

**Milestone 5: Improving the well-being of our young children through reductions in the proportion of women smoking during pregnancy, the percentage of low birth-weight babies, dental decay among 5 year olds, and by increasing the proportion of women breastfeeding.**

This milestone is measured by four indicators. The source of the information on smoking, low birth-weight and breastfeeding is Information Services NHS National Services Scotland. Information on dental decay among 5 year olds is obtained from the Scottish Health Boards Dental Epidemiology Programme (SHBDEP until 1999/00 and NDIP 2002/03) .

**(a) Women smoking during pregnancy**

Since 1998/99, there has been a small decrease in the percentage of women smoking at the start of pregnancy from 28.3 per cent to 26.1 per cent in 2002/03. This information is self-reported at the first antenatal visit to the hospital.

**Table 5a: Percentage of women smoking at the start of pregnancy, 1993/94 – 2002/03**

|            | 1993/94 | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03p |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Percentage | 27.9    | 29.0    | 28.8    | 29.4    | 29.3    | 28.3    | 27.4    | 27.5    | 27.5    | 26.1     |

Source: Information Services NHS National Services Scotland  
p- Provisional

*Carstairs Deprivation Quintiles*

Women living in the most deprived quintile of postcode sectors are around two and a half times more likely to smoke at the time of their first antenatal visit than those from the least deprived quintile. However, since 1999/2000, there has been a decrease in the proportion of women from the most deprived quintile of postcode sectors who reported smoking at the start of pregnancy.

*Urban Rural analysis*

Provisional data for 2002/03 shows that a higher proportion of women in urban areas smoke at the start of pregnancy. Some 27 per cent of women from urban areas were smoking at the start of pregnancy compared to some 20 per cent from rural areas.

