# Cigarette Smoking and Drinking Behaviour in Northern Ireland 1986-2002: A Cohort Analysis

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# Executive Summary

This report examines trends in the prevalence of cigarette smoking and drinking behaviour by age, gender and socio-economic status across different birth cohorts in Northern Ireland. Cohort specific death rates are presented for major smoking and alcohol related diseases. The analysis uses data from the Continuous Household Survey over the period 1986-2002 as well as mortality data.

***Smoking***

Over the last fifteen years the prevalence of cigarette smoking in Northern Ireland has declined substantially. In 1986, 35 percent of men and 32 percent of women over age 16 were current cigarette smokers; by 2002 these proportions had fallen to 27 percent and 26 percent respectively. The decline in smoking has been significantly less marked amongst women, compared to men, and by 2002 a similar proportion of both women and men were current smokers. Smoking cessation rises with age as a higher proportion of older age groups report being ex-smokers than younger age groups. Cross-sectionally, a greater proportion of women have never smoked than men of the same age; and this is particularly the case amongst older women.

The general decline in the propensity to smoke over the last two decades is reflected in the lower proportion of men who state that they have ever smoked amongst successive birth cohorts at all ages. This is not, however, the case amongst women, where *higher* proportions of successive birth cohorts of women report ever having smoked. Although smoking is generally more common amongst men than women, men (especially amongst the younger cohorts) are also more likely to give up than women and their *relative* improvement in mortality from smoking related diseases is higher. Gender differences in smoking behaviour need to be addressed if the targets for reducing deaths from lung cancer are to be achieved.

There is a clear gradient in the prevalence of cigarette smoking by socio-economic group amongst both men and women. In 2002, men working in semi-skilled manual occupations were twice as likely to report that they currently smoked than men employed in professional jobs (33% versus 17%). Similarly women in semi-skilled or unskilled manual occupations were *three times* as likely to smoke as professional women (i.e. 35% & 33% versus 11%). There appears to have been little progress in narrowing the gap between socio-economic groups in terms of smoking behaviour over the last two decades. Within manual groups, the rate of smoking cessation has been faster amongst men than women. By 2002, more women from manual backgrounds smoked than any other group. Inequalities in smoking behaviour between socio-economic groups appear to be generally widening both *within* birth cohorts with rising age, and *between* cohorts at any given chronological age. If public health campaigns are to be successful in reducing inequalities in death rates from smoking related diseases they will need to be more effective in targeting women, especially young women and women from manual backgrounds.

***Drinking***

The proportion of men and women who are current drinkers has *increased* significantly during the last two decades, from 73% of men and 59% of women in 1986 to 81% and 73% respectively in 2002. Men were more likely than women to drink alcohol in each year over this period (1986-2002), although the gap has narrowed across time. In 2002, a significantly higher proportion of women reported being lifetime abstainers than men. Older women were significantly more likely to have never drunk alcohol than younger women. For example, over two-fifths (42%) of women over 60 reported being lifetime abstainers compared with just 10% of women aged 25-34.

Looking at changes across birth cohorts, drinking is more common amongst successive birth cohorts at the same age. The trend towards an increased prevalence of current drinking between birth cohorts is significantly more marked amongst women than men. These changes in the patterns of drinking by gender and birth cohort may have implications for the future health of women.

Drinking varies with socio-economic group, with the highest prevalence of current drinkers in 2002 being amongst professional men and women and the lowest amongst skilled manual women. Women from a manual socio-economic background are significantly more likely to be lifetime abstainers than women from a non-manual background. Current drinking has increased amongst men and women from all socio-economic groups. Most striking is the rise in the prevalence of current drinking amongst women from non-manual backgrounds, whose rates of drinking now match those of manual men.

There has been an upward trend in current drinking amongst successive birth cohorts within each socio-economic group. This is most marked amongst women. For example, at age 45, 76% of women of non-manual backgrounds born in 1941-50 were current drinkers. However amongst non-manual women born ten years later, in 1951-60, 82% were current drinkers at the same age. The gap between non-manual and manual groups appears to be narrowing somewhat between successive cohorts and there is little difference in the prevalence of current drinking by socio-economic group amongst men born in 1971-81 and 1961-71. However, socio-economic differentials remain amongst younger cohorts of women.

## Acknowledgements

We are grateful to the DHSSPS, the Northern Ireland GRO and The Data Archive for access to mortality data and the CHS data 1986-2002, which have been used by kind permission. The analysis and interpretation of the data is the responsibility of the authors alone. The stimulus for this research originates from the cohort strand of work within the ESRC SAGE Research Group based at the London School of Economics and King's College London (funded under grant number M565-21-1001).

# Cigarette smoking and drinking behaviour in Northern Ireland 1986-2002: A Cohort Analysis

## 1. Introduction

Differentials in mortality by social class have been a continuing concern of public health analysts in the UK since the inception of death registration in 1837 (Drever and Whitehead, 1997). At the end of the twentieth century there remained clear inequalities in life expectancy by social class, with a 7.4 year difference in the expectation of life at birth between men in social class I (78.5 years) and social class V (71.1 years); and a 5.7 year differential for women (82.8 years compared with 77.1 years) (ONS, 2002). Health damaging or health promoting behaviours, such as smoking and alcohol consumption are now widely recognised as making a major contribution to current levels of morbidity and mortality (DoH, 1995). To the extent that these behaviours vary by socio-economic status means that they also contribute to the persistence of health inequalities. This report examines trends in cigarette smoking and drinking behaviour in Northern Ireland using data from the Continuous Household Survey over the period 1986 to 2002. A unique aspect of the analysis is that trends in behaviour are examined for seven different birth cohorts allowing insight into the dynamics of cigarette smoking and drinking behaviour over the life-cycle and across time.

## 2. Data and Method

To date there has been no analysis of the prevalence of smoking by different birth cohorts in Northern Ireland. In part this has been due to a lack of longitudinal data. The majority of international birth cohort studies on smoking have used retrospective data, with recall questions regarding the dates of smoking initiation and cessation. There are a number of problems inherent within such an approach. In particular, the effects of selective mortality, as well as possible biases in recall errors between older and younger cohorts, may confound comparisons between cohorts. A recent study in Finland adopted an alternative approach, utilising data from six cross-sectional surveys containing self-reported data on smoking status (Laaksonen et al, 1999). These data were then used to construct synthetic birth cohorts to analyse trends in smoking in eastern Finland during the period 1972-97. This paper adopts a similar approach to examine the smoking behaviour of representatives of seven Northern Irish birth cohorts born in the years 1991-20, 1921-30, 1931-40, 1941-50, 1961-70 and 1971-80. It builds upon earlier research examining smoking behaviour amongst different birth cohorts within Britain (Evandrou and Falkingham, 2002).

The Continuous Household Survey (CHS), an annual cross-sectional survey of individuals living in private households in Northern Ireland, has included questions on smoking behaviour in alternate years since 1984. In this report, data from the CHS for the

period 1986-2000 are used to generate seven pseudo-cohorts (see Table 1). The experience of representatives of each birth cohort is tracked in successive years of the CHS. For example, those aged 56-65 years in the 1986 CHS are taken as being representative of the birth cohort born in 1921-30. The same birth cohort is then represented by those aged 58-67 in 1988, 60-69 in 1990, and finally those aged 70-79 in 2000. This constitutes a pseudo-cohort or quasi-cohort approach since the individuals are not the same from year to year. Rather than tracking individuals per se, it is the group means or proportions that are taken. Thus the unit of analysis is the cohort and what is measured is the *average* experience for the cohort. Since a fresh sample is drawn from the surviving population each year, the cohort mean remains representative of that population and there is no problem of sample attrition for reasons other than mortality, as with panel data. As information is collected on current smoking and drinking behaviour, recall biases are minimised.

Table 1 Age ranges of ten year birth cohorts in selected years of the Continuous Household Survey (CHS), Northern Ireland

| | **Birth Cohort** | | | | | | |
|---|---|---|---|---|---|---|---|
| **Year** | **1911-20** | **1921-30** | **1931-40** | **1941-50** | **1951-60** | **1961-70** | **1971-80** |
| 1986 | 66-75 | 56-65 | 46-55 | 36-45 | 26-35 | 16-25 | |
| 1988 | 68-77 | 58-67 | 48-57 | 38-47 | 28-37 | 18-27 | |
| 1990 | 70-79 | 60-69 | 50-59 | 40-49 | 30-39 | 20-29 | |
| 1992 | | 62-71 | 52-61 | 42-51 | 32-41 | 22-31 | |
| 1994 | | 64-73 | 54-63 | 44-53 | 34-43 | 24-33 | |
| 1996 | | 66-75 | 56-65 | 46-55 | 36-45 | 26-35 | 16-25 |
| 1998 | | 68-77 | 58-67 | 48-57 | 38-47 | 28-37 | 18-27 |
| 2000 | | 70-79 | 60-69 | 50-59 | 40-49 | 30-39 | 20-29 |
| 2002 | | 72-81 | 62-71 | 52-61 | 42-51 | 32-41 | 22-31 |

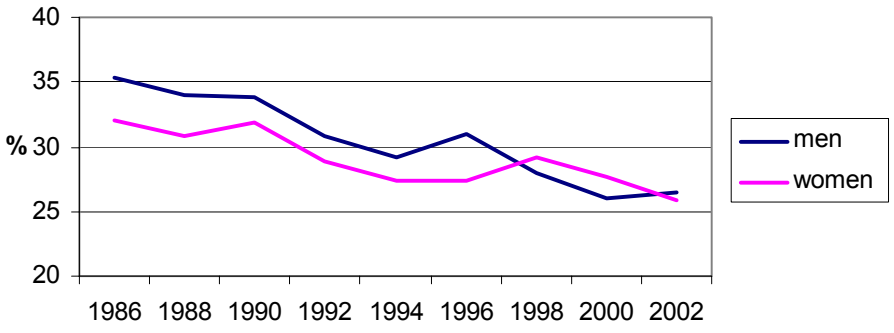
One limitation in employing such a method is that there may be problems with consistency of data, particularly where there have been changes in question wording or definitions between surveys. This problem is encountered in any analysis of cross-sectional data over time. Fortunately, there has been a remarkable degree of consistency in the questions regarding smoking behaviour within the CHS. However, there have been some changes over time in the way in which information regarding the volume of alcohol consumed has been collected and the recommended daily limits calculated. Therefore the analysis on drinking behaviour is confined to the prevalence of 'current drinking'. The

sample size of each ten year birth cohort varies over time as both the overall sample size of the CHS has changed and the share of the cohort in the sample population alters with age (see Appendix Table A1). Finally, the results are affected by both age and period effects, which are often difficult to disentangle. Nevertheless, despite these limitations, pseudo-cohort analysis can provide useful insights into inter-cohort differences and help to inform policy making.

