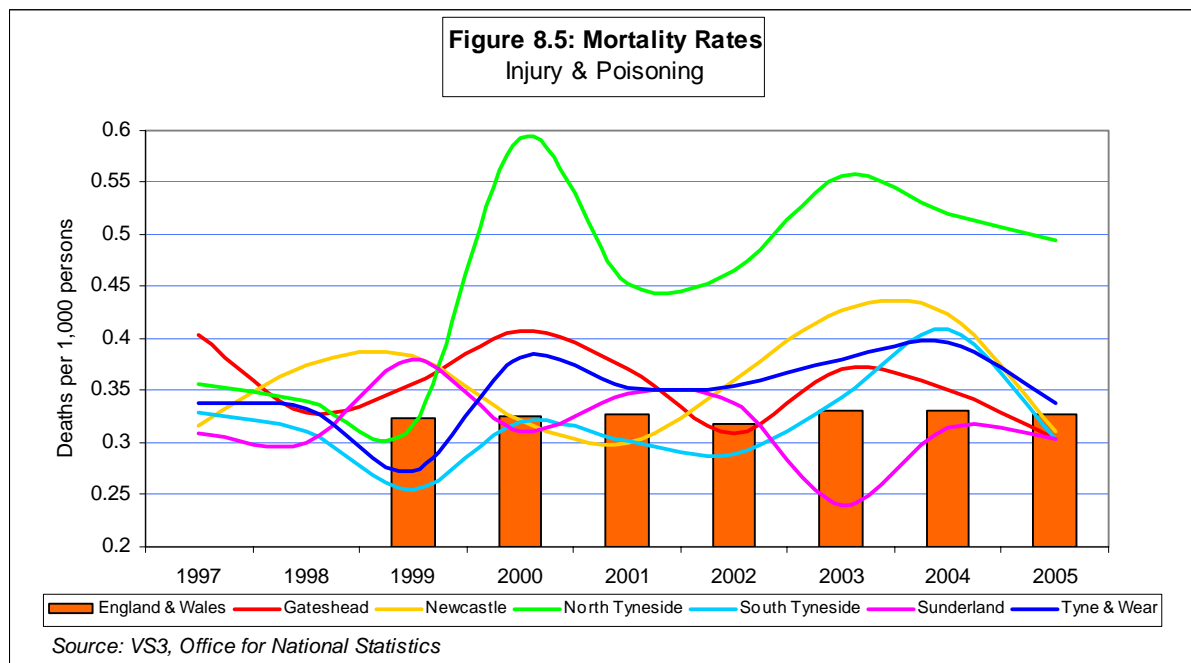


8.5 Injury & Poisoning

In 2005, 3% (371) of all deaths in Tyne & Wear were as a result of injury & poisoning (external causes of morbidity and mortality). This figure was the same as both England & Wales and the North East. Across the EU-25, deaths from external causes totalled 5% in 2003 (6% for men and 4% for women)²⁵.

Injury & poisoning (including all accidents) was the fifth-largest cause of death in Tyne & Wear between 1997 and 2005²⁶. Mortality rates were highest in North Tyneside (nine-year average of 0.5 deaths per 1,000 persons) [possibly due to its relatively large elderly population having more fatal injuries] (Figure 8.5). In Gateshead and Newcastle, rates were marginally lower at 0.4 deaths per 1,000 persons and in South Tyneside and Sunderland, rates were lower still at 0.3 deaths per 1,000 persons.

The **number** of deaths due to injury & poisoning fell 1% in Tyne & Wear between 1997 and 2005. At District level, **rates** of death arising from injury or poisoning declined most notably in Gateshead (-27%) and South Tyneside (-10%). In Newcastle and Sunderland, more moderate falls in mortality rates were experienced (-2% and -4% respectively). North Tyneside was the only district where mortality rates rose (+40%) between 1997 and 2005.



²⁵ Regions: Statistical Yearbook 2006' (EC & Eurostat., 2006)

²⁶ Though in 2005, the fifth largest cause of death was registered as being from 'Diseases of the nervous system and sense organs' with 373 deaths compared to the 371 caused by injury and poisoning.

8.6 Other Causes

Between 1997 and 2005 in Tyne & Wear, the (net) number of deaths from other causes (not previously mentioned) rose (up 226). There were rises in deaths due to:

- Diseases of the nervous system and sense organs (+140, + 60%)
- Infectious and parasitic diseases (+107, +110%)
- Diseases of the genitourinary system (+98, + 59%)
- Mental disorders (+52, +18%)
- Diseases of the musculo-skeletal system and connective tissue (+29, +56%)
- Diseases of the skin & subcutaneous tissue (+26, +186%)

There was a fall in deaths between 1997 and 2005 in the following:

- Diseases of blood and blood-forming organs (-28, -64%)
- Signs, symptoms & ill-defined conditions (-28, -19%)
- Endocrine, nutritional & metabolic diseases & immunity disorders (-20, -13%)
- Congenital anomalies (-9, -28%)

9. NATURAL CHANGE

‘Natural change’ is population change resulting from live births minus deaths (Table 9.1 and Figure 9.1). It excludes population change occurring as a result of net migration.

Between 1997 and 2005, the population in Tyne & Wear (nine-year average of -861) and the North East (nine-year average of -1,278) declined as a result of natural change. However, nationally population increased due to natural change (nine-year average of 84,994). In 2005, Tyne & Wear’s population increased due to natural change for the first time in nine years (+233). The main cause of population decline in Tyne & Wear up to 2004 remained out-migration rather than natural change²⁷.

