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**HEALTH AND POPULATION CHANGE IN TYNE & WEAR 2001**  
**AN ANALYSIS OF ONS' VITAL STATISTICS**

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## KEY POINTS

### Introduction:

This report presents information on long-term trends in fertility and mortality in Tyne & Wear and its constituent Districts. It analyses a six-year data series (1996-2001) and covers fertility amongst women of all ages, those aged 11-15, 16-34 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 birth and deaths) are also covered. Patterns in Tyne & Wear are compared with regional and national trends (§1, §2 and §3).

### Fertility:

Since 1991, fertility in Tyne & Wear and its constituent Districts has been low, relative to the region and England & Wales. Since 1995, Total Fertility Rates (TFRs) in three Tyne & Wear Districts have tended to converge on the England & Wales rate. Sunderland and South Tyneside were the exceptions. South Tyneside was the only District where the six-year average TFR (1.76) exceeded the national rate (1.71) (§3; Table 3). General Fertility Rates (GFRs) are also low in Tyne & Wear and have tended to diverge from the England & Wales rate (§4; Fig. 4).

### Live Births by Age of Mother:

Fertility rates for women aged over 15 years fell in Tyne & Wear between 1996 and 2001, except for women aged 35+ in Gateshead, Newcastle and Sunderland.

- For women aged 11-15, fertility rates fell in all Tyne & Wear Districts, with the exception of Newcastle (+13%) between 1996 and 2001. The most substantial falls were in South Tyneside (-53%) and Sunderland (-41%). The number of live births to mothers in this age group fell sharply in 1999, but rose in 2000 and, for three Districts, again in 2001 (§5.1; Fig. 5).
- For women aged 16-34 fertility rates fell between 1996 and 2001 by between 4% (Gateshead) and 13% (Sunderland). This suggests a large number of women are choosing to have fewer children or not to raise a family, possibly in order to pursue careers. Women in this age group account for 88% of all births (§5.2).
- For women aged 35+, fertility rates rose in Tyne & Wear, between 1996 and 2001. They rose in Newcastle (+17%), Gateshead (+15%) and in Sunderland (+14%). Fertility rates fell in North Tyneside (-10%) and remained stable in South Tyneside. This suggests an increasing trend for women to delay childbearing until they have established careers, and also childbearing in subsequent relationships (§5.3; Table 7 and Fig. 7).

### Live Births by Marital Status:

In 2001, the number of births outside of marriage exceeded the number of births within marriage for the second year running, in both Tyne & Wear and the North East (§6.2). Between 1996 and 2001, the average percentage of live births within marriage in Tyne & Wear was markedly lower than in England & Wales (51%, E&W 62%). The proportion of live births within marriage also declined at a faster rate (down 6 percentage points) than in England & Wales (down 4 percentage points) over this period (§6.1; Table 8).

### Mortality

Mortality ratios for both Tyne & Wear and the North East are high, compared to the national average. Between 1996 and 2001, Standardised Mortality Ratios (SMRs) in Tyne & Wear have fluctuated, averaging 114 (E&W = 100). Between 1996 and 2001, SMRs deteriorated (rose) in two Tyne & Wear Districts, Sunderland and Gateshead, and improved (fell) in North Tyneside, Newcastle and South Tyneside.

### Deaths by Cause

Between 1996 and 2001, 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 88% of all deaths in 2001. The major causes were ischaemic heart disease; cancers of the trachea, bronchus & lung; pneumonia; diseases of the liver and intentional self-harm.

In Tyne & Wear in 2001:

- Circulatory disease was by far the most common cause of death, accounting for 38% of all deaths, slightly less than in England & Wales (40%) (§8.1).
- Cancers were responsible for 29% of all deaths in Tyne & Wear, slightly more than in England & Wales (26%) and the North East (28%) (§8.2).
- Respiratory diseases accounted for 13% of all deaths in Tyne & Wear, the North East and England & Wales (§8.3).
- Diseases of the digestive system (including chronic liver disease and cirrhosis) were responsible for 5% of all deaths in Tyne & Wear and the North East, one percentage point higher than England & Wales (§8.4).
- Injury & Poisoning accounted for 3% of all deaths at county, regional and national level (§8.5).

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

In Tyne & Wear the decline in population as a result of ‘natural change’ is becoming increasingly marked. Since 1998 the natural change in population in Tyne & Wear has been negative by over 1,000 persons per annum. In 1996 and 1997, it was half, or less, than this (§9). The main cause of population decline in Tyne & Wear, therefore remains out-migration, not natural change.

## 1. INTRODUCTION

This report presents information on long-term trends in fertility and mortality in Tyne & Wear and its constituent Districts. It analyses a six-year data series (1996-2001) and covers fertility amongst women of all ages, those aged 11-15, 16-34 and 35+, and the percentage 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 and deaths) are also covered. 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.

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-specific'. 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 Ward 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 before 2001:

- Only the rates for 2001, using the MYEs (mid-year estimates), take into account the (low) Census 2001.
- All rates in relation to population up to 2000 are (ultimately) based on the (high) Census 1991.
- The six-year averages (in relation to population) presented in this report, such as live births by age of mother are, therefore, a hybrid of two bases, Census 1991 and Census 2001.
- ONS has now issued revised (lower) MYEs for 1991-2000, but these have not yet been integrated into ONS' 'Vital Statistics' series.

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<sup>1</sup> 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](http://www.statistics.gov.uk)

## 2. MID-YEAR ESTIMATES OF POPULATION

The Office for National Statistics' Mid-Year Estimates, updated year on year from the most recent Census of Population, are used as the base for fertility and mortality rates. Table 1 presents the mid-year estimates for Tyne & Wear, its constituent Districts, the North East GOR and England & Wales between 1996 and 2001. The mid-2001 estimates are based on results of the 2001 Census, and take into account population change due to births, deaths and net migration in the period between Census day (29/04/01) and mid-year (30/06/01). Note: All other years are based on the 1991 Census [The mid-year estimates (MYEs) for 1991-2000 revised downward, by ONS in the light of Census 2001 have not yet been incorporated by ONS into rates before 2001 in this report].

Within the Tyne & Wear Districts, Sunderland (six-year average 290,100) and Newcastle (six-year average 273,500) have the largest populations. Gateshead (six-year average 197,700) and North Tyneside (six-year average 193,400) have slightly smaller populations. South Tyneside has the smallest population (six-year average 154,200).

Using the hybrid series in Table 1, the population of Tyne & Wear is estimated to have fallen between 1996 and 2001 by 51,000 (-4.5%). Population in all the Tyne & Wear Districts declined between 1996 and 2001. Population in Newcastle is estimated to have fallen by 8%, whilst in Gateshead and Sunderland it is estimated to have fallen by 5%. Population in South Tyneside is estimated to have fallen by 2% and in North Tyneside by less than 1% (-0.8%). [Prior to Census 2001, the population of North Tyneside was estimated to have risen very slightly].

**Table 1: Total Population**

	1996	1997	1998	1999	2000	2001*	Average*
Gateshead	201,000	200,200	198,900	198,100	196,900	191,200	197,700
Newcastle	282,300	279,500	276,100	273,000	270,500	259,600	273,500
North Tyneside	193,600	193,300	194,000	193,200	194,000	192,000	193,400
South Tyneside	156,100	155,400	154,600	153,500	152,700	152,800	154,200
Sunderland	294,300	293,000	292,300	290,700	289,500	280,800	290,100
Tyne & Wear	1,127,300	1,121,400	1,115,800	1,108,500	1,103,600	1,076,300	1,108,800
North East GOR	2,600,500	2,594,400	2,589,600	2,579,000	2,577,300	2,516,500	2,576,200
England & Wales	52,010,200	52,211,200	52,427,900	52,689,900	52,943,300	52,084,500	52,394,500

Source: *Mid-Year Estimates, ONS, Crown Copyright.*

Note: \* The mid-2001 estimate is based on Census 2001. The six-year averages are a hybrid of bases, the 1991 Census (1996-2000 mid-year estimates) and the 2001 Census (2001 mid-year estimate). (See Introduction).

In Tyne & Wear, between 1996 and 2001, the overall population fell slightly more quickly than the female population aged 15-44. Table 2, shows the female population aged 15-44 (used as the base for fertility rates). Newcastle (six-year average 61,200) and Sunderland (six-year average 60,600) have the largest populations of women of childbearing age. Gateshead (six-year average 40,400) and North Tyneside (six-year average 39,200) have smaller populations, whilst South Tyneside has the smallest average population of 30,500.

The childbearing population, females aged 15-44, declined steadily in all Districts between 1996 and 2001. In Gateshead and Newcastle the childbearing population declined by 5%, in Sunderland it fell by 4% and in North Tyneside by 1%. In South Tyneside the childbearing population fell by less than 1% over the same period. South Tyneside saw a steady decline in its childbearing population from 1996 to 2000 (3%), followed by a 2% rise in 2001.

**Table 2: Female Population Aged 15 - 44 years\***

	1996	1997	1998	1999	2000	2001 <sup>#</sup>	Average 1996- 2001 <sup>#</sup>
Gateshead	41,100	41,000	40,600	40,500	40,300	39,000	40,400
Newcastle	63,100	62,200	61,100	60,700	60,100	59,900	61,200
North Tyneside	39,200	39,100	39,300	39,200	39,400	38,700	39,200
South Tyneside	30,900	30,800	30,400	30,200	30,100	30,700	30,500
Sunderland	61,800	61,100	60,700	60,400	60,100	59,200	60,600
Tyne & Wear	236,200	234,100	232,200	231,000	229,900	227,500	231,800
North East GOR	536,100	532,600	529,800	527,100	525,700	517,200	528,100
England & Wales	10,741,200	10,754,100	11,226,100	10,795,900	10,851,300	10,841,500	10,868,400

Source: *Mid-Year Estimates, ONS, Crown Copyright.*

Note: \* the childbearing population.