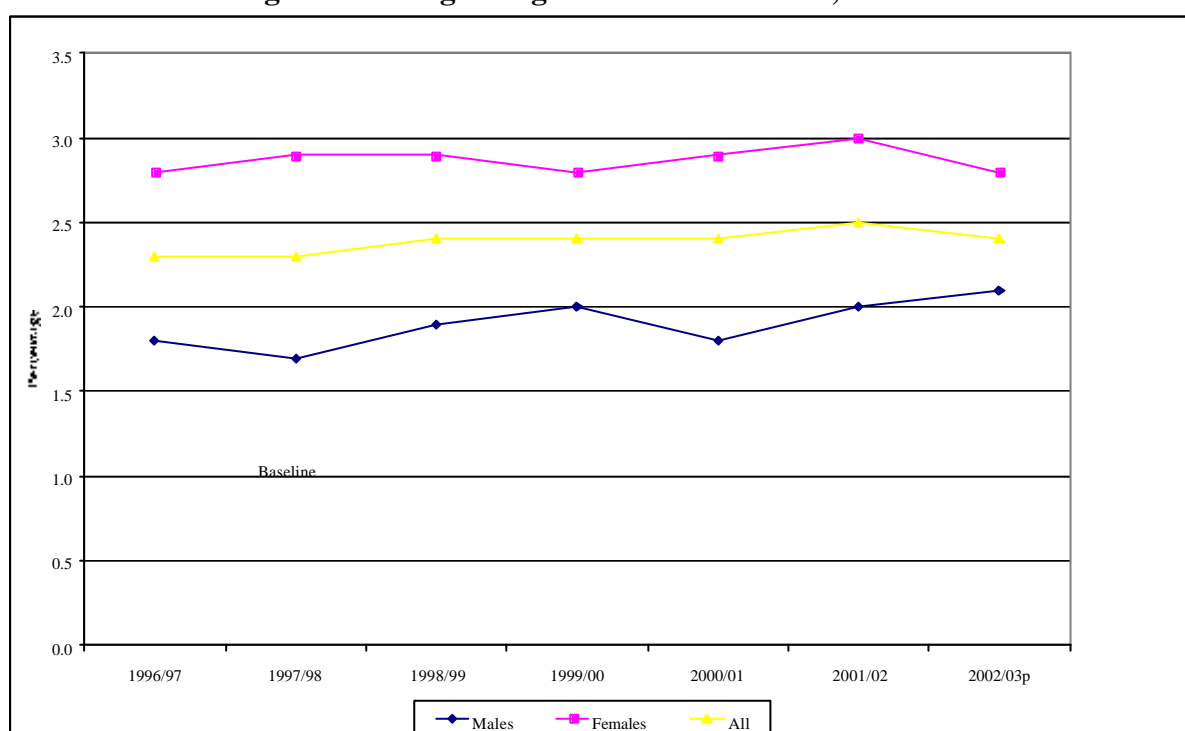
### **(b) Low birth-weight babies**

Since 1997/98, the percentage of low birth-weight singleton full term births has remained fairly stable at around 2.4 per cent of all singleton full term births. The figures exclude multiple births and those births which did not go to full term. Low birth-weight is defined as singleton full term births less than 2.5 kilograms.

### *Carstairs Deprivation Quintiles*

Singleton full term babies born to mothers from the most deprived quintile of postcode sectors are more likely to be of low birth-weight than those born to mothers from the least deprived areas. In 2002/03, some 3.5 per cent of babies born to mothers from the most deprived areas were of low birth-weight compared to some 1.6 per cent of babies born to mothers from the least deprived areas.

**Chart 5b: Percentage of low weight singleton full term births, 1996/97 – 2002/03**



Source: Information Services NHS National Services Scotland

Home births and births at non-NHS hospitals are excluded.

From 1998 where four or more babies are involved in a delivery, birth details are recorded for the first three babies delivered, prior to 1998 details for the first two babies were recorded.

Excludes births with less than 37 completed weeks gestation.

p Provisional

### *Urban Rural analysis*

Provisional data for 2002/03 shows that there are differences in the percentages of singleton low birth-weight babies between urban and rural areas. Some 2.6 per cent of births in urban areas were low birth-weight, compared to some 1.6 per cent in rural areas.

### ***(c) Proportion of women breastfeeding***

There is some evidence to show that since 1999, there has been a small increase in the percentage of women breastfeeding 6 to 8 weeks after the birth of their child. The figures below were submitted by 8, 9, or 10 of the 15 Health Boards. Given the coverage, conclusions about the levels across Scotland should be considered carefully.

**Table 5c: Percentage breastfeeding after 6-8 weeks, 1995 – 2003**

|            | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 <sup>p</sup> |
|------------|------|------|------|------|------|------|------|------|-------------------|
| Percentage | 29.1 | 32.3 | 33.4 | 34.4 | 34.6 | 35.4 | 35.1 | 36.5 | 36.1              |

Source: Information Services NHS National Services Scotland

The figures cover 8 of the 15 Health Boards in Scotland prior to 1997 and 9 of the 15 Health Boards from 1997 to 1999 and 10 of the 15 Boards from 2000.

The information includes breastfed and a mixture of breastfed and bottle fed.

*p* Provisional

Information is also available on the levels of breastfeeding on or around 7 days after birth. This shows a rise in the percentage of babies that were breastfed at 7 days of age from some 43 per cent in 1999 to 45 per cent in 2003. This information is collected nationally through the Guthrie card, which is completed when babies are screened for a range of metabolic diseases.