## 3. Trends in Cigarette Smoking by Age and Birth Cohort

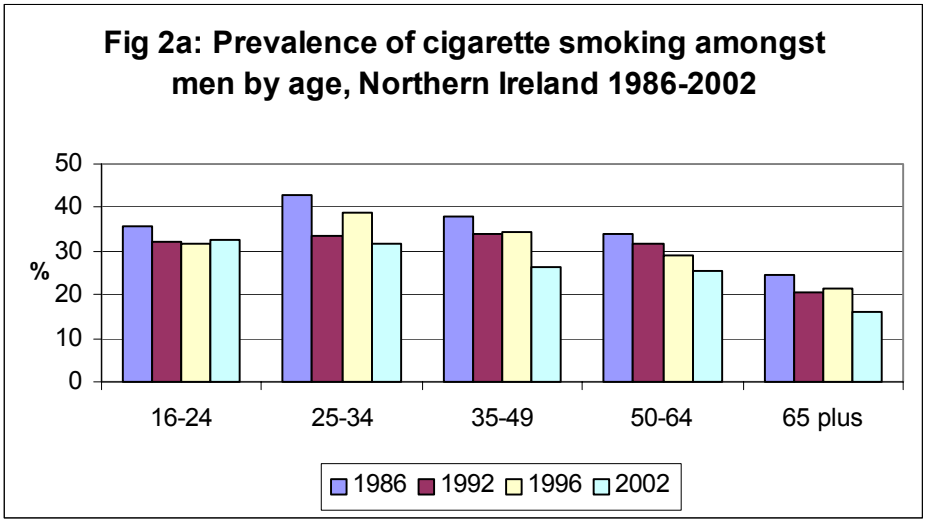
Over the last fifteen years the prevalence of cigarette smoking in Northern Ireland has declined significantly. In 1986, 35 percent of men and 32 percent of women over age 16 were current cigarette smokers; by 2002 these proportions had fallen to 27 percent and 26 percent respectively (see Figure 1 and Appendix Table A2). The decline in smoking has been less marked amongst women, compared to men, and by 2002 a similar proportion of both women and men were current smokers.

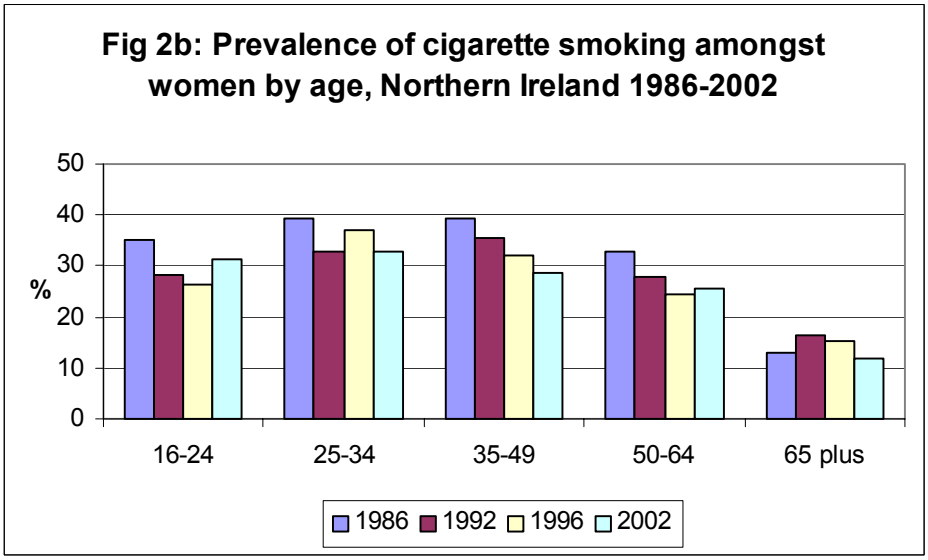
**Figure 1: Prevalence of cigarette smoking by sex, Northern Ireland 1986 to 2002**




Source: Authors' own analysis CHS 1986-2002.

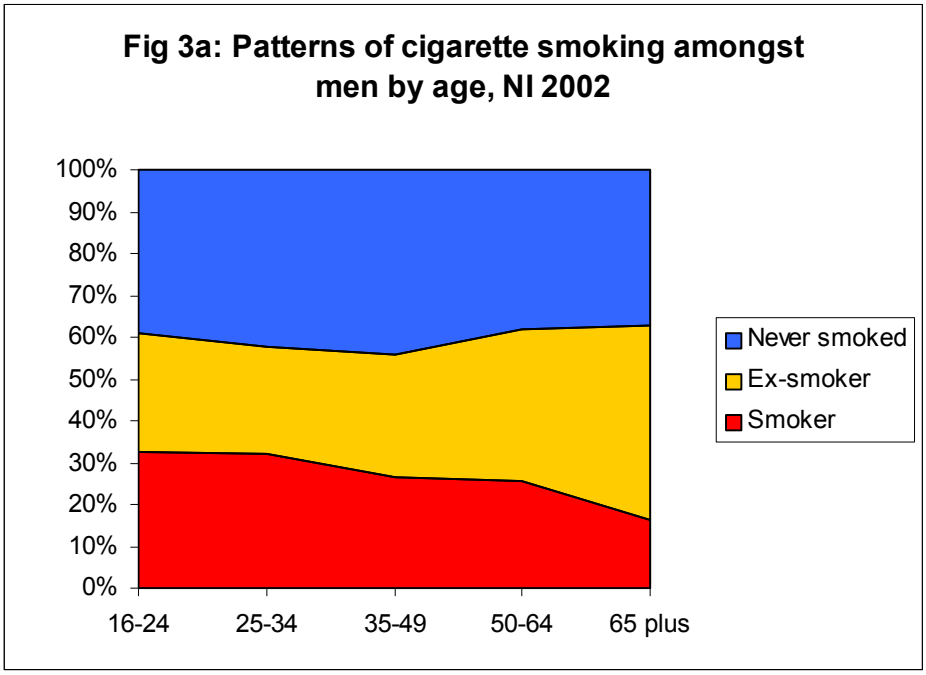
The prevalence of cigarette smoking amongst men and women varies by age, rising through the twenties and thirties and then falling back again at later ages (Figures 2a and 2b and Appendix Table A3). Within each age group, the proportion smoking has fallen significantly over time - with the notable exceptions of people under age 25 and women over age 65. Amongst men aged 16-24, the proportion reporting that they currently smoked has fallen slightly between 1986 and 2002 (from 36% to 32%), but the fall is not statistically significant. Amongst women of the same age, the prevalence of smoking fell between 1986 and 1996 (from 35% to 26%) but during the last 6 years has risen to 31% by 2002. Again, the changes are not significant at the 95% level (but only just).

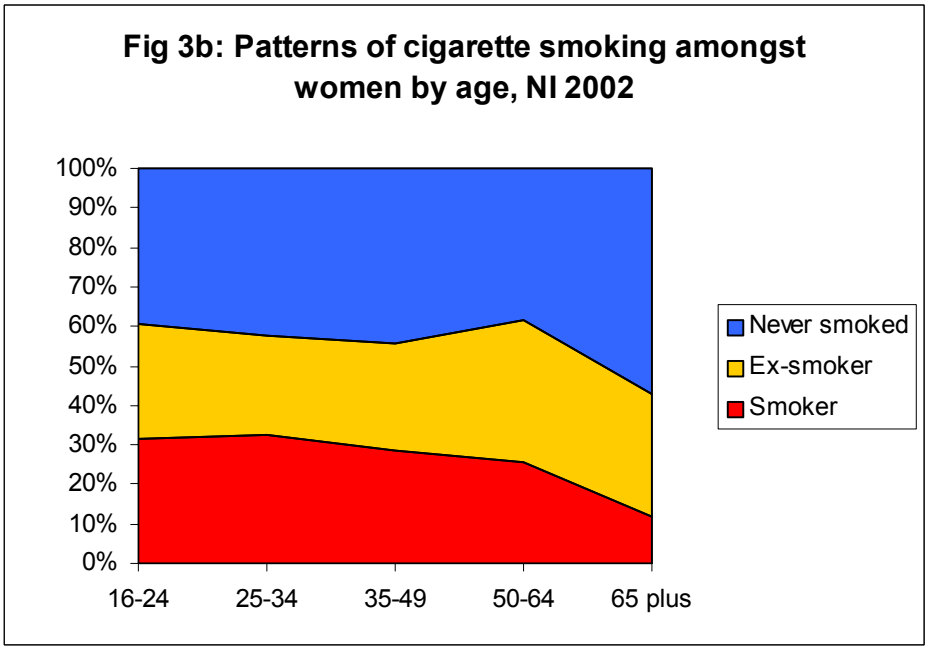



Source: Authors' own analysis CHS 1986, 1990, 1996, 2002.