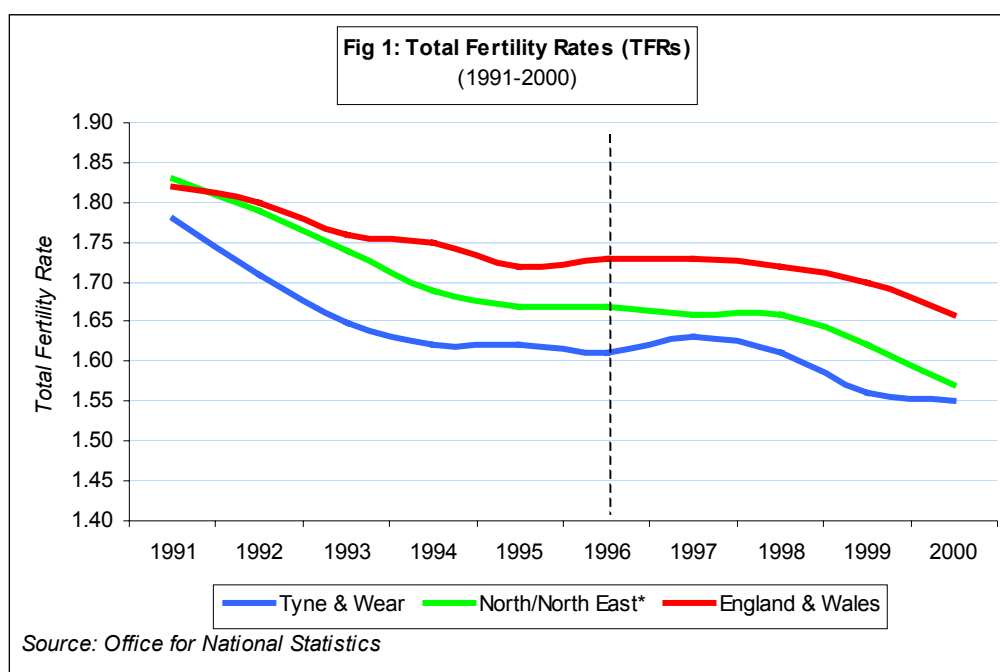
<sup>#</sup> The mid-2001 estimate is based on Census 2001. The six-year averages are a hybrid of bases, the 1991 Census (1996-2000 mid-year estimates) and the 2001 Census (2001 mid-year estimate). (See Introduction)

### 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 2001 are currently unavailable, therefore TFRs between 1995 and 2000 are considered.

Figure 1, displaying TFRs between 1991-2000, reveals persistently low TFRs for Tyne & Wear, compared to England & Wales. TFRs in Tyne & Wear averaged 1.60 during 1995-2000, whereas in England & Wales the average was 1.71. Fertility in Tyne & Wear has also been persistently lower than in the region (Northern region until 1995, thereafter North East). This gap has, however, narrowed sharply in 2000.

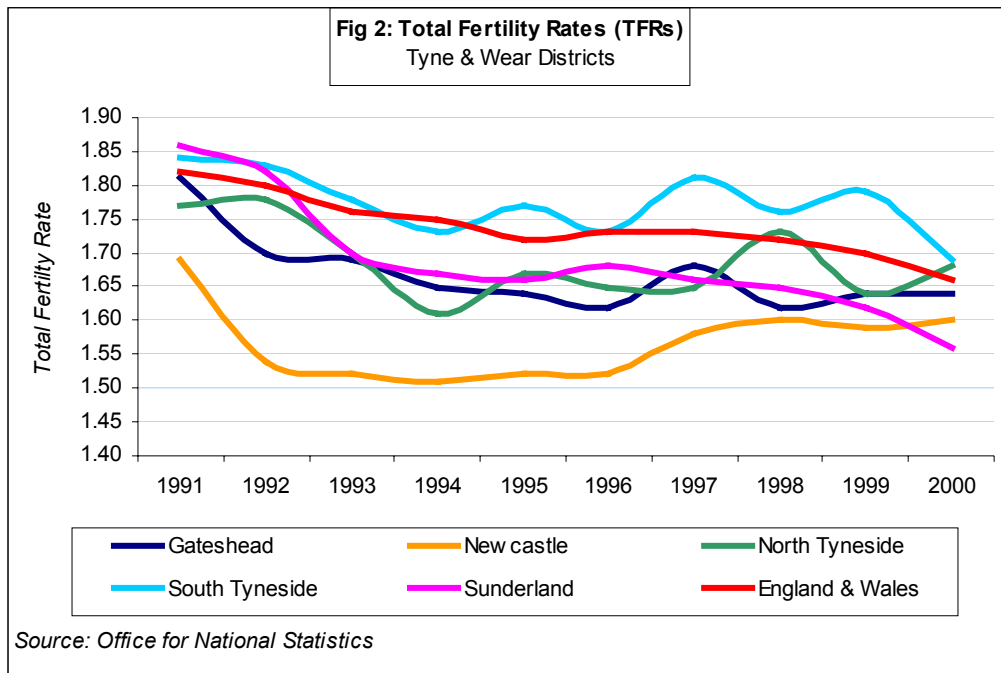
Between 1995 and 2000, fertility in the County declined (-4%) at a similar rate to that experienced nationally (-3%).



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

Since 1995, fertility rates in three Districts have tended to converge towards the England & Wales rate (Figure 2 and Table 3). This happened in Gateshead, North Tyneside and especially Newcastle. In South Tyneside, by contrast, fertility rose slightly higher than in England & Wales, but began to converge in 2000, although fluctuations have been more pronounced (six-year average TFR of 1.76, E&W 1.71). Fertility in Newcastle (six-year average 1.57) was markedly lower than the national rate from 1992-1996. Since 1996 Newcastle's fertility has converged sharply on the England & Wales rate. TFRs were also below the national rate in Gateshead (six-year average 1.64), Sunderland (1.64) and North Tyneside (1.67).

Between 1995 and 2000, TFRs declined in Sunderland (-6%) and South Tyneside (-5%). By contrast TFRs rose in Newcastle (+5%) and North Tyneside (1%). TFRs remained stable in Gateshead.



**Table 3: Total Fertility Rates (TFRs)\***

	1995	1996	1997	1998	1999	2000	Average 1995-2000
Gateshead	1.64	1.62	1.68	1.62	1.64	1.64	1.64
Newcastle	1.52	1.52	1.58	1.60	1.59	1.60	1.57
North Tyneside	1.67	1.65	1.65	1.73	1.64	1.68	1.67
South Tyneside	1.77	1.73	1.81	1.76	1.79	1.69	1.76
Sunderland	1.66	1.68	1.66	1.65	1.62	1.56	1.64
Tyne & Wear	1.62	1.61	1.63	1.61	1.56	1.55	1.60
North/North East	1.67	1.67	1.66	1.66	1.62	1.57	1.64
England & Wales	1.72	1.73	1.73	1.72	1.70	1.66	1.71

Source: Office for National Statistics, Crown Copyright

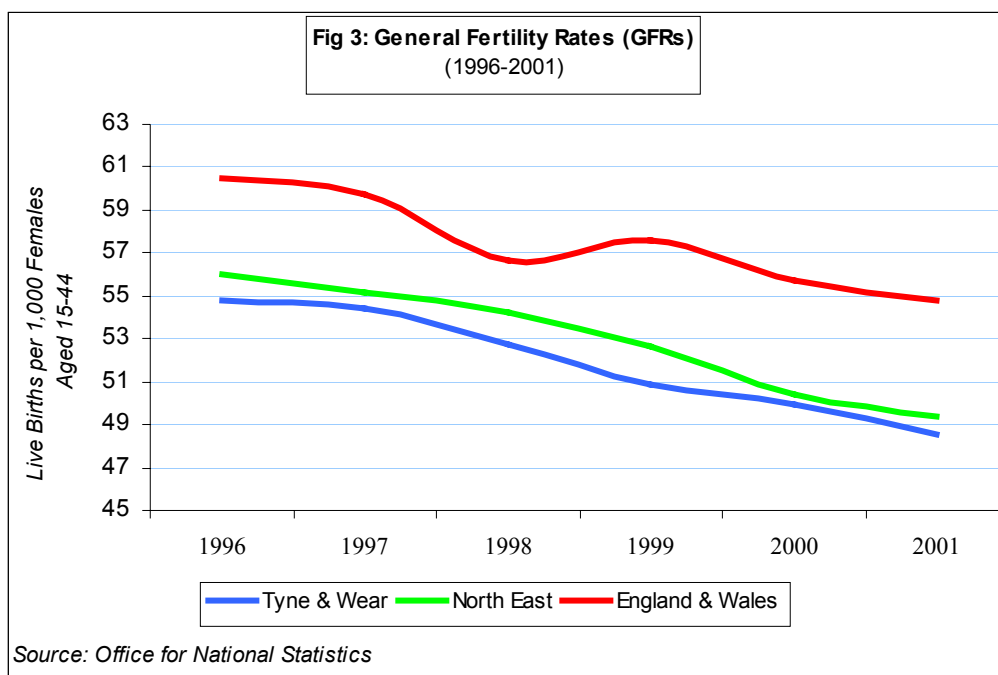
\* Note: These pre-2001 rates do not take into account the (low) Census 2001 population.

#### 4. GENERAL FERTILITY RATES (GFRs)

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

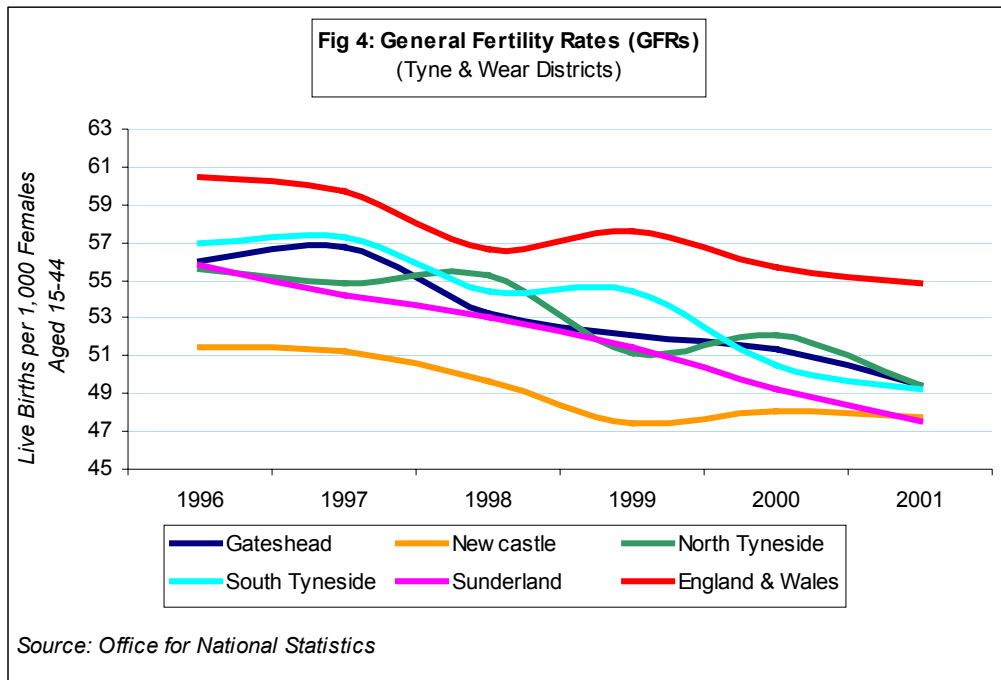
Similar to TFRs, GFRs show fertility in Tyne & Wear to be below national and regional rates (Figure 3 and Table 4). Between 1996 and 2001, the average GFR in Tyne & Wear was 52, whereas in England & Wales the six-year average was 57. [Note: The 2001 GFRs are provisional. They are based on mid-2000 population estimates].

Moreover, between 1996 and 2001 the decline in GFRs in Tyne & Wear (-11%) was greater than that experienced nationally (-9%).



At District level, GFRs were lower in all Tyne & Wear Districts than the national rate (Figure 4 and Table 4). GFRs were particularly low in Newcastle (six-year average 49, E&W 57). Although the six-year average GFRs for South Tyneside (54), Gateshead (53), North Tyneside (53) and Sunderland (52) were higher, rates remained below the national rate.