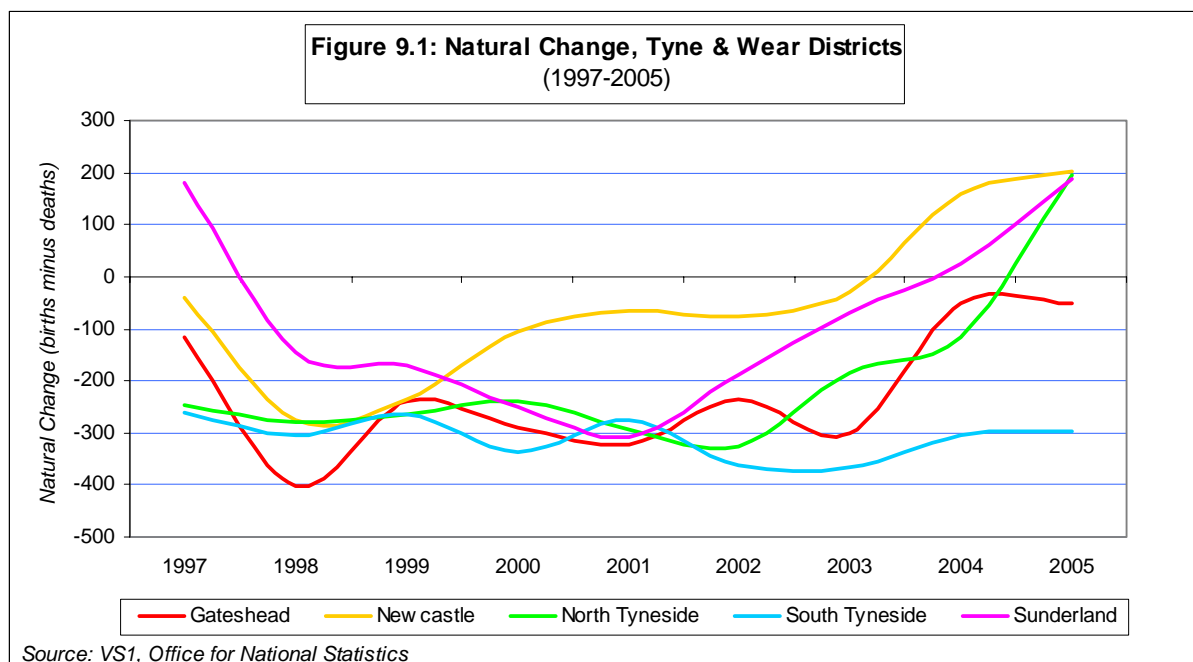
Between 1997 and 2005, South Tyneside lost on average the most people per annum as a result of natural change (-308). Gateshead and North Tyneside lost on average -223 and -195 people per annum respectively. Sunderland lost on average 83 people and Newcastle 52 persons per annum. In 2005, there were more live births than deaths in Newcastle (+201), North Tyneside (+194) and Sunderland (+186).

Table 9.1: Natural Change

	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1997-2005
Gateshead	-118	-403	-239	-289	-323	-236	-302	-51	-50	-223
Newcastle	-42	-274	-235	-106	-65	-75	-28	158	201	-52
North Tyneside	-248	-278	-264	-238	-292	-328	-185	-117	194	-195
South Tyneside	-261	-303	-266	-336	-277	-363	-367	-304	-298	-308
Sunderland	179	-145	-171	-251	-308	-188	-70	25	186	-83
Tyne & Wear	-490	-1,403	-1,175	-1,220	-1,265	-1,190	-952	-289	233	-861
North East	-393	-1,830	-1,625	-2,033	-2,442	-2,248	-1,685	-42	800	-1,278
England, Wales & Elsewhere*	84,041	82,466	68,340	66,564	62,136	60,766	82,318	125,471	132,842	84,994

Note: *Elsewhere is defined as births and deaths of non-resident people visiting England & Wales

Source: VS1, Office for National Statistics



²⁷ Between 2003 and 2004, domestic net out-migration fell from -2,063 to -1,833 (by 11%) due to a rise in in-migrants and a fall in out-migrants (NHSCR data).

10. HEALTH PROFILES FOR TYNE & WEAR

The Association of Public Health Observatories was commissioned by the Department of Health Public Health Information and Intelligence Task Force to produce 'Health Profiles' as part of the government white paper 'Choosing Health: Making Healthy Choices Easier'. The local authority Health Profiles for England were published in April 2006 and are aligned to the national report 'Health Profile of England' published in October 2006.

A health profile has been produced for all but 2 of the 388 local authorities in England. The 'Community Health Profiles' as they are known, will be updated annually and can be used by local authorities to highlight health issues and problems related to health or health inequalities. They are intended as a comparable overview, based on a number of key indicators. Data is compared with the regional and England average and a range for similar areas is also presented²⁸.

The following three sections present key findings from the health profiles for the Tyne & Wear LADs. Data on indicators from three of the five themes highlighted in the profiles are presented; 'The way we live'; 'How long we live and what we die of'; and 'Health and ill health in our community'²⁹.

10.1 Health Profiles: 'The way we live'

The four indicators grouped under this theme are: people who smoke; binge drinking; healthy eating; and obese adults³⁰ (Table 10.1). Overall, the Tyne & Wear Districts performed 'significantly worse than the England average' on these four indicators. Only North Tyneside and Newcastle were found to be 'not significantly different from the England average' on the indicator concerning obese adults. North Tyneside was also found to be 'not significantly different from the England average' on people who smoke.