**Table 5d: Percentage breastfeeding at or around 7 days after birth, 1995 – 2003**

|            | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------------|------|------|------|------|------|------|------|------|------|
| Percentage | 40.5 | 41.1 | 42.0 | 42.9 | 43.1 | 44.3 | 43.2 | 45.5 | 45.1 |

Source: National Health Service in Scotland

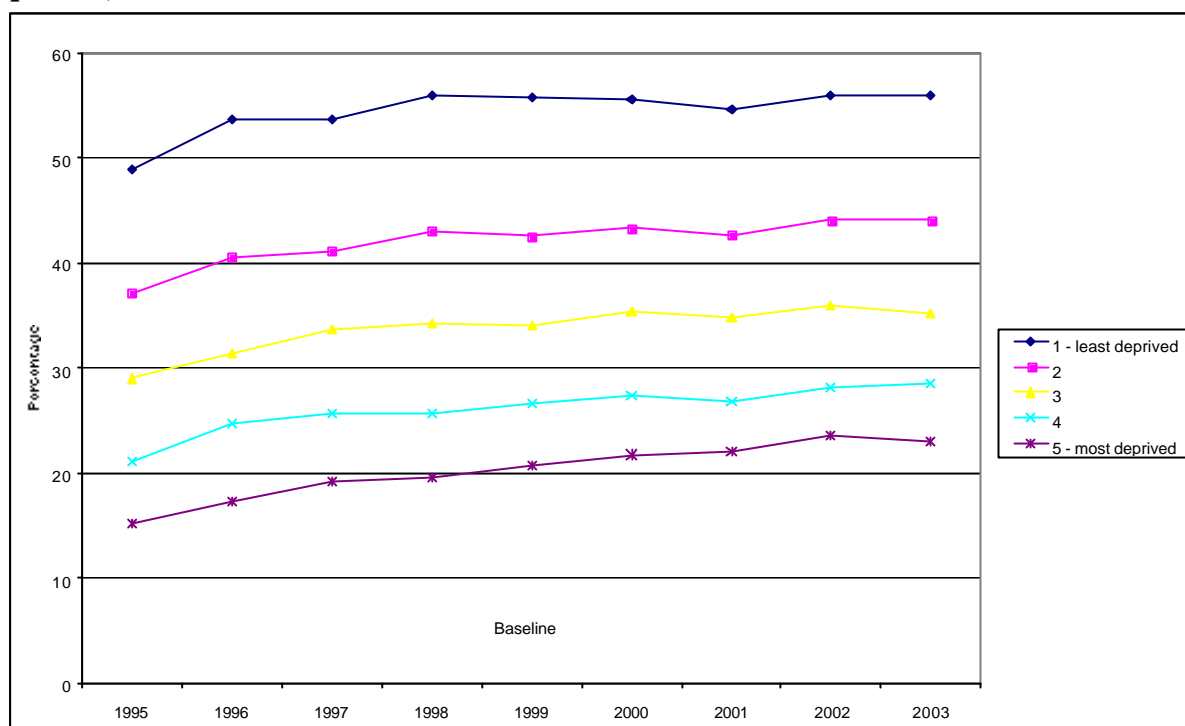
Notes: Data collated by PEACH, Yorkhill Hospital

The information includes breastfed and a mixture of breastfed and bottle fed.

### ***Carstairs Deprivation Quintiles***

There is a clear association between levels of breastfeeding and area deprivation. Mothers from more deprived areas were about two and a half times less likely to be breastfeeding at 6 to 8 weeks after the birth of their baby than women from least deprived areas. There is some evidence to show that levels of breastfeeding have seen small increases across all types of areas since 1999.

**Chart 5e: Percentage of women breastfeeding at 6-8 weeks by Carstairs deprivation quintile, 1995 - 2003**



Source: Information Services NHS National Services Scotland

The figures cover 8 of the 15 Health Boards in Scotland prior to 1997 and 9 of the 15 Health Boards from 1997 to 1999 and 10 of the 15 Boards from 2000.

The information includes breastfed and a mixture of breastfed and bottle fed.

*(d) Dental decay among 5 year olds*

Since the 1980s the percentage of 5 year olds who were free from dental caries has fluctuated between 38% and 45%.