Between 1996 and 2001 GFRs in all Districts fell, with the rate of decline in all Districts, except Newcastle (-7%), exceeding the national rate of decline (of -9%). Sunderland's rate of decline was fastest (-15%). The decline was slower in South Tyneside (-14%), Gateshead (-12%) and North Tyneside (-11%).



**Table 4: General Fertility Rates (GFRs)**

	1996	1997	1998	1999	2000	2001*	Average
Gateshead	56	57	53	52	51	50	53
Newcastle	51	51	50	47	48	48	49
North Tyneside	56	55	55	51	52	50	53
South Tyneside	57	57	54	54	51	49	54
Sunderland	56	54	53	52	49	48	52
Tyne & Wear	55	54	53	51	50	49	52
North East	56	55	54	53	50	49	53
England & Wales	60	60	57	58	56	55	57

Source: Office for National Statistics, Crown Copyright

Note: \* The 2001 GFRs are provisional. They are based on mid-2000 population estimates.

## 5. LIVE BIRTHS BY AGE OF MOTHER

Between 1996 and 2001, the average number of births per annum in Tyne & Wear was 12,051. Live births by age of mother cover three standard age groups: 11-15 years, 16-34 years and 35+ years old.

### 5.1. Mother Aged 11-15 years

Between 1996 and 2001, on average the youngest mothers had 50 live births per year in Tyne & Wear, 0.4% of the total births (Table 5). Given the very low numbers, fertility rates for females aged 11-15 fluctuated considerably in most Tyne & Wear Districts (Figure 5). In Sunderland, the six-year average rate of 1.6 live births per 1,000 females aged 11-15 was the highest of all Tyne & Wear Districts. Newcastle had the next highest average fertility rate of 1.5 births per 1,000 females aged 11-15 years. North Tyneside (1.4), South Tyneside (1.3) and Gateshead (1.2) had lower six-year average rates.

Since 1996 the fertility rate trend for females aged 11-15 years has been downwards. The average fertility rate for females aged 11-15 fell in all Tyne & Wear Districts, with the exception of Newcastle (increased by 13%). Fertility rates fell most substantially in South Tyneside (-53%) and Sunderland (-41%). Smaller decreases were apparent in Gateshead (-28%) and North Tyneside (-22%).

The number of live births to mothers aged 11-15 in Tyne & Wear fell sharply in 1999 to only 24, but rose sharply to 41 in 2000 and by a further 8 to 49 in 2001.

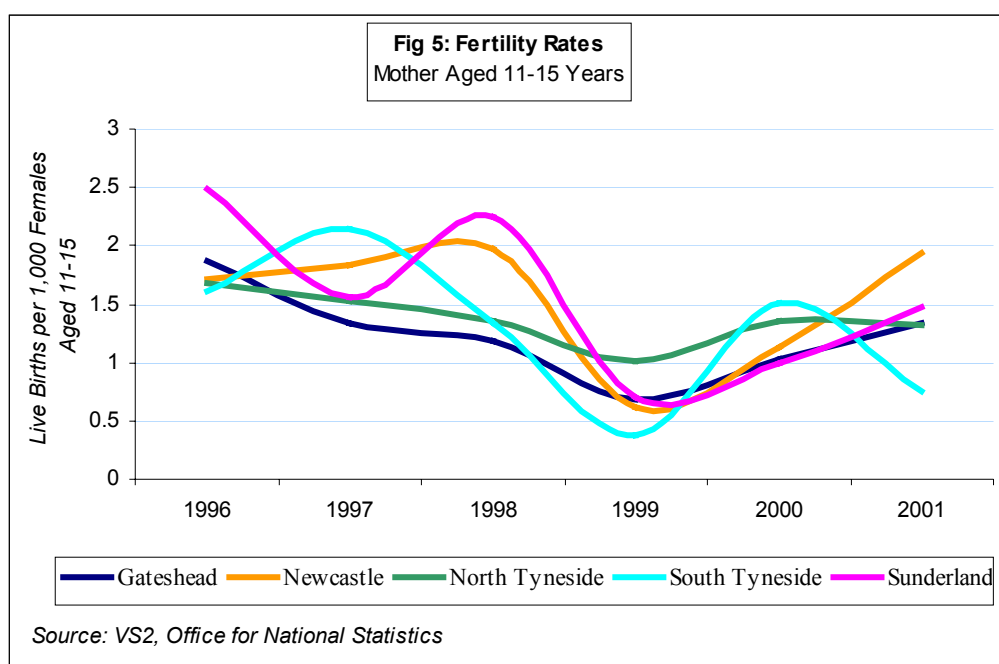
**Table 5: Live Births (Mothers Aged 11-15 years)**

	1996		1997		1998		1999		2000		2001#		Average 1996-2001#	
	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate
Gateshead	11	1.9	8	1.3	7	1.2	4	0.7	6	1.0	8	1.3	7	1.2
Newcastle	14	1.7	15	1.8	16	2.0	5	0.6	9	1.1	15	1.9	12	1.5
North Tyneside	10	1.7	9	1.5	8	1.3	6	1.0	8	1.4	8	1.3	8	1.4
South Tyneside	8	1.6	11	2.1	7	1.3	2	0.4	8	1.5	4	0.8	7	1.3
Sunderland	24	2.5	15	1.6	22	2.2	7	0.7	10	1.0	14	1.5	15	1.6
Tyne & Wear	67	1.9	58	1.7	60	1.7	24	0.7	41	1.2	49	1.4	50	1.4

Source: VS2, Office for National Statistics, Crown Copyright

Note: \* The rate is calculated as the number of live births per 1,000 females aged 11-15 years.

# The 2001 rate used the MYE based on Census 2001. The six-year averages are a hybrid of bases, the 1991 Census (1996-2000 mid-year estimates) and the 2001 Census (2001 mid-year estimate). (See Introduction).



Note: Births to mothers aged 11-15 years average about 10 per District per year.

## 5.2. Mothers Aged 16-34 years

The vast majority of births (88%) are to women aged 16-34, averaging 10,584 per year between 1996 and 2001 (Table 6).

Between 1996 and 2001, fertility rates for women aged 16-34 were highest in South Tyneside (six-year average rate of 81 live births per 1,000 women aged 16-34). Sunderland and Gateshead had the slightly lower average rate of 76 births per 1,000 women aged 16-34, whilst North Tyneside's six-year average rate was 77. Fertility in Newcastle was substantially lower, averaging 65 live births per 1,000 women aged 16-34 (Table 6 and Figure 6).

Fertility rates declined between 1996 and 2001 for women aged 16-34 by 13% in Sunderland, 11% in South Tyneside, 8% in Newcastle, 5% in North Tyneside and by 4% in Gateshead. This decline in rates is most likely to be 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.

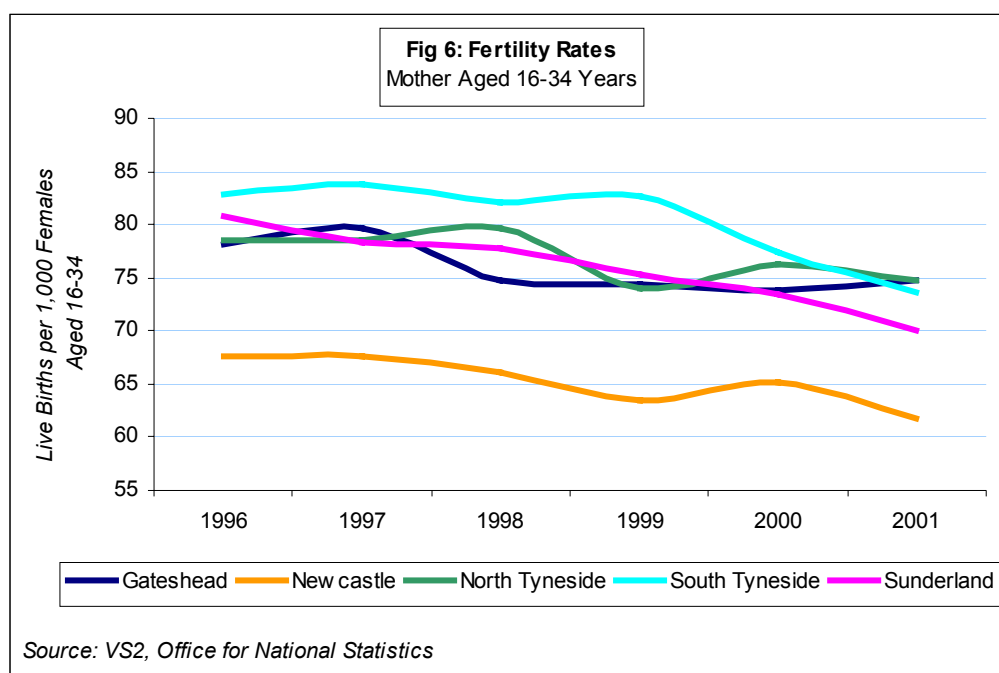
Declines in fertility rates were sharpest in 1999 and 2001. These falls followed downturns in economic conditions.

**Table 6: Live Births (Mothers Aged 16-34 years)**

	1996		1997		1998		1999		2000		2001 <sup>#</sup>		Average 1996-2001 <sup>#</sup>	
	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*
Gateshead	2,074	78.2	2,069	79.6	1,893	74.8	1,838	74.4	1,786	73.9	1,712	74.9	1,895	76.0
Newcastle	2,864	67.5	2,762	67.5	2,605	66.2	2,464	63.4	2,484	65.2	2,427	61.8	2,601	65.3
North Tyneside	1,903	78.6	1,878	78.6	1,888	79.6	1,716	74.0	1,756	76.3	1,683	74.8	1,804	77.0
South Tyneside	1,585	82.9	1,561	83.9	1,484	82.1	1,457	82.6	1,324	77.5	1,289	73.5	1,450	80.5
Sunderland	3,151	80.8	2,992	78.4	2,906	77.7	2,774	75.4	2,654	73.5	2,522	70.0	2,833	76.1
Tyne & Wear	11,577	76.5	11,262	76.3	10,776	74.9	10,249	72.6	10,004	72.2	9,633	69.7	10,584	73.8

Source: VS2, Office for National Statistics, Crown Copyright

Note: \* The rate is calculated as the number of live births per 1,000 women aged 16-34 years.  
<sup>#</sup> The 2001 rate used the MYE based on Census 2001. The six-year averages are a hybrid of bases, the 1991 Census (1996-2000 mid-year estimates) and the 2001 Census (2001 mid-year estimate). (See Introduction).



### 5.3. Mothers Aged 35+

Live births by mothers aged 35 or over accounted for 12% of all births between 1996 and 2001 in Tyne & Wear. During this period, Newcastle had relatively high fertility rates for women aged 35-44, averaging 21 live births per 1,000 (Table 7 and Figure 7). By contrast Sunderland (14) and South Tyneside (16) had low average rates. North Tyneside (19) and Gateshead (18) had average fertility rates slightly below Newcastle, but above the Tyne & Wear (17 live births per 1,000 women aged 35+) average rate.