Of the five Tyne & Wear LADs:

- Gateshead had the highest percentage of smokers aged 18-74 over the period 2000-02.
- North Tyneside had the lowest percentage of smokers of all the Tyne & Wear Districts (28.7%).
- Newcastle had a significantly higher percentage of adults binge drinking compared to the other Tyne & Wear Districts (29.2%) [about 3 or 4 percentage points above the others].
- Gateshead had the lowest proportion of binge drinkers (25.0%).
- North Tyneside had the highest proportion of adults eating 5 or more portions of fruit and vegetables a day at 17.7%.
- Gateshead, South Tyneside and Sunderland were all found to have 24% or more of adults classed as obese.

²⁸ The range for Newcastle is based on the ONS Group Cluster range 'Regional Centres'. The range for the remaining four Tyne & Wear Districts is the ONS Group Cluster range 'Industrial hinterlands'.

²⁹ The two themes not included in this analysis are 'Our communities' and 'Giving children and young people a healthy start'. The former theme did not relate directly to this analysis and the latter did not contain sufficient information to be warrant inclusion.

³⁰ One further indicator was included under this theme in the profile: 'physically active adults'. No data was currently available on this indicator but will be provided when it becomes available.

Table 10.1: Health Profiles: 'The way we live'

	People who smoke ¹	Binge Drinking ²	Healthy Eating ³	Obese Adults ⁴
Gateshead	33.1%	25.0%	17.1%	24.0%
Newcastle	32.2%	29.2%	17.4%	21.8%
North Tyneside	28.7%	25.3%	17.7%	22.8%
South Tyneside	32.9%	26.0%	16.3%	24.2%
Sunderland	32.8%	26.7%	16.5%	24.1%

Key to Performance Indicators

Significantly better than the England average



Not significantly different from the England average



Significantly worse than the England average



Notes: All data for the period 2000-2002, apart from 'Healthy Eating', for period 2001-2002. Synthetic estimates derived from the Health Survey for England.

¹ Estimated percentages of current smokers (aged 18-74).

² Synthetic estimate of the percentage of adults binge drinking.

³ Synthetic estimate of the number of adults who eat 5 or more portions of fruit and vegetables/day.

⁴ Synthetic estimate of the number of adults who are obese.

Source: *Community Health Profiles, 2006, Department of Health.*

10.2: Health Profiles: 'How long we live and what we die of'

The six indicators grouped under this theme are: life expectancy; deaths from smoking; early deaths from heart disease & stroke; early deaths from cancer; infant deaths; and road injuries & deaths (Table 10.2). Overall, the Tyne & Wear Districts performed 'significantly worse than the England average' on the first four of these six indicators. All five Districts performed 'not significantly different from the England average' on the indicator concerning infant deaths. On road injuries and deaths, all of the Districts performed better than the England average, apart from South Tyneside, which was found to be 'not significantly different from the England average'.




Of the five Tyne & Wear LADs:

- North Tyneside had the highest life expectancy for both males and females.
- Death rates from smoking were highest in Gateshead (175.9 per 100,000 population) and lowest in South Tyneside (158.3).
- Death rates from heart disease & stroke were highest in Newcastle and Gateshead (122.2 and 122.0 deaths per 100,000 European standard population).
- Though death rates from heart disease were lowest in North Tyneside (106.8), this was still classed as significantly higher than the England rate.
- Death rates from cancer were highest in South Tyneside (154.7 per 100,000 European standard population) and lowest in Sunderland (137.8).
- Death rates from both heart disease and cancer were found to be falling in all five Tyne & Wear Districts. Furthermore, the gap was said to be narrowing with the England average in Gateshead, Newcastle and Sunderland.
- The rate of infant deaths (per 1,000 live births) was highest in Sunderland (6.5) and lowest in South Tyneside (3.5).
- The rate of road injuries and deaths was highest in South Tyneside (7.4 per 100 million vehicle kilometres) and lowest in Gateshead (4.3).
- Gateshead was found to have the lowest death rate of road injuries and deaths of all comparable local authorities and both North Tyneside and Sunderland were found to be amongst the lowest of comparable local authorities (i.e. ONS Cluster Group 'Industrial hinterlands').

Table 10.2: Health Profiles: 'How long we live and what we die of'

	Life Expectancy (years)		Deaths- Smoking ¹		Early Deaths -heart disease & stroke ²		Early Deaths- cancer ³		Infant Deaths (under 1 year) ⁴		Road Injuries & deaths ⁵	
	Male	Female	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Gateshead	74.6	79.4	1,483	175.9	828	122.0	924	139.6	26	4.2	165	4.3
Newcastle	74.4	79.8	1,765	165.8	978	122.2	1,162	147.0	47	5.4	239	6.3
North Tyneside	75.0	79.9	1,422	161.6	720	106.8	974	147.9	28	4.4	121	4.5
South Tyneside	74.6	79.4	1,083	158.3	644	119.2	810	154.7	16	3.5	119	7.4
Sunderland	74.6	79.0	1,852	164.2	1,160	119.2	1,301	137.8	58	6.5	218	5.8

Key to Performance Indicators

Significantly better than the England average	
Not significantly different from the England average	
Significantly worse than the England average	

Notes: All data for the period 2002-2004, apart from 'Road injuries & deaths', for period 2003-2004.

¹ Average annual deaths due to smoking related causes (aged 35+) expressed as a number and Directly Standardised rate per 100,000 population.

² Mortality from all circulatory disease (ICD-10 100-199) Directly age-standardised rates, Persons under 75, per 100,000 European Standard population.

³ Mortality from all cancers (ICD10 C00-C97) Directly age-standardised rates, Persons under 75, per 100,000 European Standard population.

⁴ The number of infant deaths (less than one year) per 1,000 live births (crude rate).