The questions in the CHS regarding smoking behaviour are as follows: 'Have you ever smoked a cigarette, a cigar or a pipe?' and 'Do you smoke cigarettes at all nowadays?'. Thus it is possible to look at both current smokers and ex-smokers. Figures 3a and 3b show patterns of smoking behaviour amongst men and women by age in 2002. Two key observations may be made. First, smoking cessation rises with age as a higher proportion of older age groups report being ex-smokers than younger age groups. Secondly, a greater proportion of women have never smoked than men, and this is particularly the case amongst women aged 65 and over (see also Appendix Table A4).




Source: Authors' own analysis CHS 2002.

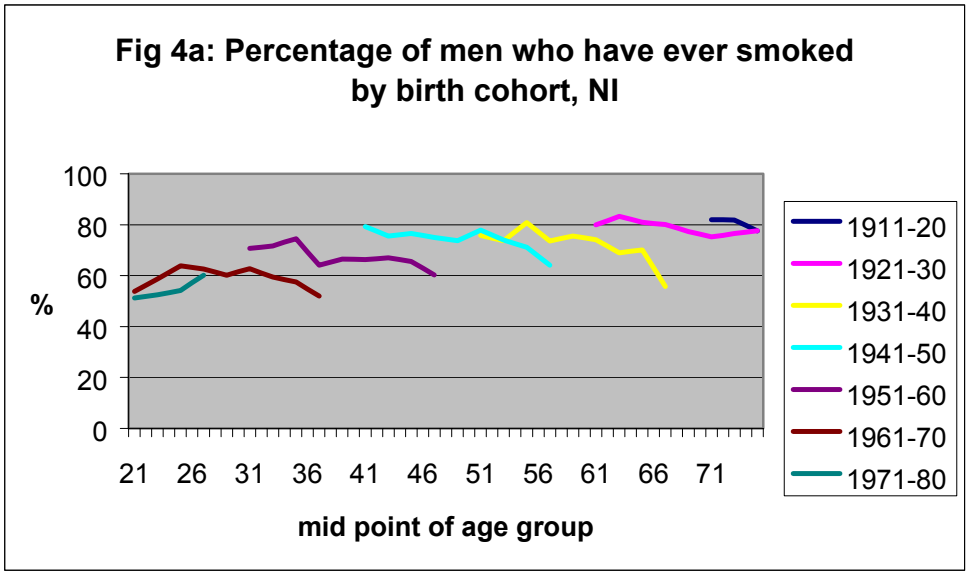
Table 2 presents data on the average daily cigarette consumption *amongst* smokers by age and sex for 2002. The proportion reporting smoking 20 cigarettes or more a day generally increases with age, and there is little difference by gender, with the exception of those aged 65 and over. In 2002, two-fifths of smokers were 'heavy' smokers a further two-fifths 'moderate' and one fifth 'light'.

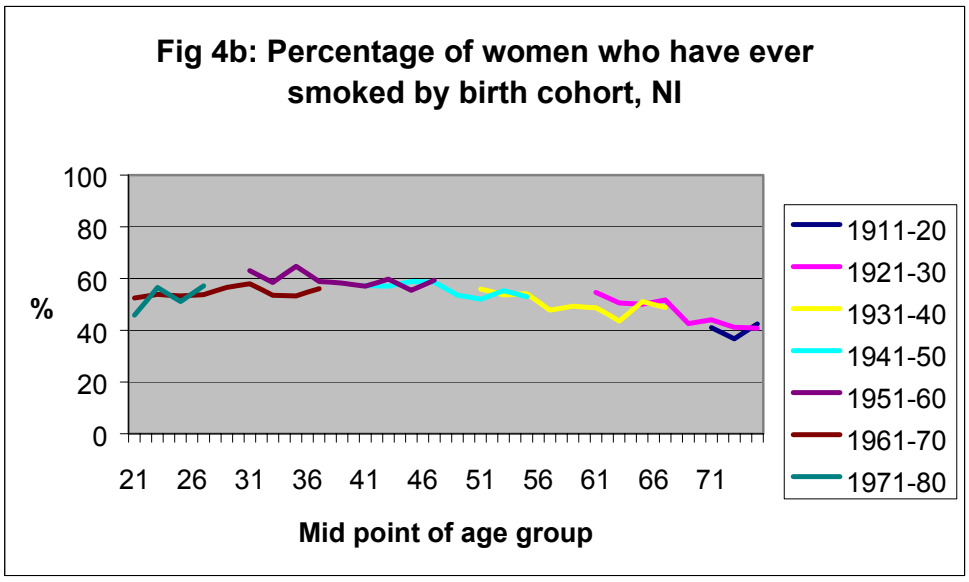
Table 2: Patterns of average daily cigarette consumption amongst current smokers by age and sex (%), Northern Ireland 2002

| | Under 10 a day | 10-19 a day | 20 or more a day | (N) |
|---|---|---|---|---|
| **Men** | | | | |
| 16-24 | 23 | 41 | 36 | (133) |
| 25-34 | 28 | 38 | 34 | (131) |
| 35-49 | 22 | 37 | 41 | (187) |
| 50-64 | 14 | 40 | 45 | (139) |
| 65 and over | 20 | 34 | 46 | (61) |
| All | 21 | 39 | 40 | (651) |
| **Women** | | | | |
| 16-24 | 16 | 44 | 39 | (122) |
| 25-34 | 28 | 37 | 35 | (163) |
| 35-49 | 18 | 42 | 40 | (209) |
| 50-64 | 17 | 36 | 47 | (148) |
| 65 and over | 29 | 36 | 36 | (62) |
| All | 21 | 39 | 40 | (704) |

Source: Authors' own analysis CHS 2002.

Changes in patterns of smoking by age reflect both period and cohort effects, and a clearer picture of trends in smoking behaviour across the life course is obtained by examining the patterns within particular birth cohorts. Figures 4a and 4b present the proportion of respondents that report 'ever having smoked' using 3 year moving averages plotted against the mid-point of the age group for the cohort. 'Ever smokers' include both current smokers and ex-smokers. The general decline in the propensity to smoke over the last two decades is reflected in the lower proportion of men who state that they have ever smoked amongst successive birth cohorts at all ages, with the exception of the youngest cohort (Figure 4a). However, this is not the case amongst women, where higher proportions of successive cohorts of women report ever having smoked. For example, around 60% of women born in 1951-60 report ever having smoked compared to about half of women born in 1931-40. Within birth cohorts, there is a slight downward trend by age – particularly at older ages, reflecting the differential survivorship of lifetime non-smokers as compared with lifetime ever-smokers (see also Appendix Tables A5a and A5b).