Between 1996 and 2001, fertility rates for women aged 35+ rose in Tyne & Wear. Fertility rates rose in Newcastle (+17%), Gateshead (+15%) and Sunderland (+14%). By contrast, fertility rates fell in North Tyneside (-10%) and remained stable in South Tyneside. 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.

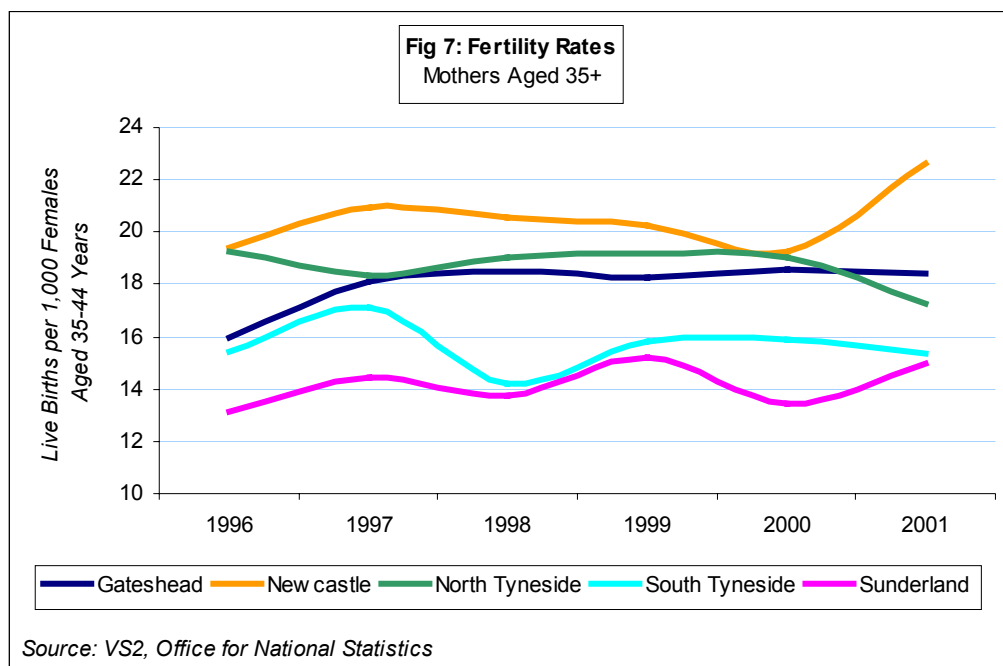
**Table 7: Live Births (Mothers Aged 35+ years)**

	1996		1997		1998		1999		2000		2001 <sup>#</sup>		Average 1996-2001 <sup>#</sup>	
	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*	no.	rate*
Gateshead	215	16.0	250	18.1	262	18.5	267	18.3	278	18.6	275	18.4	258	18.0
Newcastle	371	19.4	411	20.9	413	20.6	410	20.2	394	19.3	433	22.6	405	20.5
North Tyneside	266	19.3	258	18.4	275	19.0	284	19.2	288	19.0	258	17.3	272	18.7
South Tyneside	168	15.4	191	17.1	162	14.2	184	15.8	189	15.9	186	15.4	180	15.6
Sunderland	273	13.1	304	14.4	295	13.8	330	15.2	296	13.5	317	14.9	303	14.2
Tyne & Wear	1,293	16.6	1,414	17.7	1,407	17.3	1,475	17.8	1,445	17.1	1,469	17.9	1,417	17.4

Source: VS2, Office for National Statistics, Crown Copyright

Note: \*The rate is calculated as the number of live births per 1,000 women aged 35-44 years.

<sup>#</sup> The 2001 rate used the MYE based on Census 2001. The six-year averages are a hybrid of bases, the 1991 Census (1996-2000 mid-year estimates) and the 2001 Census (2001 mid-year estimate). (See Introduction).



## 6. LIVE BIRTHS BY MARITAL STATUS

In 2001, the majority of births in Tyne & Wear (52%) and the North East (51%) were outside marriage.

### 6.1. Live Births Within Marriage

Between 1996 and 2001, the average percentage of live births within marriage in Tyne & Wear was markedly lower than in England & Wales. Tyne & Wear was 11 percentage points below the national average (51%, E&W 62%) (Table 8 and Figure 8), with the proportion declining at a more rapid rate (down 6 percentage points) than in England & Wales (down 4 percentage points).

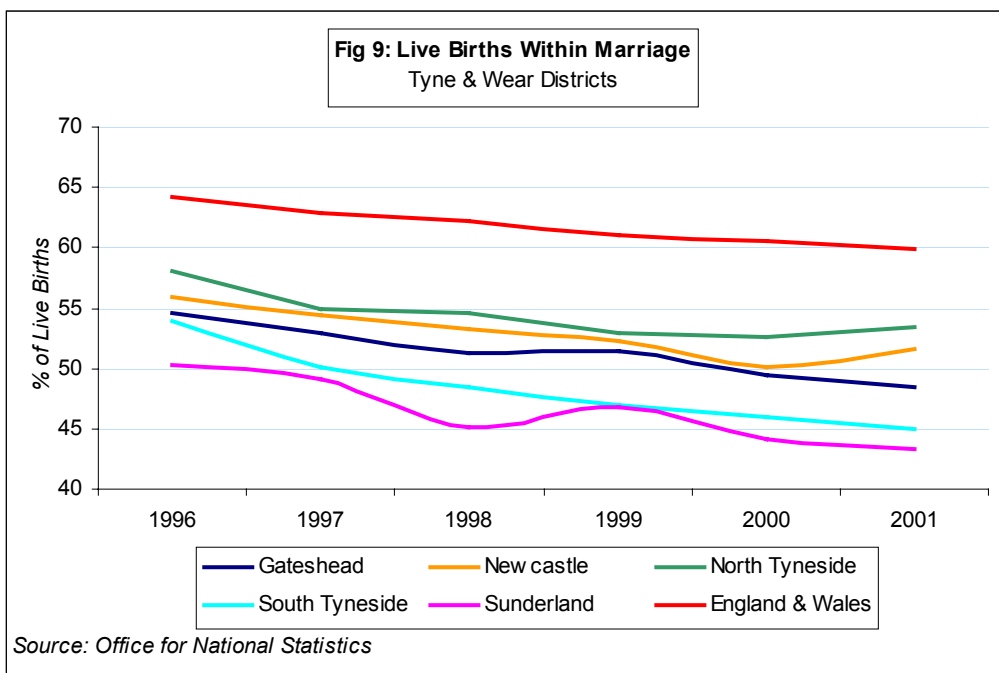
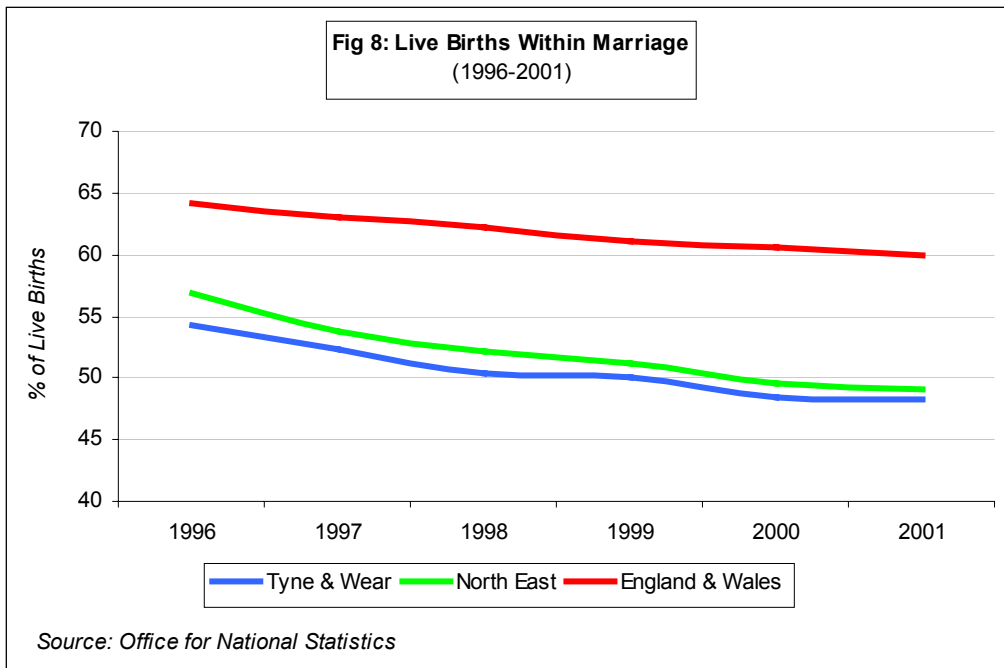
The proportion of live births within marriage between 1996 and 2001 was lower in all Tyne & Wear Districts than the national average. North Tyneside had the highest average proportion of live births within marriage, at 54%. This was still, however, 8 percentage points below the national average. The average proportion of live births within marriage in Newcastle (53%) and Gateshead (51%) were slightly lower. South Tyneside (49%) and Sunderland (47%) had the lowest averages (Table 8 and Figure 9).

The proportion of live births within marriage fell in all Tyne & Wear Districts between 1996 and 2001. The largest fall of 9 percentage points was seen in South Tyneside. In Gateshead and Sunderland, the proportion fell by 7 percentage points and in North Tyneside by 5 points. Newcastle showed the most moderate decline of 4 percentage points.

**Table 8: Percentage of Live Births Within Marriage**

	1996	1997	1998	1999	2000	2001	Average 1996-2001
Gateshead	55	53	51	51	50	48	51
Newcastle	56	54	53	52	50	52	53
North Tyneside	58	55	55	53	53	53	54
South Tyneside	54	50	48	47	46	45	49
Sunderland	50	49	45	47	44	43	47
Tyne & Wear	54	52	50	50	48	48	51
North East	57	54	52	51	49	49	51
England & Wales	64	63	62	61	61	60	62

*Source: Office for National Statistics, Crown Copyright*



## 6.2. Live Births Outside of Marriage

In 2001, the number of births outside of marriage exceeded the number of births within marriage for the second year running, in both Tyne & Wear and the North East.

Between 1996 and 2001, the average proportion of live births outside of marriage in Tyne & Wear was 49%: 11 percentage points above the England & Wales average (38%) (Table 9 and Figure 10). The proportion rose by 6 percentage points in Tyne & Wear and 4 percentage points in England & Wales during this period.