⁵ Number of people killed or seriously injured in RTAs per 100 million vehicle kilometres.

Source: Community Health Profiles, 2006, Department of Health.

10.3: Health Profiles: 'Health and ill health in our community'

The five indicators grouped under this theme are: feeling 'in poor health'³¹; mental health treatment; alcohol related hospital stays; drug misuse treatment; and people with diabetes³² (Table 10.3).

Overall, the Tyne & Wear Districts performed 'significantly worse than the England average' on the indicators relating to poor health and alcohol. Gateshead, Newcastle and South Tyneside performed significantly worse than the England average on drug misuse treatment; North Tyneside, South Tyneside and Sunderland performed worse than the England average on people with diabetes. South Tyneside and Sunderland also performed worse than the England average on mental health treatment.

More positively, on drug misuse treatment, North Tyneside was found to be 'not significantly different from the England average' and Sunderland was found to perform better than the average.

On mental health treatment, Gateshead and North Tyneside were found to be not significantly different from the England average and Newcastle was found to be performing better than the average.

Finally, on people with diabetes, Gateshead was found to be not significantly different to the England average and Newcastle was found to be significantly better than the England average.

Of the five Tyne & Wear LADs:

- Sunderland had both the highest number (35,027) and rate (11.6%) of people feeling in poor health. North Tyneside had the lowest rate (9.4%).
- The best performing district in terms of mental health treatment was found to be Newcastle, with 0.7 patients receiving treatment per 1,000 population (note: high rates are considered better as they reflect better service provision). The worst performing District was found to be South Tyneside with 0.3 patients per 1,000 population.
- South Tyneside had the highest rate of alcohol related stays (336.2 per 100,000 population); while North Tyneside had the lowest (220.6).

³¹ Note: this data is also available through the Census 2001 with the question 'Over the last twelve months would you say your health has on the whole been: Good; Fairly good or Not good?'

³² Two further indicators were included in this theme: 'Children's tooth decay' and 'Sexually transmitted infections'. The former was not considered relevant to this analysis and the latter had no data currently available.

- On drug misuse treatment, Gateshead had the worst rate (1163.9 per 100,000 resident population) while Sunderland had the lowest rate (564.4).
- The percentage of people on general practice diabetes registers was highest in South Tyneside (4.0%) and lowest in Newcastle (3.1%) (note: high rates considered worse as reflects high prevalence).

Table 10.3: Health Profiles: 'Health and ill health in our community'

	Feeling 'in poor health' ¹		Mental health treatment ²		Alcohol related hospital stays ³		Drug misuse treatment ⁴		People with diabetes ⁵	
	Number	Rate	Number	%	Number	Rate	Number	Rate	Number	%
Gateshead	24,202	11.1	1,102	0.5	2,879	289.0	895	1163.9	6,684	3.3
Newcastle	29,695	10.9	1,941	0.7	4,268	322.4	1,240	991.0	9,233	3.1
North Tyneside	20,863	9.4	1,015	0.5	2,184	220.6	539	723.8	7,273	3.7
South Tyneside	18,603	10.7	465	0.3	2,568	336.2	535	893.0	6,046	4.0
Sunderland	35,027	11.6	1,026	0.4	3,846	262.7	663	564.4	9,703	3.5

Key to Performance Indicators

Significantly better than the England average



Not significantly different from the England average



Significantly worse than the England average



Notes:

¹ Directly age standardised percentage of household residents who reported their health over the previous 12 months as having been 'not good' (2001).

² Prevalence rate of patients on practice register of people with severe long-term mental health problems who require and have agreed to regular follow-up (rate per 1,000 population). (2005) [Note: High rates considered 'better' as reflects better service provision].

³ Directly standardised rate for persons who were admitted at least once in year for alcohol related condition (ICD10: F10, I42.6, K70, K73, K74, X45). Average rate per 100,000 population/year over the period 1998-2003.

⁴ Number of drug users in contact with druf treatment services per 100,000 resident population (all ages) (2004/05) [Note: High rates considered 'worse' as reflects high prevalence].

⁵ Prevalence- number of patients who have a GP diagnosis of diabetes as a proportion of total list size (%) (2005) [Note: High rates considered 'worse' as reflects high prevalence].

Source: *Community Health Profiles, 2006, Department of Health.*

11. FUTURE HEALTH PROSPECTS IN TYNE & WEAR

The future health prospects of all 408 Local Authorities in England & Wales are assessed in a recent report entitled 'Health of the Nation Report' (CACI and TNS, 2006). This report analyses diet, health and exercise characteristics³³ as well as demographic attributes and has ranked Local Authorities according to four groups:

- Group 1: Existing Problems (High levels of serious illness and poor diet and consumption patterns)
- Group 2: Future Problems (High levels of severely unhealthy lifestyles likely to lead to serious illness)
- Group 3: Possible Future Concerns (Generally good health but with some potentially unhealthy lifestyle traits)
- Group 4: Good Health with few lifestyle issues

The future health prospects of the five Tyne & Wear authorities are predicted to be poor, but not as significant as existing problems according to the rankings (Table 11.1). For existing problems, Gateshead (16th), South Tyneside (15th) and Sunderland (25th) feature in the top thirty worst areas however for future problems, none of the Tyne & Wear Districts feature in top thirty.

Table 11.1: Future health prospects- ranking of Tyne & Wear Authorities in E&W (408 LAs)

	Existing Problems	Future Problems	Possible Future Concerns	Healthy	
Gateshead	16th	53rd	372nd	388th	
Newcastle	48th	47th	337th	343rd	
North Tyneside	46th	125th	191st	363rd	
South Tyneside	15th	31st	379th	394th	
Sunderland	25th	45th	375th	385th	

Source: CACI/TNS Health of the Nation Report

³³ The report has been produced using a combination of official data and commercial information from lifestyle surveys and market research. For further details of the report see <http://www.caci.co.uk/acorn/healthacorn.asp>.