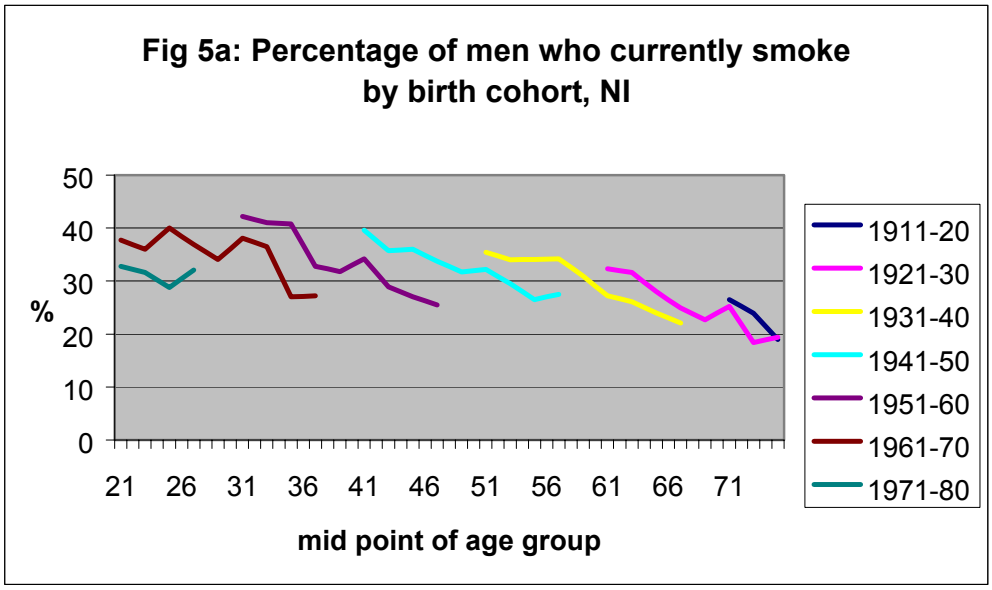


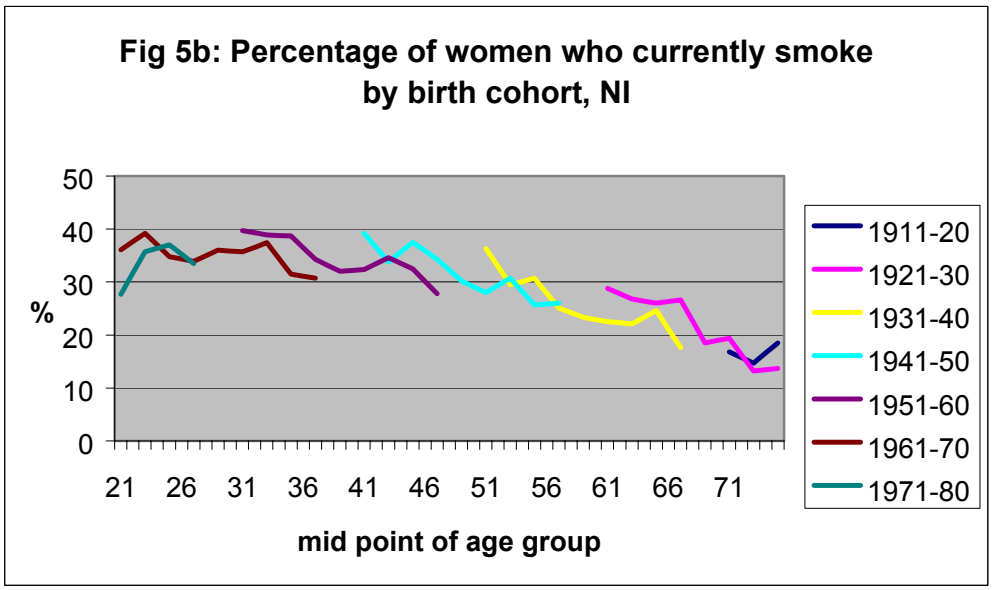




Note: Age is the mid-point of the ten year age range of each birth cohort in the relevant CHS year. For example, the cohort born in 1931-40 is aged 46-55 in 1986. Thus the mid-point of 51 is taken to represent that cohort in that year.
Source: Authors' own analysis CHS 1986-2002.

Figures 5a and 5b show the prevalence of smoking amongst each cohort by age and sex. A decrease in the prevalence of smoking by age within birth cohorts may be the result of either smoking cessation or selective mortality, with smokers being more likely to die than non-smokers. Selective mortality is only likely to affect the oldest age groups, and therefore the downward gradients in Figures 5a and 5b primarily reflect the tendency to give up smoking with increasing age amongst each cohort. Only for the youngest cohort

of women is there any upward trend in the prevalence of smoking, as young women join the ranks of smokers during their late teens and early 20s. The decrease in the proportion smoking by age amongst men observed *within* birth cohorts is much greater than that observed in cross-sectional data (see also Appendix Tables A6a and A6b).




Source: Authors' own analysis CHS 1986-2002.

Although smoking is generally more common amongst men than women, men are also more likely to give up than women, particularly amongst the younger cohorts. For example, amongst the cohort born 1961-70, at age 21, 38 percent of men reported that they currently smoked, compared to 36 percent of women. However, amongst the same

birth cohort at age 37, the gender differential has reversed with a higher proportion of women currently smoking than men (34% vs. 27%). Similar differences in smoking behaviour by gender were found for Britain (Evandrou and Falkingham, 2002) and have been reported in birth cohort studies for other countries, such as the US (Escobedo and Peddicord, 1996), West Germany (Brenner, 1993) and Canada (Ferrence, 1988).

Patterns of smoking behaviour by gender and birth cohort are reflected in Tables 3a and 3b, which illustrate the trends in the death rates from major smoking-related diseases, including cancer of the trachea, bronchus and lung. Ischaemic heart disease (IHD), bronchitis and emphysema (B&E), and chronic airways obstruction (CAO) are also recognised as being related to smoking, although the aetiology is less clear cut. The likelihood of dying from lung cancer, IHD and B&E at any given chronological age generally falls between successive birth cohorts - with the notable exception of a rise in lung cancer between women born in 1921-25 and those born in 1926-30. There is also evidence of some relative deterioration in death rates amongst women born in 1946-50 compared to earlier cohorts. Death rates from CAO do not appear to be consistently improving between successive cohorts. However CAO was only introduced as a separate disease classification in ICD-9 in 1978, and the rise may reflect the increasing tendency for doctors to enter this on the death certificate as they become more familiar with the classification over time.

Interestingly, although the death rates at any age are lower for women than men, the proportionate improvement in mortality from lung cancer between successive cohorts of women is also significantly lower. For example, the likelihood of dying at age 55-59 fell from 1690 per million for men born in 1921-25 to 911 per million for men born in 1936-40, i.e. a fall of 46%; the corresponding fall for women was just 28% (i.e. from 614 to 440 per million). Similarly, the likelihood of men dying at age 40-44 fell by 47% from 165 per million born in 1931-35 to 87 per million for those born in 1950-55; the corresponding fall for women was only 36% (i.e. from 75 to 48 per million). This differential by gender reflects the differences in rates of smoking cessation between men and women noted previously. If the targets for reducing deaths from cancer set out in *Our Healthier Nation* (DoH, 1999) are to be achieved, then the gender differences in smoking behaviour need to be addressed.

Table 3a Men: Death rates from malignant neoplasm of trachea, bronchus and lung (ICD 62), Ischaemic heart disease (ICD 410-414), Bronchitis and emphysema (ICD 490-492) and Chronic airways obstruction (ICD 496) by age and birth cohort (rates per million population), N. Ireland.

**Lung cancer (inc bronchus & trachea (ICD 162)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | 7 | 4 | 11 | 6 |
| 30-34 | | | | | 30 | 16 | 20 | 7 | 10 |
| 35-39 | | | | 75 | 88 | 49 | 20 | 50 | |
| 40-44 | | | 165 | 154 | 158 | 62 | 87 | | |
| 45-49 | | 354 | 274 | 299 | 242 | 228 | | | |
| 50-54 | 969 | 826 | 706 | 571 | 555 | | | | |
| 55-59 | 1690 | 1464 | 1367 | 911 | | | | | |
| 60-64 | 2582 | 2458 | 1893 | | | | | | |
| 65-69 | 3647 | 3228 | | | | | | | |
| 70-74 | 4437 | | | | | | | | |

**Ischaemic heart disease (ICD 410-414)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | 37 | 23 | 21 | 10 |
| 30-34 | | | | | 131 | 120 | 104 | 75 | 58 |
| 35-39 | | | | 331 | 370 | 287 | 172 | 139 | |
| 40-44 | | | 1209 | 943 | 752 | 632 | 385 | | |
| 45-49 | | 2547 | 2250 | 1561 | 1359 | 873 | | | |
| 50-54 | 4498 | 4348 | 3610 | 2532 | 1844 | | | | |
| 55-59 | 7780 | 6508 | 4613 | 3459 | | | | | |
| 60-64 | 10398 | 8286 | 6512 | | | | | | |
| 65-69 | 13170 | 10331 | | | | | | | |
| 70-74 | 16938 | | | | | | | | |

**Bronchitis and emphysema (ICD 490-492)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | | | | |
| 30-34 | | | | | 4 | | | | |
| 35-39 | | | | 23 | 18 | | | | |
| 40-44 | | | 36 | 25 | 14 | | | | |
| 45-49 | | 118 | 81 | 26 | 14 | | | | |
| 50-54 | 335 | 186 | 89 | 74 | 55 | | | | |
| 55-59 | 441 | 133 | 122 | 87 | | | | | |
| 60-64 | 425 | 320 | 202 | | | | | | |
| 65-69 | 532 | 320 | | | | | | | |
| 70-74 | 623 | | | | | | | | |

**Chronic airways obstruction (ICD 496)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | | | | |
| 30-34 | | | | | 4 | | | | |
| 35-39 | | | | | | | | | |
| 40-44 | | | 0 | 5 | 32 | | | | |
| 45-49 | | | 16 | 36 | 73 | | | | |
| 50-54 | 5 | 55 | 122 | 74 | 60 | | | | |
| 55-59 | 229 | 312 | 238 | 173 | | | | | |
| 60-64 | 659 | 561 | 570 | | | | | | |
| 65-69 | 1386 | 1178 | | | | | | | |
| 70-74 | 2048 | | | | | | | | |

Table 3b Women: Death rates from malignant neoplasm of trachea, bronchus and lung (ICD 62), Ischaemic heart disease (ICD 410-414), Bronchitis and emphysema (ICD 490-492) and Chronic airways obstruction (ICD 496) by age and birth cohort (rates per million population), N. Ireland.