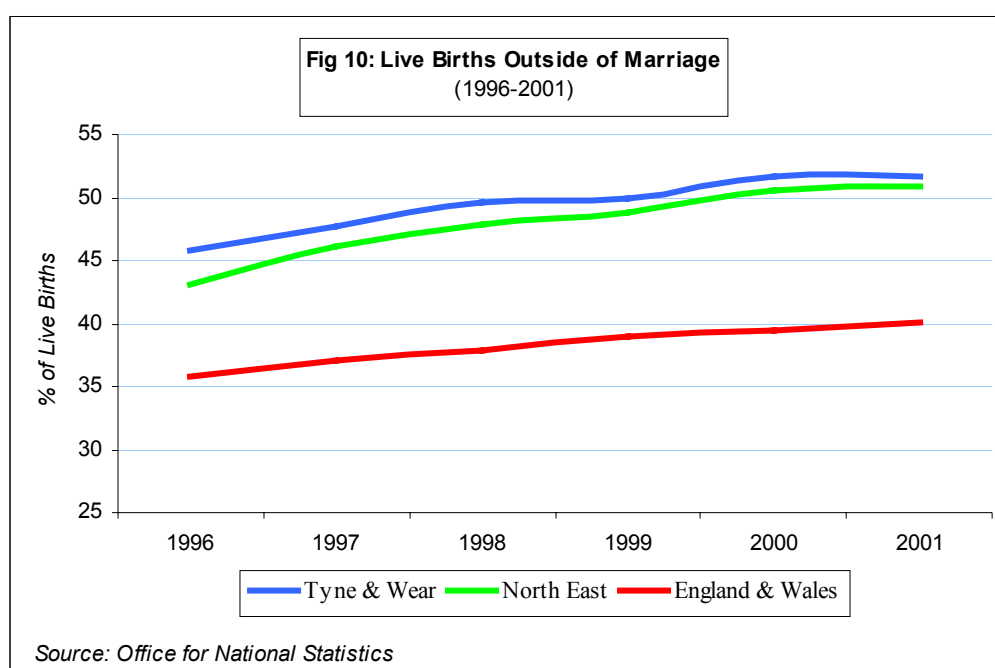
At District level, Sunderland (six-year average 53%) and South Tyneside (six-year average 51%) had the largest proportions of live births outside of marriage. Gateshead (average 49%) and Newcastle (average 47%) had lower average proportions. North Tyneside had the smallest proportion at 46% (Table 9 and Figure 11).

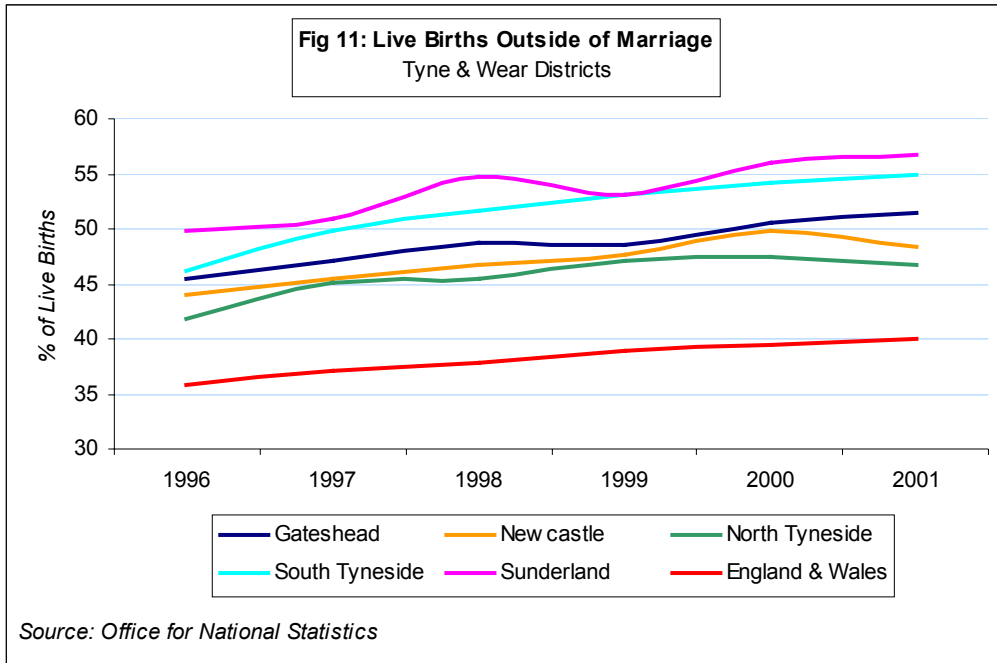
The proportion of live births outside of marriage increased in all Tyne & Wear Districts between 1996 and 2001. South Tyneside showed the largest increase of 9 percentage points. In both Gateshead and Sunderland the proportion rose by 7 points. North Tyneside (5 points) and Newcastle (4 points) showed relatively moderate rises. Only Newcastle's modest rise matched that of England & Wales.

**Table 9: Percentage of Live Births Outside of Marriage**

	1996	1997	1998	1999	2000	2001	Average 1996-2001
Gateshead	45	47	49	49	50	52	49
Newcastle	44	46	47	48	50	48	47
North Tyneside	42	45	45	47	47	47	46
South Tyneside	46	50	52	53	54	55	51
Sunderland	50	51	55	53	56	57	53
Tyne & Wear	46	48	50	50	52	52	49
North East	43	46	48	49	51	51	48
England & Wales	36	37	38	39	39	40	38

Source: Office for National Statistics, Crown Copyright





## 7. 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 & Wales’<sup>2</sup>.

Table 10 and Figure 12 reveal extremely high mortality ratios for both Tyne & Wear and the region, relative to the nation. Since 1996, in Tyne & Wear, SMRs have fluctuated, averaging 114 and peaking at 117 in 1998. SMRs in the region have improved (fallen) slightly relative to the county (Fig. 12).

Between 1996 and 2001, SMRs varied within the Tyne & Wear Districts (Table 10 and Figure 13). In North Tyneside, the six-year average SMR was 106 (6 points above the national average). This was low relative to the other Districts. The average SMR in Newcastle was 112 and 113 in South Tyneside. In Gateshead and Sunderland the average SMRs were higher (both 118).

Between 1996 and 2001, SMRs rose (deteriorated) in two Tyne & Wear Districts: Sunderland (+4%) and Gateshead (+2%). SMRs improved (fell) in North Tyneside by 3% and by 1% in both Newcastle and South Tyneside.

Among Government Office Regions, the North East had the highest level of mortality in 2001 (SMR = 112), while the lowest level was in the South West (92). At District level, Halton UA had the highest mortality level in 2001 (131), followed by Liverpool (130) and Knowsley (130), all located in the North West Government Office Region. The lowest SMRs were in the City of London (SMR = 50, based on small numbers) and the London Boroughs of Kensington & Chelsea (71) and Westminster (71). Compared to other urban/industrialised areas of England, Tyne & Wear had a typical SMR (113). Such areas as Manchester (126) and Liverpool (130) had higher SMRs than Tyne & Wear, whilst areas such as Birmingham (107), Nottinghamshire (103) and Sheffield (101) had significantly lower SMRs. It is notable 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.

**Table 10: Standardised Mortality Ratios (SMRs)**

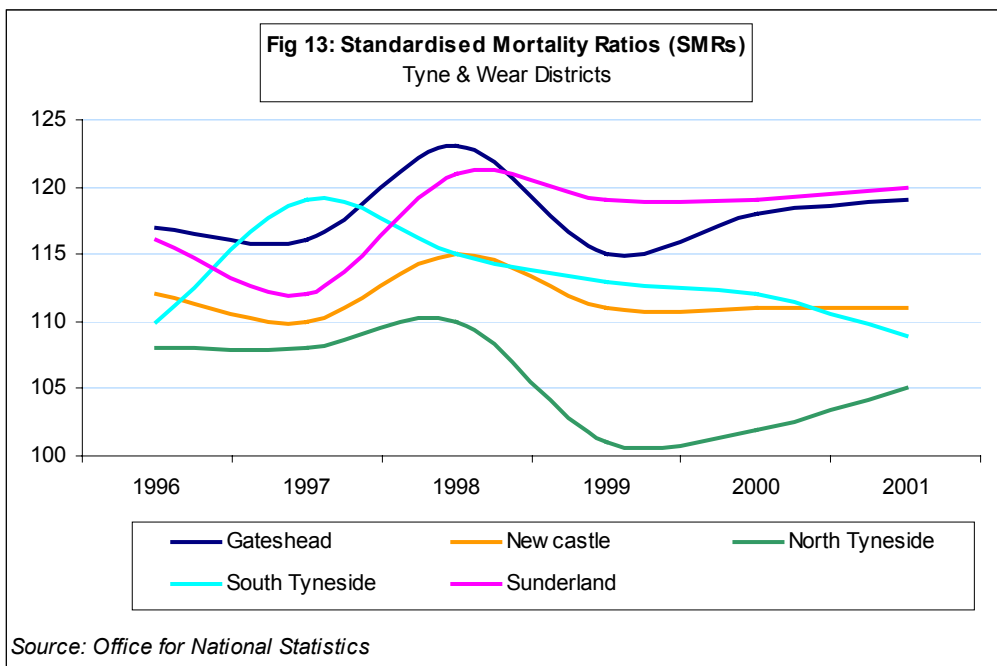
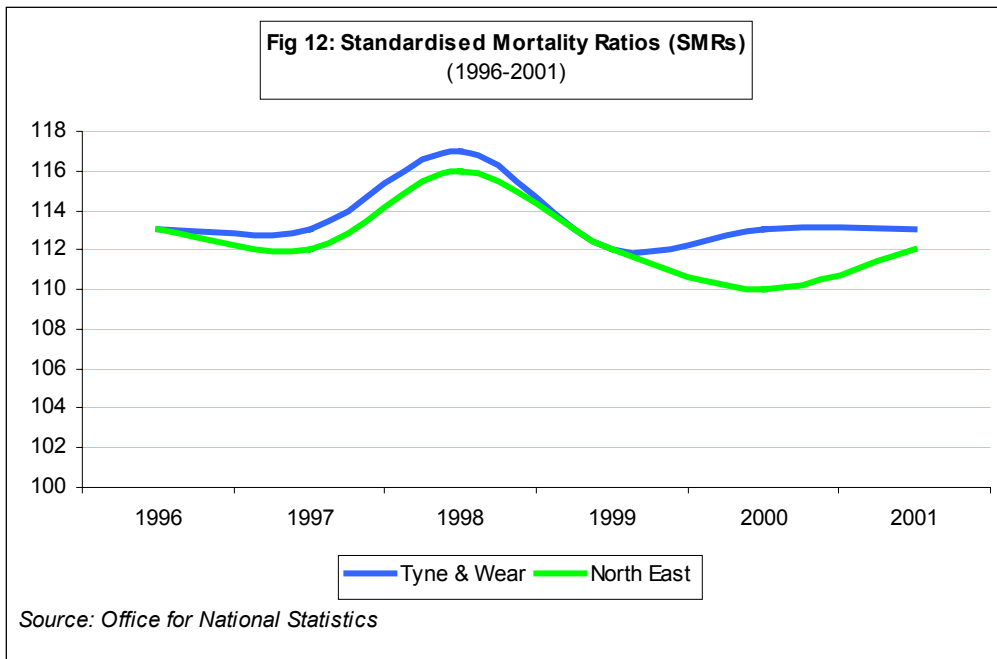
	1996	1997	1998	1999	2000	2001 <sup>#</sup>	Average
Gateshead	117	116	123	115	118	119	118
Newcastle	112	110	115	111	111	111	112
North Tyneside	108	108	110	101	102	105	106
South Tyneside	110	119	115	113	112	109	113
Sunderland	116	112	121	119	119	120	118
Tyne & Wear	113	113	117	112	113	113	114
North East	113	112	116	112	110	112	113
England, Wales & Elsewhere*	100	100	100	100	100	100	100

Source: *Population Trends, Office for National Statistics, Crown Copyright.*

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.