**Table 5f: Percentage of 5 year olds free from dental caries, 1987/88 – 2002/03**

|         | Males | Females | All  |
|---------|-------|---------|------|
| 1987/88 | 41.4  | 43.4    | 42.4 |
| 1989/90 | 38.5  | 43.5    | 40.8 |
| 1991/92 | 42.0  | 42.3    | 41.8 |
| 1993/94 | 37.4  | 39.0    | 38.2 |
| 1995/96 | 41.3  | 41.4    | 41.4 |
| 1997/98 | 43.6  | 42.8    | 43.3 |
| 1999/00 | 44.7  | 45.4    | 45.1 |
| 2002/03 | 44.2  | 45.1    | 44.6 |

Source: 1987-88 - Dental Health Services Research Unit: University of Dundee

2003 – National Dental Inspection programme

## Background Data

The following background data corresponds to the charts and commentary included in this milestone.

**Table 5g: Women Smoking at the start of pregnancy by Carstairs deprivation quintile, 1994/95 – 2002/03; and Smoking at the start of pregnancy by urban rural, 2001/02 – 2002/03**

|                        | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03p |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Least Deprived 1       | 14.4    | 14.6    | 14.7    | 14.8    | 14.4    | 13.9    | 14.3    | 15.1    | 13.8     |
| 2                      | 21.9    | 21.8    | 22.4    | 22.5    | 23.0    | 21.6    | 22.3    | 23.0    | 20.6     |
| 3                      | 28.6    | 27.9    | 28.5    | 28.5    | 27.8    | 28.2    | 28.1    | 28.0    | 27.8     |
| 4                      | 35.3    | 34.5    | 35.2    | 36.0    | 33.7    | 33.0    | 33.4    | 33.1    | 31.9     |
| Least Deprived 5       | 42.4    | 43.1    | 43.7    | 42.8    | 41.2    | 39.2    | 38.3    | 37.8    | 35.8     |
|                        |         |         |         |         |         |         |         |         |          |
| Large Urban Areas      |         |         |         |         |         |         |         | 29.6    | 27.3     |
| Other Urban Areas      |         |         |         |         |         |         |         | 28.8    | 27.6     |
| Accessible Small Towns |         |         |         |         |         |         |         | 27.0    | 27.3     |
| Remote Small Towns     |         |         |         |         |         |         |         | 30.4    | 27.7     |
| Accessable Rural Areas |         |         |         |         |         |         |         | 21.3    | 20.4     |
| Remote Rural Areas     |         |         |         |         |         |         |         | 18.9    | 19.7     |

Source: Information and Statistics Division : National Health Service in Scotland

Home births and births at non-NHS hospitals are excluded.

Data on smoking behaviour is based on self reporting information obtained at the first antenatal visit to hospital

These national figures include a small amount of estimation from some Health Boards