**Lung cancer (inc bronchus & trachea (ICD 162)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | 4 | | | 3 |
| 30-34 | | | | | 4 | 4 | 16 | 4 | 9 |
| 35-39 | | | | 29 | 13 | 41 | 8 | 21 | |
| 40-44 | | | 75 | 69 | 62 | 41 | 48 | | |
| 45-49 | | 181 | 97 | 109 | 84 | 145 | | | |
| 50-54 | 230 | **355** | 234 | 195 | 323 | | | | |
| 55-59 | 614 | 528 | 490 | 440 | | | | | |
| 60-64 | 861 | **1039** | 841 | | | | | | |
| 65-69 | 1226 | **1634** | | | | | | | |
| 70-74 | 1813 | | | | | | | | |

**Ischaemic heart disease (ICD 410-414)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | 12 | 8 | 4 | 0 |
| 30-34 | | | | | 22 | 25 | 4 | 18 | 19 |
| 35-39 | | | | 63 | 44 | 53 | 24 | 21 | |
| 40-44 | | | 204 | 191 | 88 | 85 | 96 | | |
| 45-49 | | 436 | 368 | 332 | 289 | 162 | | | |
| 50-54 | 978 | 917 | 889 | 595 | 439 | | | | |
| 55-59 | 2352 | 1773 | 1299 | 957 | | | | | |
| 60-64 | 3606 | 2948 | 2348 | | | | | | |
| 65-69 | 5320 | 5114 | | | | | | | |
| 70-74 | 7806 | | | | | | | | |

**Bronchitis and emphysema (ICD 490-492)**

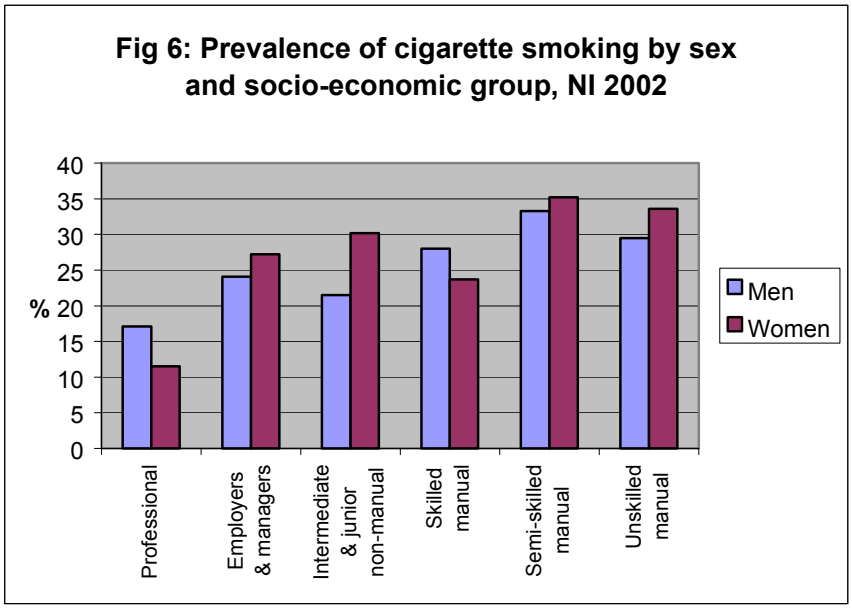
| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | 8 | | | |
| 30-34 | | | | | 4 | 4 | | | |
| 35-39 | | | | 10 | | 4 | | | |
| 40-44 | | | 40 | 20 | 9 | | | | |
| 45-49 | | 88 | 41 | 10 | 13 | 12 | | | |
| 50-54 | 163 | 101 | 42 | 15 | 36 | | | | |
| 55-59 | 166 | 87 | 96 | 41 | | | | | |
| 60-64 | 150 | 148 | 76 | | | | | | |
| 65-69 | 296 | 279 | | | | | | | |
| 70-74 | 236 | | | | | | | | |

**Chronic airways obstruction (ICD 496)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | | | | |
| 30-34 | | | | | | | | | |
| 35-39 | | | | | | | | | |
| 40-44 | | | | 5 | 4 | | | | |
| 45-49 | | 5 | 15 | 20 | 22 | 16 | | | |
| 50-54 | | 30 | 26 | 55 | 67 | | | | |
| 55-59 | 96 | 200 | 181 | 174 | | | | | |
| 60-64 | 342 | 464 | 339 | | | | | | |
| 65-69 | 712 | 879 | | | | | | | |
| 70-74 | 1317 | | | | | | | | |

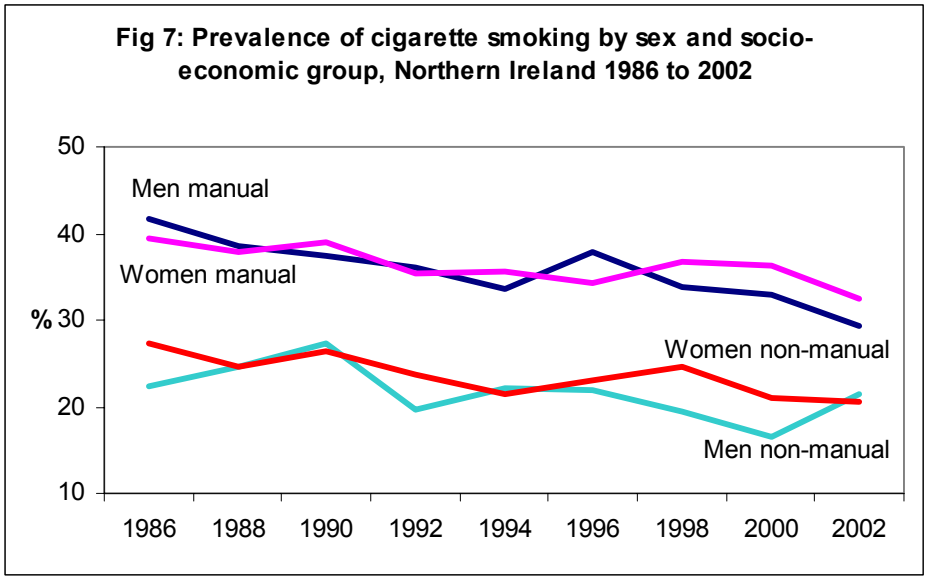
# 4. Socio-economic Differentials in Cigarette Smoking

Figure 6 shows a clear gradient in the prevalence of cigarette smoking by socio-economic group amongst both men and women. There is a clear gradient in the prevalence of cigarette smoking by socio-economic group amongst both men and women. In 2002, men working in semi-skilled manual occupations were twice as likely to report that they currently smoked than men employed in professional jobs (33% versus 17%). Similarly women in semi-skilled or unskilled manual occupations were *three times* as likely to smoke as professional women (i.e. 35% & 33% versus 11%). The proportions who have never smoked varies by socio-economic group and gender (see Figures A1 and A2 in Appendix). For example, in 2000 54% of men and 52% of women from professional backgrounds reported never having smoked compared to 36% of men and women from unskilled manual occupations.




Source: Authors' own analysis CHS 2002.

The clear differential between men and women in manual and non-manual occupations is also evident in Figure 7, which shows the trends in the prevalence of smoking over the period 1986-2002. Although the overall prevalence of smoking has fallen over time, it is notable that by the end of the period a higher proportion of both manual and non-manual women smoke than their male counterparts.




Source: Authors' own analysis CHS 1986-2002.

Tables 4 and 5 shed further light on recent trends in smoking by socio-economic group and gender, presenting the odds ratios of smoking of men and women from manual occupations versus non-manual occupations (Table 4), and *within* occupations of women versus men (Table 5).

Table 4: Socio-economic differentials in the prevalence of cigarette smoking by sex (odds ratios of manual versus non-manual), NI 1986 - 2002.

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| **Year** | **Manual** | **Non-manual** | **Odds ratio** | **Manual** | **Non-manual** | **Odds ratio** |
| 1986 | 0.416 | 0.224 | 2.47 | 0.394 | 0.274 | **1.72** |
| 1988 | 0.386 | 0.246 | 1.93 | 0.378 | 0.246 | 1.86 |
| 1990 | 0.375 | 0.272 | 1.61 | 0.389 | 0.264 | 1.77 |
| 1992 | 0.361 | 0.197 | 2.30 | 0.353 | 0.237 | 1.76 |
| 1994 | 0.337 | 0.222 | 1.78 | 0.357 | 0.214 | 2.04 |
| 1996 | 0.378 | 0.219 | 2.17 | 0.342 | 0.231 | 1.73 |
| 1998 | 0.339 | 0.195 | 2.12 | 0.367 | 0.245 | 1.79 |
| 2000 | 0.329 | 0.165 | 2.48 | 0.362 | 0.209 | **2.15** |
| 2002 | 0.293 | 0.215 | 1.51 | 0.325 | 0.205 | 1.87 |

Note: The odds ratio is defined as the probability of occurrence over the probability of non-occurrence. In 2000, the probability of a man from manual background smoking was 0.329 and from a non-manual background was 0.165. Thus the odds of smoking for a manual man are 0.329/0.671 =0.490 and for a non-manual man are 0.165/0.835 = 0.198. The odds of smoking are 2.48 times greater (i.e. 0.490/0.198) when the man works in a manual occupation than when he works in a non-manual occupation.
Source: Authors' own analysis CHS 1986-2002.

As Table 4 illustrates, the odds of a man smoking were 2.47 times greater if they were from a manual background compared to non-manual in 1986. The odds ratio is virtually the same in 2000; however there has been little stability over the fifteen year period with

the two end points masking both falls and rises over time. Interestingly, in 2002 the odds ratio drops to 1.51, primarily as a result of the increased probability of smoking amongst non-manual men rather than the fall in smoking amongst manual men[3].