<sup>#</sup> The 2001 SMRs are provisional. They are based on the mid-2000 age and sex structure population estimates.

<sup>2</sup> As defined in ‘Key Population and Vital Statistics’, Office for National Statistics, Crown Copyright. See also Introduction within this report (§1).



## 8. DEATHS BY CAUSE

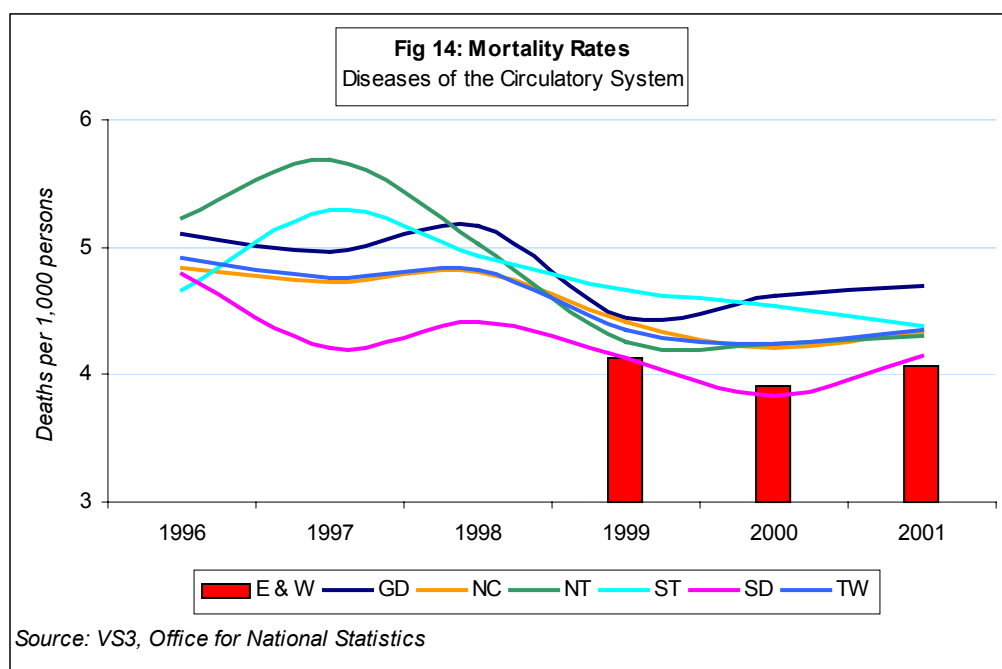
Circulatory disease, cancer, respiratory disease, diseases of the digestive system and ‘external causes of morbidity and mortality’ (injury and poisoning) were the largest causes of death in Tyne & Wear between 1996 and 2001. These five causes accounted for 88% of all deaths in 2001. The total number of deaths, from all causes, in 2001 was 12,416.

### 8.1 Circulatory Diseases

In 2001, circulatory disease (failure of the heart and blood vessels) accounted for 38% (4,680) of all deaths in Tyne & Wear. In the North East 39% of all deaths were attributed to circulatory diseases, whilst in England & Wales the figure was slightly higher at 40%. The Public Health Observatory<sup>3</sup> states that “the North East has the highest *premature* death rate [i.e. under 75 years] from circulatory diseases in the country”[England]. (TWRI’s italics).

Circulatory diseases were by far the largest cause of death in Tyne & Wear between 1996 and 2001. Mortality rates were highest in Gateshead and North Tyneside (six-year averages of 4.8 deaths per 1,000 persons) (Figure 14). South Tyneside (average rate of 4.7) and Newcastle (average rate of 4.6) had slightly lower average rates. Sunderland had the lowest average rate of 4.3 deaths per 1,000 persons.

The number of deaths caused by circulatory diseases fell by 16% (-860 deaths) in Tyne & Wear Districts between 1996 and 2001. The largest decline in mortality rates were apparent in North Tyneside (-18%), Sunderland (-13%) and Newcastle (-10%). Mortality rates fell at a slower rate in Gateshead (-8%) and South Tyneside (-6%).



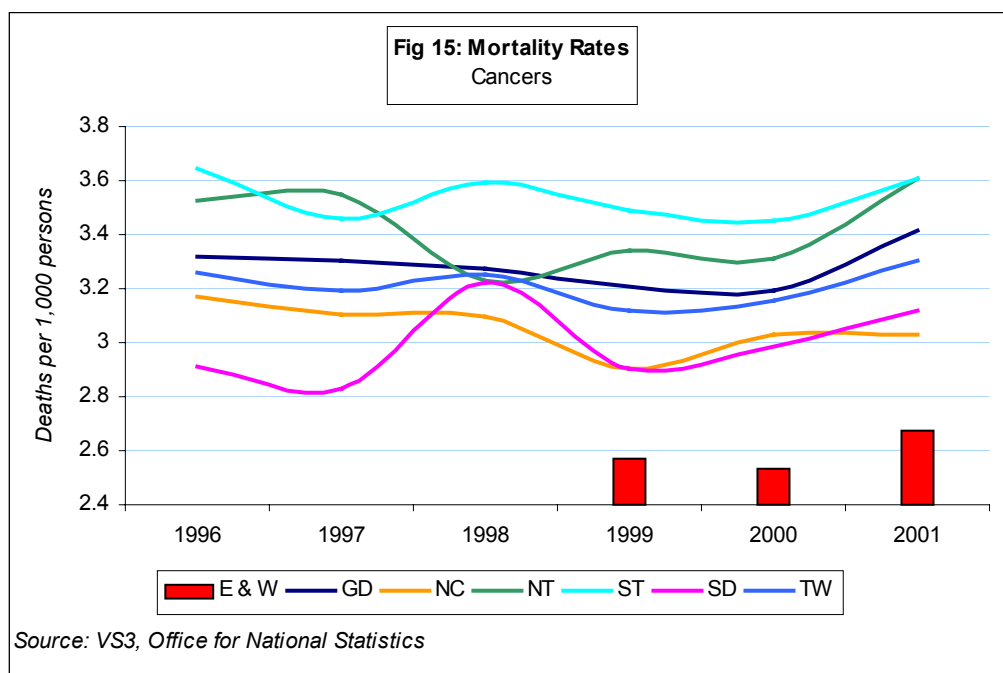
<sup>3</sup> Northern & Yorkshire Public Health Observatory. “Towards a Healthier North East: A Profile of Health and its Determinants in the North East of England”, published October 2001.

## 8.2 Cancers

In 2001, 29% (3,600) of all deaths in Tyne & Wear were due to cancer. This was slightly higher than the North East (28%) and, more particularly, England & Wales (26%). Death rates in the five Tyne & Wear Districts were well above the average for England & Wales in 2001. The Public Health Observatory notes that “the North East has the highest premature [under 75 years] death rate in the country from all cancers. The rate is significantly higher than for the nation as a whole and all other Government Office Regions”. It also notes that “The overall [cancer] death rate is falling but the incidence (the number of cases) is increasing as the population gets older”.

Cancers were the second largest cause of death in Tyne & Wear between 1996 and 2001. Mortality rates were highest in South Tyneside (six-year average 3.5 per 1,000 persons) and North Tyneside (six-year average 3.4 per 1,000 persons) (Figure 15). Gateshead had a slightly lower average mortality rate of 3.3 deaths per 1,000 persons. Newcastle (average 3.1) and Sunderland (average 3.0) had the lowest mortality rates due to cancer.

Cancer mortality rates declined in Newcastle (-4%) and South Tyneside (-1%) between 1996 and 2001. However, mortality rates due to cancer increased in the remaining Districts: in Sunderland (by +7%), in Gateshead (by +3%) and in North Tyneside (by +2%).

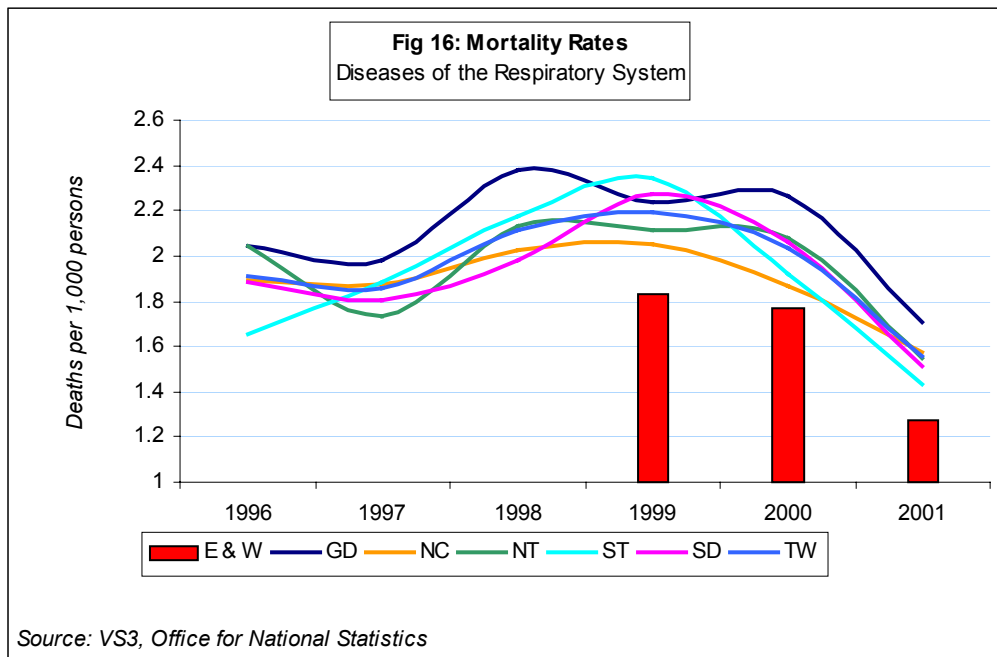


### 8.3 Respiratory Diseases

In 2001, 13% of all deaths in Tyne & Wear, the North East and England & Wales were as a result of respiratory diseases.

Respiratory diseases (for example pneumonia, bronchitis and emphysema) were the third largest cause of death in Tyne & Wear between 1996 and 2001. Mortality rates were highest in Gateshead (six-year average of 2.1 deaths per 1,000 persons). The remaining Districts all had slightly lower mortality rates of 1.9 deaths per 1,000 persons (Figure 16).