APPENDICES

Appendix 1: Live Births and Deaths by Ward

Note: New ward boundaries were adopted in Tyne & Wear Districts in June 2004, hence the discontinuity in the live births and deaths wards series between 2003 and 2004.

Table A1: Live Births by Ward (Gateshead)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Bede	130	117	100	96	90	107	94	Birtley	79	86
Bensham	124	117	108	125	112	110	124	Blaydon	110	122
Birtley	88	88	71	68	57	74	70	Bridges	99	120
Blaydon	136	118	112	124	105	82	100	Chopwell & Rowlands Gill	97	85
Chopwell & Rowlands Gill	103	101	101	97	86	68	74	Chowdene	72	79
Chowdene	72	75	78	83	68	64	55	Crawcrook & Greenside	85	84
Crawcrook & Greenside	100	104	89	111	89	114	106	Deckham	121	143
Deckham	101	99	84	73	121	97	96	Dunston & Teams	105	108
Dunston	124	121	108	96	107	94	119	Dunston Hill & Whickham East	66	71
Felling	101	98	71	80	85	95	75	Felling	117	113
High Fell	82	100	91	90	93	82	95	High Fell	107	122
Lamesley	105	78	77	84	70	83	86	Lamesley	105	75
Leam	141	118	112	129	98	126	102	Lobley Hill & Bensham	128	110
Low Fell	94	88	107	106	103	84	84	Low Fell	104	95
Pelaw & Heworth	67	95	72	73	67	70	84	Pelaw & Heworth	74	71
Ryton	114	77	104	91	90	90	88	Ryton, Crookhill & Stella	72	70
Saltwell	119	115	141	144	109	106	124	Saltwell	173	178
Teams	136	108	122	92	113	123	103	Wardley & Leam Lane	89	102
Whickham North	109	94	115	92	88	100	88	Whickham North	73	61
Whickham South	97	88	92	80	77	75	93	Whickham South & Sunnyside	80	63
Winlaton	59	62	46	58	58	50	55	Windy Nook & Whitehills	104	95
Wrekendyke	125	101	108	78	109	118	105	Winlaton & High Spen	68	65
Total	2,327	2,162	2,109	2,070	1,995	2,012	2,020	Total	2,128	2118

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A2: Live Births by Ward (Newcastle)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Benwell	101	97	85	101	90	89	82	Benwell & Scotswood	211	170
Blakelaw	162	142	148	126	137	138	140	Blakelaw	140	143
Byker	112	105	97	91	91	135	109	Byker	155	161
Castle	108	129	119	111	131	110	119	Castle	114	91
Dene	139	132	136	143	162	174	156	Dene	94	112
Denton	101	85	106	91	104	111	91	Denton	108	108
Elswick	158	148	151	153	152	188	210	East Gosforth	97	105
Fawdon	121	123	118	116	104	110	124	Elswick	234	247
Fenham	159	124	129	120	132	140	129	Fawdon	109	104
Grange	130	143	128	117	115	122	125	Fenham	127	130
Heaton	103	97	77	94	91	96	74	Kenton	140	132
Jesmond	88	109	82	84	60	82	56	Lemington	126	121
Kenton	146	135	157	145	121	129	121	Newburn	92	95
Lemington	107	129	105	124	122	118	107	North Heaton	89	82
Monkchester	175	142	128	123	129	127	132	North Jesmond	40	40
Moorside	104	89	100	91	133	129	137	Ouseburn	47	56
Newburn	111	111	102	87	99	95	95	Parklands	94	111
Sandyford	90	75	83	92	74	79	82	South Heaton	59	72
Scotswood	124	109	104	101	98	53	71	South Jesmond	40	40
South Gosforth	119	148	130	144	118	134	123	Walker	180	196
Walker	111	108	100	121	91	78	103	Walkergate	72	82
Walkergate	97	118	86	98	91	88	82	Westerhope	55	69
West City	86	77	65	76	66	59	98	Westgate	85	89
Westerhope	116	98	92	69	96	99	87	West Gosforth	102	97
Wingrove	189	141	143	167	167	157	143	Wingrove	192	183
Woolsington	131	120	108	102	101	101	99	Woolsington	116	143
Total	3,188	3,034	2,879	2,887	2,875	2,941	2,895	Total	2,918	2979

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A3: Live Births by Ward (North Tyneside)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Battle Hill	132	169	132	117	128	126	123	Battle Hill	112	115
Benton	61	83	74	95	71	78	94	Benton	99	92
Camperdown	103	97	93	100	93	115	105	Camperdown	139	151
Chirton	153	174	128	156	123	117	132	Chirton	157	185
Collingwood	116	120	117	125	91	108	105	Collingwood	106	111
Cullercoats	71	74	66	75	64	60	71	Cullercoats	71	65
Holystone	137	158	165	172	158	147	156	Howdon	138	143
Howdon	94	100	90	78	72	87	95	Killingworth	102	119
Longbenton	55	60	43	55	45	61	63	Longbenton	99	110
Monkseaton	125	116	100	115	96	82	76	Monkseaton North	90	73
North Shields	114	77	92	110	91	112	104	Monkseaton South	105	110
Northumberland	121	146	122	111	93	100	106	Northumberland	85	90
Riverside	135	118	92	102	143	158	176	Preston	76	75
St. Mary's	66	56	71	54	72	55	50	Riverside	143	175
Seatonville	112	100	87	82	94	90	94	St Mary's	40	63
Tynemouth	84	81	88	83	77	72	84	Tynemouth	106	102
Valley	127	131	133	138	135	142	127	Valley	155	125
Wallsend	129	123	120	101	100	124	135	Wallsend	126	142
Weetslade	115	101	88	80	91	93	97	Weetslade	102	96
Whitley Bay	95	87	105	103	112	115	108	Whitley Bay	109	132
Total	2,145	2,171	2,006	2,052	1,949	2,042	2,101	Total	2,160	2274