<sup>r</sup> Revised

**Table 5h: Percentage of full term low birth weight babies, 1975/76 – 2002/03**

|                      | Males     |          | Females   |          | All       |          |
|----------------------|-----------|----------|-----------|----------|-----------|----------|
|                      | Singleton | Multiple | Singleton | Multiple | Singleton | Multiple |
| 1975/76              | 2.8       | 34.1     | 4.4       | 36.5     | 3.6       | 35.3     |
| 1976/77              | 2.7       | 24.4     | 4.1       | 42.0     | 3.4       | 33.0     |
| 1977/78              | 2.6       | 29.6     | 3.7       | 40.1     | 3.2       | 34.7     |
| 1978/79              | 2.6       | 30.9     | 3.6       | 37.4     | 3.1       | 34.0     |
| 1979/80              | 2.6       | 28.9     | 3.5       | 32.6     | 3.0       | 30.8     |
| 1980/81              | 2.3       | 26.1     | 3.5       | 27.5     | 2.9       | 26.7     |
| 1981/82              | 2.1       | 25.8     | 3.2       | 39.6     | 2.7       | 32.3     |
| 1982/83              | 2.2       | 24.8     | 3.3       | 36.4     | 2.8       | 30.5     |
| 1983/84              | 2.2       | 27.8     | 3.1       | 36.6     | 2.6       | 32.1     |
| 1984/85              | 2.0       | 25.5     | 3.0       | 32.9     | 2.5       | 29.0     |
| 1985/86              | 2.2       | 28.4     | 3.2       | 33.2     | 2.7       | 30.7     |
| 1986/87              | 2.1       | 28.0     | 3.1       | 35.5     | 2.6       | 32.2     |
| 1987/88              | 2.1       | 24.1     | 3.1       | 32.8     | 2.6       | 28.9     |
| 1988/89              | 1.9       | 22.3     | 3.1       | 29.2     | 2.5       | 25.8     |
| 1989/90              | 2.1       | 22.9     | 3.0       | 30.0     | 2.5       | 26.6     |
| 1990/91              | 2.0       | 27.3     | 2.9       | 35.5     | 2.5       | 31.4     |
| 1991/92              | 1.9       | 22.7     | 3.2       | 31.1     | 2.5       | 27.2     |
| 1992/93              | 1.9       | 23.4     | 2.9       | 32.5     | 2.4       | 27.9     |
| 1993/94              | 1.8       | 22.4     | 2.8       | 29.5     | 2.3       | 26.1     |
| 1994/95              | 1.9       | 20.6     | 3.0       | 30.9     | 2.4       | 26.0     |
| 1995/96              | 2.0       | 22.8     | 2.9       | 32.8     | 2.5       | 27.7     |
| 1996/97              | 1.8       | 23.9     | 2.8       | 27.8     | 2.3       | 25.8     |
| 1997/98              | 1.7       | 25.3     | 2.9       | 29.5     | 2.3       | 27.4     |
| 1998/99              | 1.9       | 26.4     | 2.9       | 29.5     | 2.4       | 28.0     |
| 1999/00              | 2.0       | 20.5     | 2.8       | 33.9     | 2.4       | 27.5     |
| 2000/01              | 1.8       | 18.8     | 2.9       | 37.3     | 2.3       | 28.2     |
| 2001/02              | 2.0       | 24.5     | 3.0       | 29.1     | 2.5       | 27.0     |
| 2002/03 <sup>p</sup> | 2.1       | 18.2     | 2.8       | 30.3     | 2.4       | 24.0     |

Source: Information Services NHS National Services Scotland

Home births and births at non-NHS hospitals are excluded.

From 1998 where four or more babies are involved in a delivery, birth details are recorded for the first three babies delivered,

prior to 1998 details for the first two babies were recorded.

Excludes births with less than 37 completed weeks gestation.

p Provisional

**Table 5i: Percentage of Singleton full term low birth weight babies by Carstairs deprivation quintile, 1990/91 – 2002/03; and Percentage of Singleton full term low birth weight babies by urban rural, 2001/02 – 2002/03**

|                        | 1990/91 r | 1991/92 r | 1992/93 r | 1993/94 r | 1994/95 r | 1995/96 r | 1996/97 r | 1997/98 r | 1998/99 r | 1999/00 r | 2000/01 r | 2001/02 r | 2002/03 p |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Least Deprived 1       | 1.8       | 1.7       | 1.4       | 1.4       | 1.7       | 1.6       | 1.6       | 1.4       | 1.4       | 1.6       | 1.3       | 1.6       | 1.6       |
| 2                      | 1.9       | 1.8       | 1.9       | 1.7       | 1.7       | 1.9       | 1.8       | 1.7       | 1.8       | 1.9       | 1.7       | 1.7       | 1.7       |
| 3                      | 2.3       | 2.2       | 2.3       | 2.3       | 2.3       | 2.2       | 2.2       | 2.3       | 2.3       | 2.2       | 2.4       | 2.3       | 2.4       |
| 4                      | 2.7       | 2.8       | 2.8       | 2.7       | 2.9       | 2.9       | 2.6       | 2.4       | 2.6       | 2.9       | 2.8       | 3.2       | 2.9       |
| Least Deprived 5       | 3.5       | 3.7       | 3.4       | 3.3       | 3.6       | 3.6       | 3.2       | 3.5       | 3.7       | 3.4       | 3.6       | 3.6       | 3.5       |
| Large Urban Areas      |           |           |           |           |           |           |           |           |           |           |           | 3.0       | 2.8       |
| Other Urban Areas      |           |           |           |           |           |           |           |           |           |           |           | 2.5       | 2.4       |
| Accessible Small Towns |           |           |           |           |           |           |           |           |           |           |           | 2.2       | 2.4       |
| Remote Small Towns     |           |           |           |           |           |           |           |           |           |           |           | 1.8       | 2.5       |
| Accessible Rural Areas |           |           |           |           |           |           |           |           |           |           |           | 1.8       | 1.5       |
| Remote Rural Areas     |           |           |           |           |           |           |           |           |           |           |           | 1.4       | 2.0       |