Mortality rates for diseases of the respiratory system fell in all Tyne & Wear Districts, most significantly in North Tyneside (-24%). Mortality rates fell by 19% in Sunderland, 17% in Newcastle and 16% in Gateshead. The smallest decline was in South Tyneside (-13%).



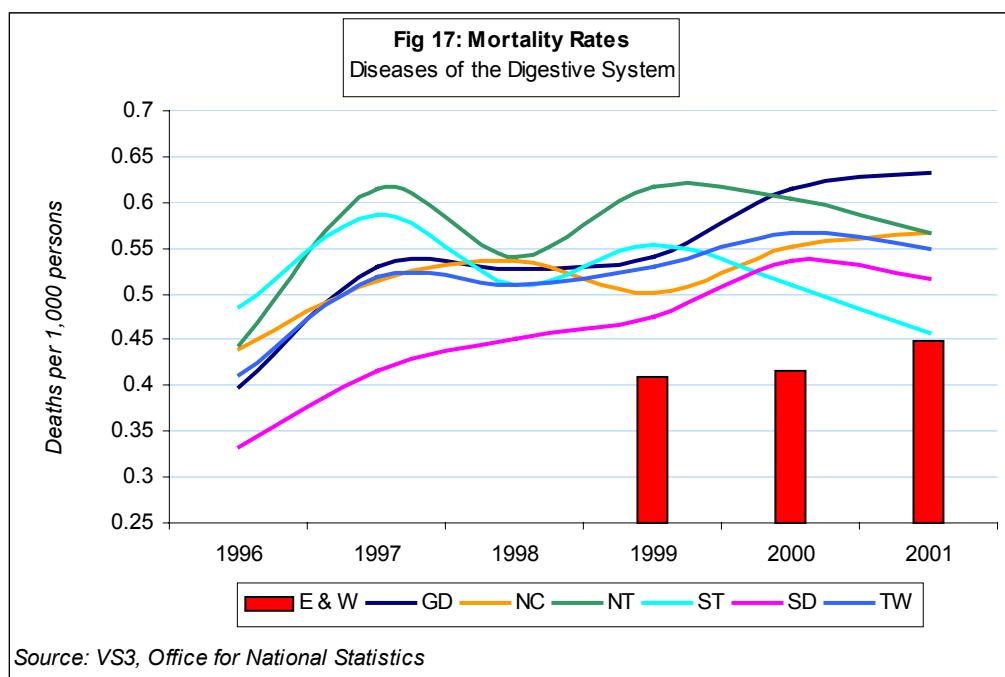
## 8.4 Diseases of the Digestive System

In 2001, 4% of all deaths in England & Wales were as a result of diseases of the digestive system. In Tyne & Wear and the North East the proportion was one percentage point higher.

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 1996 and 2001. Deaths from diseases of the digestive system have risen by 28%, since 1996, in Tyne & Wear.

In all Tyne & Wear Districts, except North Tyneside, the average mortality rate due to diseases of the digestive system, between 1996 and 2001, was 0.5 deaths per 1,000 persons. In North Tyneside, the rate was slightly higher at 0.6 deaths per 1,000 persons.

Deaths attributable to diseases of the digestive system rose (+128 deaths) in Tyne & Wear between 1996 and 2001. At District level, mortality rates rose in four Districts. The most notable rises were in Gateshead (+59%) and Sunderland (+55%). In Newcastle the mortality rate rose by 29% and in North Tyneside by 28%. The only District to see a decline in diseases of the digestive system was South Tyneside (-6%).

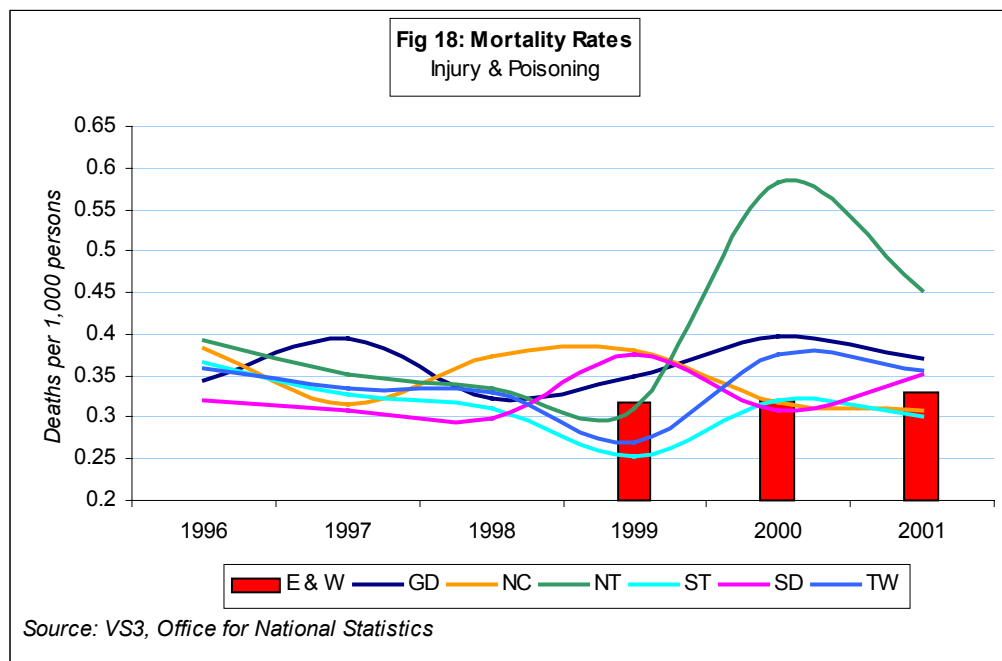


## 8.5 Injury & Poisoning

In 2001, 3% of all deaths were a result of injury & poisoning (external causes of morbidity and mortality) at national, regional and county level (about 370 deaths p.a. in Tyne & Wear). The Public Health Observatory notes that “The (death) rate for the North East is not significantly different from the national rate, but is significantly lower than rates for the North West and East Midlands”. It also notes that, “Mortality rates due to accidents are higher in the North East than nationally for children and older people, but are lower in the North East than nationally for young people”.

Injury & poisoning (including all accidents) was the fifth largest cause of death in Tyne & Wear between 1996 and 2001. Mortality rates were highest in Gateshead and North Tyneside (six-year averages of 0.4 deaths per 1,000 persons) (Figure 18). In Newcastle, South Tyneside and Sunderland rates were marginally lower at 0.3 deaths per 1,000 persons.

The number of deaths due to injury & poisoning fluctuate considerably, averaging about 77 deaths p.a. per District. Between 1996 and 2001 rates of death arising from injury & poisoning declined in Newcastle (-19%) and South Tyneside (-18%). Increases were recorded in North Tyneside (+15%), Sunderland (+10%) and Gateshead (+3%). The sharp rise in deaths due to injury & poisoning in 2000 in North Tyneside was attributed to a dramatic rise in the number of deaths due to accidental falls (up from 18 in 1999, to 48 in 2000, with a slight fall to 45 in 2001).



## 8.6 Other Causes

Between 1996 and 2001, in Tyne & Wear, deaths from diseases of blood & blood-forming organs declined (-32%, -12), as did Endocrine, nutritional & metabolic diseases & immunity disorders (-10%, -16). This was offset by substantial rises in deaths due to diseases of the nervous system & sense organs (+60%, +134), infectious & parasitic diseases (+58%, +48), mental disorders (+28%, +75), signs, symptoms & ill-defined conditions (+25%, +32) and diseases of the musculo-skeletal system & connective tissue (+25%, +16). Deaths due to diseases of the genitourinary system (+18%, +28), congenital anomalies (+8%, +2) and diseases of the skin & subcutaneous tissue (+4%, +1) also increased. Deaths from HIV numbered 177 in 2001 for ‘England, Wales & Elsewhere’, with only a handful of deaths from HIV in Tyne & Wear.

## 9. NATURAL CHANGE

‘Natural change’ is population change resulting from live births and deaths (Table 11). It excludes population change occurring as a result of net migration.

Between 1996 and 2001, Gateshead, North Tyneside and South Tyneside each lost on average around 260 people per annum as a result of natural change. Newcastle annually lost on average 136 people. Over the six-year period, Sunderland’s natural change turned from positive to negative with an average loss of 91 persons per annum.

Between 1996 and 2001, the population in Tyne & Wear and the North East declined as a result of natural change. However, nationally population increased due to natural change.

**Table 11: Natural Change**

	1996	1997	1998	1999	2000	2001	Average 1996-2001
Gateshead	-186	-118	-403	-239	-289	-323	-260
Newcastle	-94	-42	-274	-235	-106	-65	-136
North Tyneside	-273	-248	-278	-264	-238	-292	-266
South Tyneside	-122	-261	-303	-266	-336	-277	-261
Sunderland	153	179	-145	-171	-251	-308	-91
Tyne & Wear	-522	-490	-1,403	-1,175	-1,220	-1,265	-1,013
North East	-777	-393	-1,830	-1,625	-2,033	-2,442	-1,517
England, Wales & Elsewhere*	86,478	84,041	82,466	68,340	66,564	62,136	75,004

Source: VS1, Office for National Statistics

\* ‘Elsewhere’ is defined as births and deaths of non-resident people visiting England & Wales.

**APPENDICES****Table A1: Live Births by Ward (Gateshead)**

	1996	1997	1998	1999	2000	2001
Bede	113	130	117	100	96	90
Bensham	121	124	117	108	125	112
Birtley	91	88	88	71	68	57
Blaydon	164	136	118	112	124	105
Chopwell & Rowlands Gill	94	103	101	101	97	86
Chowdene	75	72	75	78	83	68
Crawcrook & Greenside	128	100	104	89	111	89
Deckham	110	101	99	84	73	121
Dunston	111	124	121	108	96	107
Felling	99	101	98	71	80	85
High Fell	75	82	100	91	90	93
Lamesley	85	105	78	77	84	70
Leam	119	141	118	112	129	98
Low Fell	88	94	88	107	106	103
Pelaw & Heworth	88	67	95	72	73	67
Ryton	96	114	77	104	91	90
Saltwell	146	119	115	141	144	109
Teams	140	136	108	122	92	113
Whickham North	103	109	94	115	92	88
Whickham South	87	97	88	92	80	77
Winlaton	57	59	62	46	58	58
Wrekendyke	110	125	101	108	78	109
<b>Total</b>	<b>2,300</b>	<b>2,327</b>	<b>2,162</b>	<b>2,109</b>	<b>2,070</b>	<b>1,995</b>