Table 5: Gender differentials in the prevalence of cigarette smoking by socio-economic group (odds ratios of women versus men), NI 1986 - 2002.

| | Non-manual | | | Manual | | |
|---|---|---|---|---|---|---|
| **Year** | **Women** | **Men** | **Odds ratio** | **Women** | **Men** | **Odds ratio** |
| 1986 | 0.274 | 0.224 | 1.31 | 0.394 | 0.416 | **0.91** |
| 1988 | 0.246 | 0.246 | 1.00 | 0.378 | 0.386 | 0.97 |
| 1990 | 0.264 | 0.272 | 0.96 | 0.389 | 0.375 | 1.06 |
| 1992 | 0.237 | 0.197 | 1.27 | 0.353 | 0.361 | 0.97 |
| 1994 | 0.214 | 0.222 | 0.95 | 0.357 | 0.337 | 1.09 |
| 1996 | 0.231 | 0.219 | 1.07 | 0.342 | 0.378 | 0.86 |
| 1998 | 0.245 | 0.195 | 1.34 | 0.367 | 0.339 | 1.13 |
| 2000 | 0.209 | 0.165 | 1.34 | 0.362 | 0.329 | **1.16** |
| 2002 | 0.325 | 0.293 | 1.16 | 0.205 | 0.215 | 0.94 |

Source: Authors' own analysis CHS 1986-2000.

Two main points emerge from the analysis. First, there has been little progress in narrowing the gap between socio-economic groups in terms of smoking behaviour over the last two decades. Indeed, in 2000 the odds of smoking were over two times greater when the woman worked in a manual occupation than when she worked in a non-manual occupation (up from 1.7 in 1986)(Table 4). Secondly, within manual groups, the rate of smoking cessation has been faster amongst men than women. In 1986, men from manual occupations had the highest rates of smoking (42%) but by 2000 women from manual backgrounds had replaced them at the top of the 'smoking league'. In 2000, the odds of a person from a manual background being a smoker were 1.16 higher if they were a woman rather than a man (Table 5). Amongst smokers, those with the greatest likelihood of being *heavy* smokers (i.e. smoking 20 or more cigarettes a day) were women from professional backgrounds and men from skilled manual backgrounds (Table 6).

[3] The risk in non manual men smoking is due to a significant ($p<0.1$) rise in the percentage of professional men reporting being a current smoker, from 9% in 2000 to 17% in 2001.

Table 6: Average daily cigarette consumption by socio-economic group and sex (%), Northern Ireland 2002

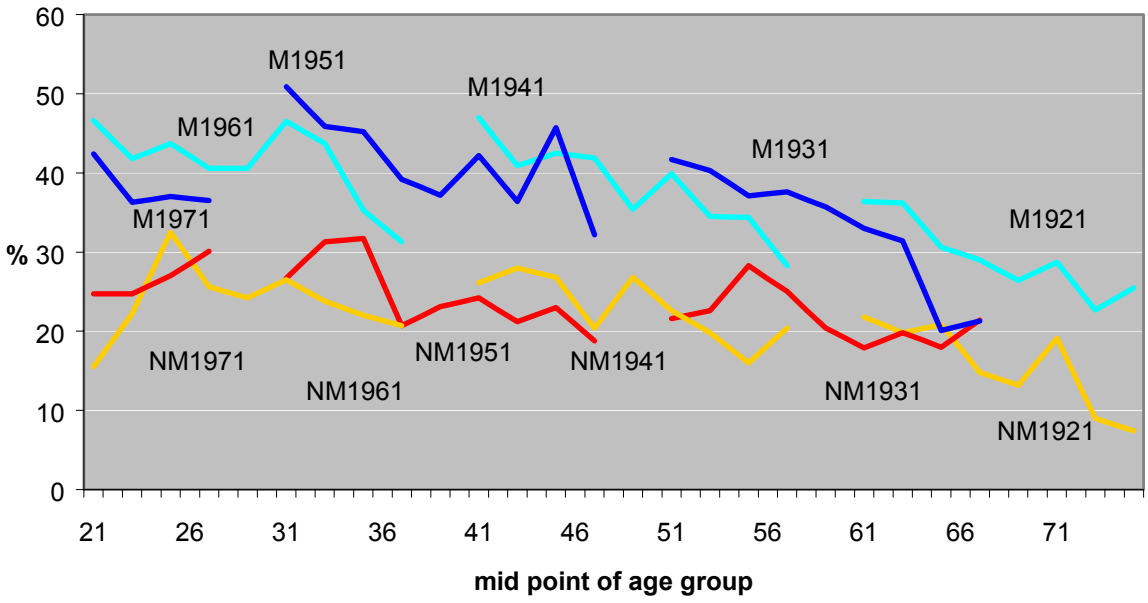
| | Under 10 a day | 10-19 a day | 20 or more a day | (N) |
|---|---|---|---|---|
| **Men** | | | | |
| Prof, Employers & Managers | 25 | 40 | 36 | (73) |
| Intermediate & Junior non-manual | 27 | 38 | 35 | (103) |
| Skilled manual | 19 | 37 | 44 | (231) |
| Semi & unskilled manual | 22 | 43 | 35 | (134) |
| **Women** | | | | |
| Prof, Employers & Managers | 27 | 29 | 44 | (34) |
| Intermediate & Junior non-manual | 25 | 40 | 35 | (241) |
| Skilled manual | 20 | 44 | 36 | (50) |
| Semi & unskilled manual | 22 | 40 | 38 | (259) |

Source: Authors' own analysis CHS 2002.

## 5. Socio-economic Differentials in Smoking Behaviour Across Cohorts

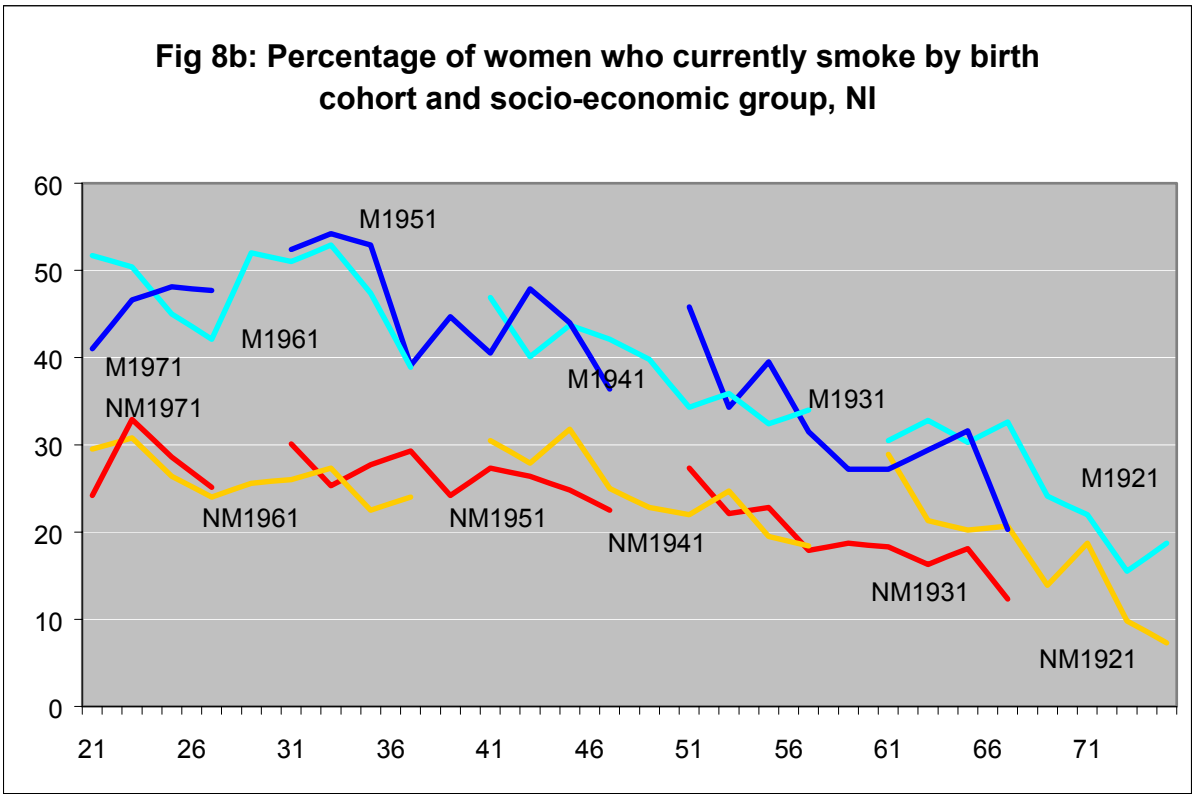
Further light can be shed by examining trends in smoking behaviour by age for different socio-economic groups within birth cohorts. Although low cell counts mean that there is significant variability, some trends are nevertheless clear. The trajectories of the prevalence of cigarette smoking in Figure 8a suggests that a lower proportion of each successive generation of manual and non-manual men are smoking than amongst their predecessors at the same age, with the notable exception of the youngest cohort of non manual men.

**Fig 8a: Percentage of men who currently smoke by birth cohort and socio-economic group, NI**




Note: M = manual occupational backgrounds. NM = non-manual occupational backgrounds.
Source: Authors' own analysis CHS 1986-2002.

Similarly, it appears that younger generations of women are also smoking less, again with the exception of women born in 1971-80 (Figure 8b). It is also clear from Figure 8b that the gap between the smoking behaviour of women from manual and non-manual backgrounds is widening amongst successive generations of women (i.e. the gap between the blue and red lines).




Source: Authors' own analysis CHS 1986-2002.

Table 7a: Socio-economic differentials in the prevalence of cigarette smoking within birth cohort, by sex and age (odds ratios of manual v non-manual), NI.