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A4: Live Births by Ward (South Tyneside)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
All Saints	136	97	123	89	96	88	94	Beacon & Bents	130	106
Beacon & Bents	97	97	92	86	83	100	104	Bede	79	87
Bede	101	72	82	83	61	70	62	Biddick & All Saints	117	127
Biddick Hall	88	93	80	76	84	73	84	Boldon Colliery	87	98
Boldon Colliery	121	96	102	119	101	99	111	Cleadon & East Boldon	58	59
Cleadon & East Boldon	72	74	85	77	71	58	65	Cleadon Park	70	71
Cleadon Park	96	91	94	85	88	91	78	Fellgate & Hedworth	87	74
Fellgate & Hedworth	80	93	97	71	64	89	79	Harton	74	73
Harton	52	65	56	52	57	57	56	Hebburn North	87	108
Hebburn Quay	132	115	105	98	97	101	95	Hebburn South	68	64
Hebburn South	51	43	34	34	52	46	47	Horsley Hill	67	77
Horsley Hill	70	78	73	73	74	72	77	Monkton	76	82
Monkton	98	109	103	78	87	69	90	Primrose	79	78
Primrose	94	76	78	83	85	82	72	Simonside & Rekendyke	136	138
Rekendyke	110	111	90	87	86	104	102	Westoe	99	66
Tyne Dock & Simonside	69	60	77	70	54	57	67	West Park	90	88
Westoe	93	90	90	80	73	63	83	Whitburn & Marsden	61	70
West Park	69	61	64	71	59	48	61	Whiteleas	75	63
Whitburn & Marsden	68	46	66	54	45	59	43	Total	1,540	1529
Whiteleas	66	86	52	55	62	41	53			
Total	1,763	1,653	1,643	1,521	1,479	1,467	1,523			

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A5: Live Births by Ward (Sunderland)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Castletown	129	117	133	130	121	115	132	Barnes	98	116
Central	143	143	126	121	129	106	118	Castle	141	131
Colliery	115	106	96	102	83	91	82	Copt Hill	125	127
Eppleton	143	146	129	134	155	133	155	Doxford	98	94
Fulwell	98	85	103	90	76	76	70	Fulwell	82	94
Grindon	119	113	112	102	119	109	99	Hendon	136	171
Hendon	114	109	129	115	107	136	124	Hetton	113	115
Hetton	128	116	114	116	112	125	117	Houghton	109	144
Houghton	112	121	87	104	101	106	111	Millfield	126	127
Pallion	100	97	84	89	78	86	103	Pallion	143	131
Ryhope	128	180	170	122	135	129	182	Redhill	139	159
St. Chad's	110	80	98	91	84	85	81	Ryhope	101	130
St. Michael's	91	76	80	63	79	80	65	St Anne's	117	113
St. Peter's	93	86	92	91	74	92	91	St Chad's	82	98
Shiney Row	183	174	167	183	164	162	166	St Michael's	77	92
Silksworth	136	150	120	116	115	109	132	St Peter's	88	100
South Hylton	155	146	138	123	131	127	124	Sandhill	136	135
Southwick	107	135	112	99	110	124	104	Shiney Row	164	153
Thorney Close	133	121	127	106	110	115	100	Silksworth	118	116
Thornholme	117	132	111	143	99	125	117	Southwick	134	126
Town End Farm	161	133	148	131	107	109	118	Washington Central	125	93
Washington East	177	150	134	136	133	146	144	Washington East	121	105
Washington North	187	170	169	144	139	145	172	Washington North	161	169
Washington South	199	185	179	166	163	180	171	Washington South	99	105
Washington West	133	152	153	143	129	119	134	Washington West	138	124
Total	3,311	3,223	3,111	2,960	2,853	2,930	3,012	Total	2,971	3068

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A6: Deaths by Ward (Gateshead)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Bede	116	125	109	105	87	94	107	Birtley	114	107
Bensham	94	111	106	102	109	113	110	Blaydon	79	88
Birtley	89	86	95	103	92	94	101	Bridges	115	98
Blaydon	90	117	104	71	86	79	79	Chopwell & Rowlands Gill	89	94
Chopwell & Rowlands Gill	90	122	108	97	86	89	89	Chowdene	93	113
Chowdene	118	129	103	118	132	129	128	Crawcrook & Greenside	87	98
Crawcrook & Greenside	117	91	109	89	101	112	116	Deckham	115	106
Deckham	114	106	81	94	94	87	99	Dunston & Teams	104	113
Dunston	129	138	111	109	101	98	126	Dunston Hill & Whickham East	115	86
Felling	140	138	125	134	137	123	118	Felling	100	111
High Fell	120	132	120	148	142	136	115	High Fell	113	128
Lamesley	113	115	117	110	101	84	98	Lamesley	91	86
Leam	107	117	98	120	94	98	121	Lobley Hill & Bensham	126	126
Low Fell	131	146	112	138	120	103	129	Low Fell	102	105
Pelaw & Heworth	113	123	105	100	97	84	105	Pelaw & Heworth	103	95
Ryton	103	124	117	102	105	105	107	Ryton, Crookhill & Stella	78	76
Saltwell	92	94	70	92	82	76	79	Saltwell	69	89
Teams	111	98	105	102	110	95	99	Wardley & Leam Lane	85	71
Whickham North	159	169	144	120	155	122	110	Whickham North	88	98
Whickham South	94	80	82	69	77	74	74	Whickham South & Sunnyside	66	62
Winlaton	111	121	122	125	124	138	119	Windy Nook & Whitehills	103	99
Wrekendyke	94	83	105	111	86	115	93	Winlaton & High Spen	144	119
Total	2,445	2,565	2,348	2,359	2,318	2,248	2,322	Total	2,179	2,168