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

**Table A2: Live Births by Ward (Newcastle)**

	1996	1997	1998	1999	2000	2001
Benwell	136	101	97	85	101	90
Blakelaw	133	162	142	148	126	137
Byker	103	112	105	97	91	91
Castle	120	108	129	119	111	131
Dene	137	139	132	136	143	162
Denton	111	101	85	106	91	104
Elswick	175	158	148	151	153	152
Fawdon	147	121	123	118	116	104
Fenham	127	159	124	129	120	132
Grange	145	130	143	128	117	115
Heaton	104	103	97	77	94	91
Jesmond	87	88	109	82	84	60
Kenton	132	146	135	157	145	121
Lemington	113	107	129	105	124	122
Monkchester	165	175	142	128	123	129
Moorside	121	104	89	100	91	133
Newburn	123	111	111	102	87	99
Sandyford	87	90	75	83	92	74
Scotswood	110	124	109	104	101	98
South Gosforth	133	119	148	130	144	118
Walker	141	111	108	100	121	91
Walkergate	110	97	118	86	98	91
West City	86	86	77	65	76	66
Westerhope	96	116	98	92	69	96
Wingrove	181	189	141	143	167	167
Woolsington	126	131	120	108	102	101
<b>Total</b>	<b>3,249</b>	<b>3,188</b>	<b>3,034</b>	<b>2,879</b>	<b>2,887</b>	<b>2,875</b>

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

**Table A3: Live Births by Ward (North Tyneside)**

	1996	1997	1998	1999	2000	2001
Battle Hill	140	132	169	132	117	128
Benton	81	61	83	74	95	71
Camperdown	118	103	97	93	100	93
Chirton	149	153	174	128	156	123
Collingwood	105	116	120	117	125	91
Cullercoats	84	71	74	66	75	64
Holystone	167	137	158	165	172	158
Howdon	103	94	100	90	78	72
Longbenton	91	55	60	43	55	45
Monkseaton	119	125	116	100	115	96
North Shields	114	114	77	92	110	91
Northumberland	131	121	146	122	111	93
Riverside	113	135	118	92	102	143
St. Mary's	57	66	56	71	54	72
Seatonville	84	112	100	87	82	94
Tynemouth	72	84	81	88	83	77
Valley	138	127	131	133	138	135
Wallsend	125	129	123	120	101	100
Weetslade	102	115	101	88	80	91
Whitley Bay	86	95	87	105	103	112
<b>Total</b>	<b>2,179</b>	<b>2,145</b>	<b>2,171</b>	<b>2,006</b>	<b>2,052</b>	<b>1,949</b>

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

**Table A4: Live Births by Ward (South Tyneside)**

	1996	1997	1998	1999	2000	2001
All Saints	110	136	97	123	89	96
Beacon & Bents	91	97	97	92	86	83
Bede	81	101	72	82	83	61
Biddick Hall	87	88	93	80	76	84
Boldon Colliery	106	121	96	102	119	101
Cleadon & East Boldon	83	72	74	85	77	71
Cleadon Park	112	96	91	94	85	88
Fellgate & Hedworth	99	80	93	97	71	64
Harton	53	52	65	56	52	57
Hebburn Quay	95	132	115	105	98	97
Hebburn South	43	51	43	34	34	52
Horsley Hill	84	70	78	73	73	74
Monkton	111	98	109	103	78	87
Primrose	91	94	76	78	83	85
Rekedyke	112	110	111	90	87	86
Tyne Dock & Simonside	66	69	60	77	70	54
Westoe	108	93	90	90	80	73
West Park	78	69	61	64	71	59
Whitburn & Marsden	66	68	46	66	54	45
Whiteleas	85	66	86	52	55	62
<b>Total</b>	<b>1,761</b>	<b>1,763</b>	<b>1,653</b>	<b>1,643</b>	<b>1,521</b>	<b>1,479</b>

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

**Table A5: Live Births by Ward (Sunderland)**

	1996	1997	1998	1999	2000	2001
Castletown	141	129	117	133	130	121
Central	152	143	143	126	121	129
Colliery	119	115	106	96	102	83
Eppleton	153	143	146	129	134	155
Fulwell	97	98	85	103	90	76
Grindon	148	119	113	112	102	119
Hendon	128	114	109	129	115	107
Hetton	125	128	116	114	116	112
Houghton	111	112	121	87	104	101
Pallion	105	100	97	84	89	78
Ryhope	169	128	180	170	122	135
St. Chad's	121	110	80	98	91	84
St. Michael's	83	91	76	80	63	79
St. Peter's	89	93	86	92	91	74
Shiney Row	180	183	174	167	183	164
Silksworth	165	136	150	120	116	115
South Hylton	142	155	146	138	123	131
Southwick	129	107	135	112	99	110
Thorney Close	135	133	121	127	106	110
Thornholme	101	117	132	111	143	99
Town End Farm	166	161	133	148	131	107
Washington East	176	177	150	134	136	133
Washington North	186	187	170	169	144	139
Washington South	205	199	185	179	166	163
Washington West	122	133	152	153	143	129
<b>Total</b>	<b>3,448</b>	<b>3,311</b>	<b>3,223</b>	<b>3,111</b>	<b>2,960</b>	<b>2,853</b>

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

**Table A6: Deaths by Ward (Gateshead)**

	1996	1997	1998	1999	2000	2001
Bede	127	116	125	109	105	87
Bensham	91	94	111	106	102	109
Birtley	100	89	86	95	103	92
Blaydon	98	90	117	104	71	86
Chopwell & Rowlands Gill	96	90	122	108	97	86
Chowdene	119	118	129	103	118	132
Crawcrook & Greenside	101	117	91	109	89	101
Deckham	102	114	106	81	94	94
Dunston	95	129	138	111	109	101
Felling	137	140	138	125	134	137
High Fell	125	120	132	120	148	142
Lamesley	121	113	115	117	110	101
Leam	100	107	117	98	120	94
Low Fell	158	131	146	112	138	120
Pelaw & Heworth	105	113	123	105	100	97
Ryton	121	103	124	117	102	105
Saltwell	98	92	94	70	92	82
Teams	128	111	98	105	102	110
Whickham North	173	159	169	144	120	155
Whickham South	69	94	80	82	69	77
Winlaton	127	111	121	122	125	124
Wrekendyke	95	94	83	105	111	86
<b>Total</b>	<b>2,486</b>	<b>2,445</b>	<b>2,565</b>	<b>2,348</b>	<b>2,359</b>	<b>2,318</b>

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

**Table A7: Deaths by Ward (Newcastle)**

	1996	1997	1998	1999	2000	2001
Benwell	115	90	92	125	117	84
Blakelaw	112	111	126	104	110	108
Byker	124	150	147	134	150	171
Castle	82	84	123	93	99	85
Dene	151	135	150	132	151	145
Denton	128	137	134	143	115	112
Elswick	151	130	149	137	133	137
Fawdon	129	127	136	128	104	135
Fenham	160	162	129	127	125	126
Grange	200	195	169	165	161	147
Heaton	85	87	83	81	81	80
Jesmond	161	145	152	131	95	132
Kenton	145	150	148	126	140	150
Lemington	132	113	116	114	96	104
Monkchester	131	119	140	149	143	96
Moorside	118	106	94	107	73	87
Newburn	131	137	136	130	117	126
Sandyford	159	125	146	135	124	105
Scotswood	109	85	108	83	78	63
South Gosforth	139	137	138	145	134	87
Walker	133	144	142	114	136	120
Walkergate	120	109	106	119	112	105
West City	117	105	115	97	95	114
Westerhope	108	133	135	137	135	146
Wingrove	110	100	92	85	64	80
Woolsington	93	114	102	73	105	95
<b>Total</b>	<b>3,228</b>	<b>3,140</b>	<b>3,216</b>	<b>3,114</b>	<b>2,993</b>	<b>2,940</b>

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

**Table A8: Deaths by Ward (North Tyneside)**

	1996	1997	1998	1999	2000	2001
Battle Hill	117	120	119	105	99	123
Benton	143	115	128	144	133	148
Camperdown	84	88	79	71	99	74
Chirton	103	119	128	109	91	70
Collingwood	113	101	111	84	116	93
Cullercoats	130	112	118	145	115	143
Holystone	121	118	139	107	122	150
Howdon	100	116	96	82	99	108
Longbenton	125	89	101	87	69	84
Monkseaton	134	125	130	136	113	117
North Shields	167	190	208	194	209	197
Northumberland	107	117	104	102	102	107
Riverside	143	146	110	110	127	123
St. Mary's	82	90	91	94	73	60
Seatonville	99	90	124	82	89	93
Tynemouth	117	101	118	100	107	83
Valley	110	117	123	106	117	111
Wallsend	153	155	133	121	137	104
Weetslade	111	118	116	121	105	116
Whitley Bay	193	166	173	170	168	137
<b>Total</b>	<b>2,452</b>	<b>2,393</b>	<b>2,449</b>	<b>2,270</b>	<b>2,290</b>	<b>2,241</b>

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

**Table A9: Deaths by Ward (South Tyneside)**

	1996	1997	1998	1999	2000	2001
All Saints	84	109	84	95	87	75
Beacon & Bents	96	127	122	96	112	108
Bede	116	129	139	139	123	115
Biddick Hall	96	90	93	95	84	74
Boldon Colliery	100	106	101	83	85	71
Cleadon & East Boldon	78	75	63	87	74	65
Cleadon Park	59	77	76	68	71	64
Fellgate & Hedworth	75	77	62	74	82	70
Harton	97	113	117	109	97	110
Hebburn Quay	88	94	110	98	73	95
Hebburn South	93	94	75	80	86	69
Horsley Hill	96	122	100	90	107	100
Monkton	140	154	117	148	130	155
Primrose	114	137	128	103	125	85
Rekedyke	100	97	118	108	94	74
Tyne Dock & Simonside	80	67	69	69	72	73
Westoe	108	111	123	94	108	111
West Park	82	84	61	77	70	58
Whitburn & Marsden	73	70	100	78	83	86
Whiteleas	108	91	98	118	94	98
<b>Total</b>	<b>1,883</b>	<b>2,024</b>	<b>1,956</b>	<b>1,909</b>	<b>1,857</b>	<b>1,756</b>

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

**Table A10: Deaths by Ward (Sunderland)**

	1996	1997	1998	1999	2000	2001
Castletown	113	111	141	140	132	140
Central	147	111	134	149	135	139
Colliery	167	148	139	125	116	142
Eppleton	137	160	150	157	157	170
Fulwell	106	89	114	90	88	95
Grindon	124	111	86	85	105	96
Hendon	171	166	198	168	132	133
Hetton	181	157	170	154	170	135
Houghton	117	113	141	127	131	122
Pallion	143	135	144	159	155	160
Ryhope	160	107	131	142	139	135
St. Chad's	98	117	148	145	140	120
St. Michael's	113	131	96	127	98	98
St. Peter's	182	175	199	188	192	180
Shiney Row	146	153	162	179	183	159
Silksworth	140	108	133	115	132	124
South Hylton	135	131	113	134	107	131
Southwick	132	124	144	116	131	111
Thorney Close	114	129	119	110	100	107
Thornholme	138	151	166	133	117	145
Town End Farm	91	89	84	76	83	84
Washington East	132	128	119	129	165	130
Washington North	113	93	110	104	89	77
Washington South	101	89	107	82	97	114
Washington West	94	106	120	148	117	114
<b>Total</b>	<b>3,295</b>	<b>3,132</b>	<b>3,368</b>	<b>3,282</b>	<b>3,211</b>	<b>3,161</b>

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