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | **Manual** | **Non-manual** | **Odds ratio** | **Manual** | **Non-manual** | **Odds ratio** |
| **1931-40** | | | | | | |
| Age 55 | 0.37 | 0.28 | 1.5 | 0.40 | 0.23 | 2.2 |
| Age 65 | 0.20 | 0.11 | 2.1 | 0.32 | 0.18 | 2.1 |
| | | | widening | | | narrowing |
| **1941-50** | | | | | | |
| Age 45 | 0.43 | 0.27 | 2.0 | 0.44 | 0.32 | 1.7 |
| Age 55 | 0.34 | 0.14 | 3.1 | 0.32 | 0.20 | 2.0 |
| | | | widening | | | widening |
| **1951-60** | | | | | | |
| Age 35 | 0.45 | 0.32 | 1.8 | 0.53 | 0.28 | 2.9 |
| Age 45 | 0.46 | 0.28 | 2.2 | 0.44 | 0.25 | 2.4 |
| | | | widening | | | narrowing |
| **1961-70** | | | | | | |
| Age 25 | 0.44 | 0.33 | 1.6 | 0.45 | 0.26 | 2.3 |
| Age 35 | 0.35 | 0.17 | 2.7 | 0.47 | 0.22 | 3.3 |
| | | | widening | | | Widening |

Source: Authors' own analysis CHS 1986-2000.

Inequalities in smoking behaviour between socio-economic groups appear to be generally widening both *within* birth cohorts with rising age, as non-manual groups (especially amongst men) give up smoking at a faster rate than manual groups (Table 7a) and *between* cohorts at any given chronological age (Table 7b). For example, amongst women aged 45, the odds of a woman born in 1941-50 smoking were 1.7 greater if they were from a manual background compared to non-manual. However amongst those women born in 1951-60 the odds had risen to 2.4 at the same age. Public health campaigns need to be more effective in targeting women, especially young women and women from manual backgrounds, in order to reduce inequalities in death rates from smoking related diseases.

Table 7b: Socio-economic differentials in the prevalence of cigarette smoking at selected ages by sex and birth cohort (odds ratios manual v non-manual), NI.

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | **Manual** | **Non-manual** | **Odds ratio** | **Manual** | **Non-manual** | **Odds ratio** |
| **Age 25** | | | | | | |
| 1961-70 | 0.44 | 0.33 | 1.6 | 0.45 | 0.26 | 2.3 |
| 1971-80 | 0.37 | 0.19 | 2.5 | 0.48 | 0.29 | 2.3 |
| | | | widening | | | same |
| **Age 35** | | | | | | |
| 1951-60 | 0.45 | 0.32 | 1.8 | 0.53 | 0.28 | 2.9 |
| 1961-70 | 0.35 | 0.17 | 2.7 | 0.47 | 0.22 | 3.3 |
| | | | widening | | | widening |
| **Age 45** | | | | | | |
| 1941-50 | 0.43 | 0.27 | 2.0 | 0.44 | 0.32 | 1.7 |
| 1951-60 | 0.46 | 0.28 | 2.2 | 0.44 | 0.25 | 2.4 |
| | | | widening | | | widening |
| **Age 55** | | | | | | |
| 1931-40 | 0.37 | 0.28 | 1.5 | 0.40 | 0.23 | 2.2 |
| 1941-50 | 0.34 | 0.14 | 3.1 | 0.32 | 0.20 | 2.0 |
| | | | widening | | | narrowing |
| **Age 65** | | | | | | |
| 1921-30 | 0.31 | 0.21 | 1.7 | 0.30 | 0.20 | 1.7 |
| 1931-40 | 0.20 | 0.11 | 2.1 | 0.32 | 0.18 | 2.1 |
| | | | widening | | | widening |

Source: Authors' own analysis CHS 1986-2000.

# 6. Smoking Trends Summary

- Over the last fifteen years the prevalence of cigarette smoking in Northern Ireland has declined substantially. In 1986, 35 percent of men and 32 percent of women over age 16 were current cigarette smokers; by 2002 these proportions had fallen to 27 percent and 26 percent respectively.
- The decline in smoking has been significantly less marked amongst women, compared to men, and by 2002 a similar proportion of both men and women were current smokers.
- Smoking cessation rises with age as a higher proportion of older age groups report being ex-smokers than younger age groups.
- Cross-sectionally, a greater proportion of women have never smoked than men of the same age; and this is particularly the case amongst older women.

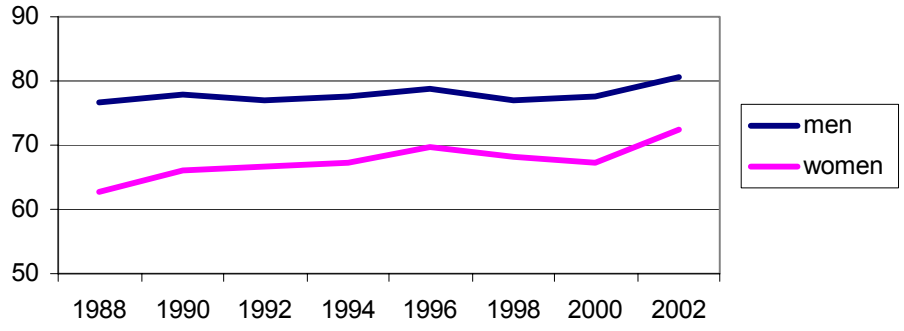
- The general decline in the propensity to smoke over the last two decades is reflected in the lower proportion of men who state that they have ever smoked amongst successive birth cohorts at all ages.
- This is not, however, the case amongst women, where *higher* proportions of successive birth cohorts of women report ever having smoked.
- Although smoking is generally more common amongst men than women, men (especially amongst the younger cohorts) are also more likely to give up than women and their *relative* improvement in mortality from smoking related diseases is higher.
- Gender differences in smoking behaviour need to be addressed if the targets for reducing deaths from lung cancer are to be achieved.

- There is a clear gradient in the prevalence of cigarette smoking by socio-economic group amongst both men and women. In 2002, men working in semi-skilled manual occupations were twice likely to report that they currently smoked than men employed in professional jobs (33% versus 17%). Similarly women in semi-skilled or unskilled manual occupations were *over three times* as likely to smoke as professional women (i.e. 35% & 34% versus 11%).
- There appears to have been little progress in narrowing the gap between socio-economic groups in terms of smoking behaviour over the last two decades.
- Within manual groups, the rate of smoking cessation has been faster amongst men than women. By 2002, more women from manual backgrounds smoked than any other group.
- Inequalities in smoking behaviour between socio-economic groups appear to be generally widening both *within* birth cohorts with rising age, and *between* cohorts at any given chronological age.
- Public health campaigns need to be more effective in targeting women, especially young women and women from manual backgrounds, in order to reduce inequalities in death rates from smoking related diseases.

# 7. Trends in Alcohol Consumption by Age and Birth Cohort

In contrast to the trends in smoking behaviour, the proportion of men and women who are current drinkers has *increased* significantly during the last two decades; from 73% of men and 59% of women in 1986 to 81% and 73% respectively in 2002 (Figure 9 and Appendix Table A7). Men were more likely than women to drink alcohol over this period, although the gap has narrowed across time.

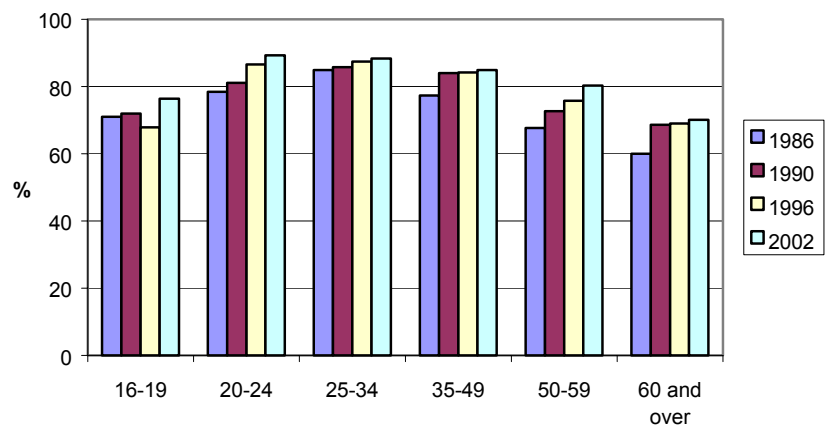
**Figure 9: Prevalence of drinking by sex, Northern Ireland 1986 to 2002**

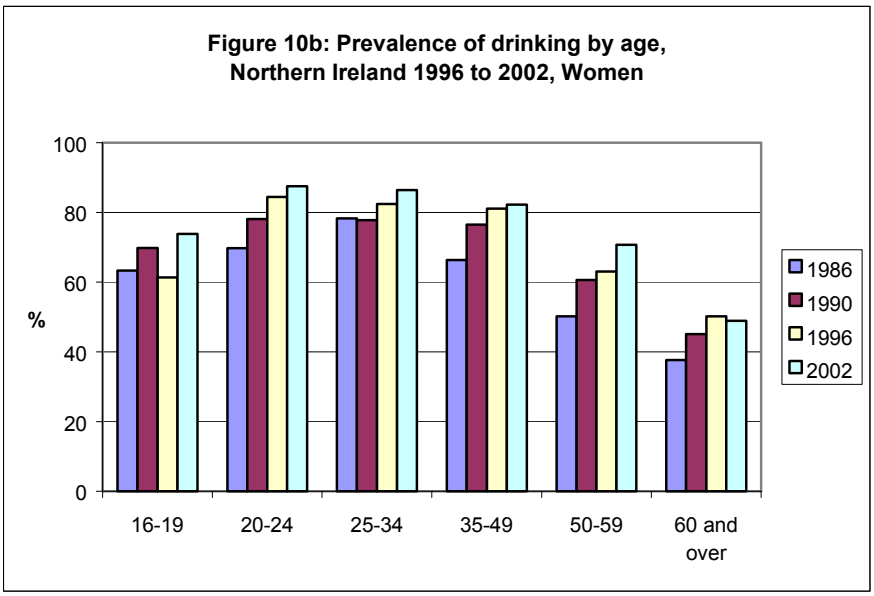



Source: Authors' own analysis CHS 1986-2002.