Source: Information Services NHS National Services Scotland

Home births and births at non-NHS hospitals are excluded.

From 1998 where four or more babies are involved in a delivery, birth details are recorded for the first three babies delivered, prior to 1998 details for the first two babies were recorded.

Excludes births with less than 37 completed weeks gestation.

p Provisional; r Revised;

**Table 5j: Percentage breastfeeding after 6-8 weeks by Carstairs deprivation quintile, 1995 – 2003**

|                  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 <sup>p</sup> |
|------------------|------|------|------|------|------|------|------|------|-------------------|
| Least deprived 1 | 49.0 | 53.6 | 53.7 | 56.0 | 55.7 | 55.6 | 54.6 | 56.0 | 55.9              |
| 2                | 37.2 | 40.6 | 41.1 | 43.0 | 42.6 | 43.3 | 42.7 | 44.1 | 44.1              |
| 3                | 29.0 | 31.4 | 33.7 | 34.2 | 34.0 | 35.4 | 34.9 | 35.9 | 35.2              |
| 4                | 21.2 | 24.8 | 25.8 | 25.7 | 26.6 | 27.5 | 26.8 | 28.1 | 28.6              |
| Most deprived 5  | 15.2 | 17.4 | 19.2 | 19.6 | 20.8 | 21.8 | 22.0 | 23.6 | 23.0              |

Source: Information Services NHS National Services Scotland

The figures cover 8 of the 15 Health Boards in Scotland prior to 1997 and 9 of the 15 Health Boards from 1997 to 1999 and 10 of the 15 Boards from 2000.

The information includes breastfed and a mixture of breastfed and bottle fed.

p Provisional

*Availability of data and references*

*Women and Children's health (incl. Sexual Health) Maternal smoking*

[http://www.isdscotland.org/isd/info3.jsp?pContentID=1808&p\\_applic=CCC&p\\_service=Content.show&](http://www.isdscotland.org/isd/info3.jsp?pContentID=1808&p_applic=CCC&p_service=Content.show&)

*Scottish Health Statistics Births and Babies*

[http://www.isdscotland.org/isd/info3.jsp?pContentID=1022&p\\_applic=CCC&p\\_service=Content.show&](http://www.isdscotland.org/isd/info3.jsp?pContentID=1022&p_applic=CCC&p_service=Content.show&)

*Scottish Health Statistics Breastfeeding*

[http://www.isdscotland.org/isd/info3.jsp?p\\_applic=CCC&p\\_service=Content.show&pContentID=1764&](http://www.isdscotland.org/isd/info3.jsp?p_applic=CCC&p_service=Content.show&pContentID=1764&)

*GUTHRIE DATA BY HOSPITAL 1990 - 2001*

[http://www.show.scot.nhs.uk/breastfeed/GUTHRIE\\_PRINT\\_DATA.html](http://www.show.scot.nhs.uk/breastfeed/GUTHRIE_PRINT_DATA.html)

*Dental Health Services Research Unit and Scotland's National Dental Inspection Programme 2003*

<http://www.dundee.ac.uk/dhsru/>