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A7: Deaths by Ward (Newcastle)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Benwell	90	92	125	117	84	120	117	Benwell & Scotswood	181	147
Blakelaw	111	126	104	110	108	103	119	Blakelaw	109	92
Byker	150	147	134	150	171	164	188	Byker	165	197
Castle	84	123	93	99	85	111	89	Castle	73	76
Dene	135	150	132	151	145	140	155	Dene	85	81
Denton	137	134	143	115	112	131	111	Denton	101	121
Elswick	130	149	137	133	137	120	112	East Gosforth	112	103
Fawdon	127	136	128	104	135	154	156	Elswick	196	193
Fenham	162	129	127	125	126	134	89	Fawdon	143	147
Grange	195	169	165	161	147	135	147	Fenham	108	102
Heaton	87	83	81	81	80	68	74	Kenton	129	120
Jesmond	145	152	131	95	132	115	98	Lemington	95	119
Kenton	150	148	126	140	150	150	135	Newburn	112	111
Lemington	113	116	114	96	104	103	98	North Heaton	83	64
Monkchester	119	140	149	143	96	94	107	North Jesmond	48	53
Moorside	106	94	107	73	87	106	104	Ouseburn	65	62
Newburn	137	136	130	117	126	123	128	Parklands	70	68
Sandyford	125	146	135	124	105	101	118	South Heaton	72	74
Scotswood	85	108	83	78	63	76	55	South Jesmond	67	70
South Gosforth	137	138	145	134	87	109	104	Walker	167	179
Walker	144	142	114	136	120	147	136	Walkergate	128	101
Walkergate	109	106	119	112	105	102	102	Westerhope	111	110
West City	105	115	97	95	114	93	101	Westgate	76	76
Westerhope	133	135	137	135	146	137	116	West Gosforth	74	91
Wingrove	100	92	85	64	80	86	78	Wingrove	78	83
Woolsington	114	102	73	105	95	94	86	Woolsington	112	138
Total	3,140	3,216	3,114	2,993	2,940	3,016	2,923	Total	2,760	2,778

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A8: Deaths by Ward (North Tyneside)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Battle Hill	120	119	105	99	123	102	86	Battle Hill	98	86
Benton	115	128	144	133	148	123	110	Benton	121	109
Camperdown	88	79	71	99	74	83	107	Camperdown	84	72
Chirton	119	128	109	91	70	91	73	Chirton	122	82
Collingwood	101	111	84	116	93	101	96	Collingwood	99	80
Cullercoats	112	118	145	115	143	126	115	Cullercoats	117	131
Holystone	118	139	107	122	150	119	130	Howdon	148	134
Howdon	116	96	82	99	108	105	111	Killingworth	89	88
Longbenton	89	101	87	69	84	84	73	Longbenton	119	131
Monkseaton	125	130	136	113	117	129	115	Monkseaton North	85	75
North Shields	190	208	194	209	197	226	217	Monkseaton South	103	97
Northumberland	117	104	102	102	107	115	103	Northumberland	89	69
Riverside	146	110	110	127	123	161	166	Preston	149	137
St. Mary's	90	91	94	73	60	85	76	Riverside	177	141
Seatonville	90	124	82	89	93	97	120	St Mary's	74	81
Tynemouth	101	118	100	107	83	107	113	Tynemouth	138	125
Valley	117	123	106	117	111	113	121	Valley	87	89
Wallsend	155	133	121	137	104	122	126	Wallsend	125	123
Weetslade	118	116	121	105	116	122	93	Weetslade	102	104
Whitley Bay	166	173	170	168	137	159	135	Whitley Bay	151	126
Total	2,393	2,449	2,270	2,290	2,241	2,370	2,286	Total	2,277	2,080

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A9: Deaths by Ward (South Tyneside)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
All Saints	109	84	95	87	75	90	96	Beacon & Bents	116	104
Beacon & Bents	127	122	96	112	108	94	95	Bede	106	87
Bede	129	139	139	123	115	106	116	Biddick & All Saints	110	125
Biddick Hall	90	93	95	84	74	110	96	Boldon Colliery	84	101
Boldon Colliery	106	101	83	85	71	68	102	Cleadon & East Boldon	77	83
Cleadon & East Boldon	75	63	87	74	65	80	64	Cleadon Park	93	83
Cleadon Park	77	76	68	71	64	85	75	Fellgate & Hedworth	73	66
Fellgate & Hedworth	77	62	74	82	70	70	72	Harton	141	131
Harton	113	117	109	97	110	80	111	Hebburn North	103	99
Hebburn Quay	94	110	98	73	95	94	81	Hebburn South	112	105
Hebburn South	94	75	80	86	69	76	68	Horsley Hill	109	100
Horsley Hill	122	100	90	107	100	102	83	Monkton	126	136
Monkton	154	117	148	130	155	158	153	Primrose	117	118
Primrose	137	128	103	125	85	111	114	Simonside & Rekendyke	87	101
Rekendyke	97	118	108	94	74	105	88	Westoe	128	103
Tyne Dock & Simonside	67	69	69	72	73	70	74	West Park	79	82
Westoe	111	123	94	108	111	105	120	Whitburn & Marsden	79	66
West Park	84	61	77	70	58	58	71	Whiteleas	104	137
Whitburn & Marsden	70	100	78	83	86	75	87	Total	1,844	1,827
Whiteleas	91	98	118	94	98	93	124			
Total	2,024	1,956	1,909	1,857	1,756	1,830	1,890			

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Table A10: Deaths by Ward (Sunderland)

	1997	1998	1999	2000	2001	2002	2003		2004	2005
Castletown	111	141	140	132	140	125	123	Barnes	142	123
Central	111	134	149	135	139	140	118	Castle	109	140
Colliery	148	139	125	116	142	147	133	Copt Hill	159	135
Eppleton	160	150	157	157	170	182	168	Doxford	83	71
Fulwell	89	114	90	88	95	102	94	Fulwell	104	98
Grindon	111	86	85	105	96	92	104	Hendon	135	123
Hendon	166	198	168	132	133	145	153	Hetton	132	138
Hetton	157	170	154	170	135	126	127	Houghton	148	129
Houghton	113	141	127	131	122	109	93	Millfield	110	111
Pallion	135	144	159	155	160	122	166	Pallion	107	104
Ryhope	107	131	142	139	135	108	113	Redhill	120	147
St. Chad's	117	148	145	140	120	127	128	Ryhope	129	102
St. Michael's	131	96	127	98	98	121	111	St Anne's	87	103
St. Peter's	175	199	188	192	180	152	151	St Chad's	121	125
Shiney Row	153	162	179	183	159	159	159	St Michael's	114	115
Silksworth	108	133	115	132	124	126	104	St Peter's	149	147
South Hylton	131	113	134	107	131	117	124	Sandhill	116	100
Southwick	124	144	116	131	111	125	135	Shiney Row	154	134
Thorney Close	129	119	110	100	107	102	91	Silksworth	108	109
Thornholme	151	166	133	117	145	125	125	Southwick	171	162
Town End Farm	89	84	76	83	84	101	87	Washington Central	104	102
Washington East	128	119	129	165	130	137	136	Washington East	95	104
Washington North	93	110	104	89	77	90	101	Washington North	86	83
Washington South	89	107	82	97	114	120	102	Washington South	52	56
Washington West	106	120	148	117	114	118	136	Washington West	111	121
Total	3,132	3,368	3,282	3,211	3,161	3,118	3,082	Total	2,946	2,882

Source: VS4 - Vital Statistics for Wards, ONS, Crown Copyright

Appendix 2: Health Datasets, 2005

Health datasets published by ONS (and available free of charge at www.statistics.gov.uk) include:

- Cancer Atlas of the United Kingdom and Ireland, 1991-2000
- Focus on Health
- The National Diet and Nutrition Survey: adults aged 19 to 64 years (Vols 1 to 5)

Health datasets published by the Department of Health (and available free of charge at www.dh.gov.uk) include:

- Drug Use, Smoking and Drinking Among Young People
- Health Survey for England
- NHS Workforce Statistics, England
- Smoking, Drinking and Drug Use Among Young People in England
- Smoking Related Behaviour and Attitudes

Health datasets published by the Health and Safety Executive (and available free of charge at www.hse.gov.uk) include:

- Self-reported Work-related illness in 2003/04: Results from the Labour Force Survey
- Statistics of Fatal Injuries

Appendix 3: Standardised Mortality Ratios (SMRs) in England³⁴

Note: In the report 'Death registrations in England & Wales, 2005; ONS state in their explanatory note on SMRs that "direct comparisons between areas or between sexes can be misleading" (p.64) however they go on to make a number of key observations where such comparisons are made. TWRI note that SMRs should only be used to enable comparisons with a national average.

The following two paragraphs on SMRs for other areas are presented for completeness. The first paragraph draws directly from the key observations made by ONS in the report cited above. The second paragraph updates a section of commentary included in TWRI's 'Health & Population Change Report, 2004' [For comparisons between areas, see Section 7.2 on Directly Standardised Mortality Rates (DSRs)].

1) ONS Observations on SMRs

Among Government Office Regions, the North East had the highest SMR in 2005 (113), while the lowest level was in the South West (92). At District level, Hartlepool in the North East had the highest mortality level in 2005 (131). This was followed by Knowsley (126), Liverpool and the UA of Halton (both 125), all located in the North West Government Office Region. The lowest SMRs were in the London Borough of Kensington & Chelsea (66), followed by Purbeck (77) and East Dorset (78), both in the South West Government Office Region.

2) TWRI Observations on SMRs

Compared to other urban/industrialised areas of England, Tyne & Wear had a typical SMR (113). Areas such as Greater Manchester Met County (115) and Merseyside Met County (115) had higher SMRs than Tyne & Wear, whilst areas such as Birmingham (108), Nottinghamshire (102) and Sheffield (105) had significantly lower SMRs. It is striking, and odd, that areas with more widespread experience of coal-mining, such as Nottinghamshire, or a history of heavy industry (Sheffield) had much better SMRs than Tyne & Wear. This might suggest other major public health factors which are negative in Tyne & Wear. Possibilities include; (higher levels of) smoking, drinking and less exercise. These issues are discussed in Section 7.3 of this report.

³⁴ As reported in the article 'Death registrations in England & Wales, 2005: area of residence' in 'Population Trends' Volume 124, Summer 2006, pp. 64-74.