The prevalence of current drinking varies by age, rising in the 20s and then falling amongst older age groups. The tendency towards an increased prevalence of current drinking over time is found within all age groups (see also Appendix Table A8).

**Figure 10a: Prevalence of drinking by age, Northern Ireland 1996 to 2002, Men**






Source: Authors' own analysis CHS 1986-2000.

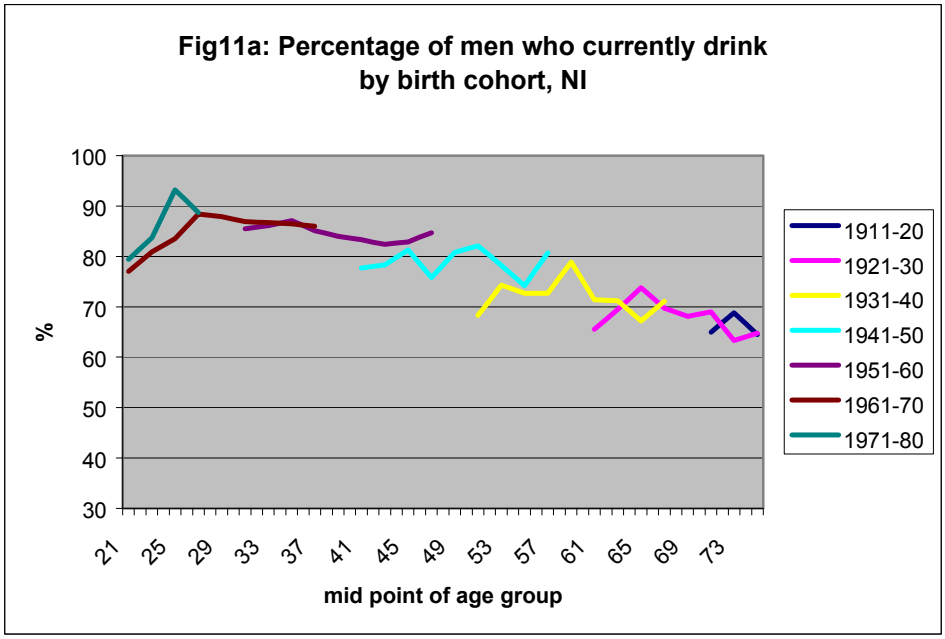
In 2002, a significantly higher proportion of women reported being lifetime abstainers (i.e. never having drunk alcohol) than men. This was the case for all age groups, with the notable exception of 16-19 year olds (Table 8). Older women were significantly more likely to have never drunk alcohol than younger women. For example, nearly half (47.8%) of women over 60 reported being lifetime abstainers compared with just 10% of women aged 25-34.

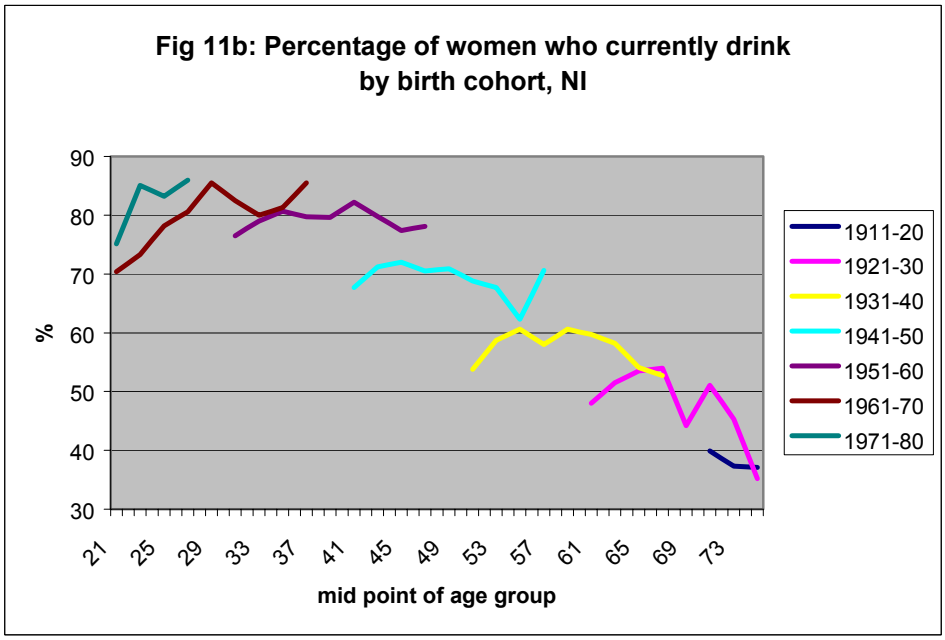
Table 8: Drinkers, ex-drinkers and lifetime abstainers by sex and age (%), Northern Ireland 2002

| | Drinker | Ex-drinker | Lifetime abstainer | (N) |
|---|---|---|---|---|
| **Men** | | | | |
| 16-19 | 76 | 1 | 23 | (106) |
| 20-24 | 89 | 3 | 7 | (121) |
| 25-34 | 88 | 2 | 9 | (291) |
| 35-49 | 85 | 7 | 8 | (497) |
| 50-59 | 80 | 8 | 11 | (299) |
| 60 and over | 70 | 9 | 21 | (478) |
| | | | | |
| **Women** | | | | |
| 16-19 | 74 | 3 | 23 | (103) |
| 20-24 | 88 | 3 | 10 | (144) |
| 25-34 | 86 | 4 | 10 | (442) |
| 35-49 | 82 | 5 | 13 | (691) |
| 50-59 | 71 | 7 | 23 | (406) |
| 60 and over | 49 | 9 | 42 | (617) |

Source: Authors' own analysis CHS 2002.

As with smoking, changes in the pattern of current drinking by age reflects both period and cohort effects, and a clearer picture of trends in drinking behaviour across the life course is obtained by examining the patterns within particular birth cohorts. Two points stand out from Figures 11a and 11b. First, drinking is more common amongst successive birth cohorts at the same age. Second, the trend towards an increased prevalence of current drinking between birth cohorts is significantly more marked amongst women than men (see also Appendix Tables A9a and A9b).




Source: Authors' own analysis CHS 1986-2002.

These changes in the patterns of drinking by gender and birth cohort may have implications for the future health of women. Tables 9a and 9b present data on trends in the death rates from two drinking-related diseases: alcohol dependence syndrome (ADS) (ICD 303) and chronic liver disease and cirrhosis (ICD 571). The data show that there has been virtually no improvement in the male and female death rates from chronic liver disease and cirrhosis between birth cohorts at the same chronological age, and there are signs that mortality from ADS is actually increasing amongst successive cohorts of men and women. Death rates are higher amongst men than women. However, given that rates of current drinking have increased significantly amongst younger cohorts of women –who have yet to enter the higher risk age groups - it is possible that female death rates from these causes of death may increase in the future.

Table 9a Men: Death rates from Alcohol dependence syndrome (ICD 303) and Chronic liver disease and cirrhosis (ICD 571) by age and birth cohort (rates per million population), N. Ireland.

| **Alcohol dependence syndrome (ICD 303)** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
| 25-29 | | | | | | 11 | 11 | | 3 |
| 30-34 | | | | | 13 | | 4 | 14 | 13 |
| 35-39 | | | | 37 | 4 | | 12 | 21 | |
| 40-44 | | | 36 | | 5 | 21 | 64 | | |
| 45-49 | | 31 | | 15 | 41 | 75 | | | |
| 50-54 | 31 | 22 | 17 | 53 | 51 | | | | |
| 55-59 | 50 | 35 | 41 | 87 | | | | | |
| 60-64 | 12 | 62 | 80 | | | | | | |
| 65-69 | 40 | 75 | | | | | | | |
| 70-74 | 49 | | | | | | | | |
| **Chronic liver disease and cirrhosis (ICD 571)** | | | | | | | | | |
| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
| 25-29 | | | | | | | 4 | 4 | |
| 30-34 | | | | | 4 | 12 | 24 | 11 | 22 |
| 35-39 | | | | 19 | 35 | 20 | 24 | 39 | |
| 40-44 | | | 41 | 15 | 59 | 50 | 67 | | |
| 45-49 | | 77 | 59 | 93 | 64 | 58 | | | |
| 50-54 | 108 | 93 | 100 | 100 | 97 | | | | |
| 55-59 | 145 | 127 | 145 | 190 | | | | | |
| 60-64 | 174 | 172 | 172 | | | | | | |
| 65-69 | 209 | 204 | | | | | | | |
| 70-74 | 97 | | | | | | | | |

Source: derived by authors using unpublished data on deaths by cause and age for men and women and mid-year population estimates by single year of age and sex for the period 1971-2000 from GRO.

Table 9b Women: Death rates from Alcohol dependence syndrome (ICD 303) and Chronic liver disease and cirrhosis (ICD 571) by age and birth cohort (rates per million population), N. Ireland.

**Alcohol dependence syndrome (ICD 303)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | | | | |
| 30-34 | | | | | | | | | |
| 35-39 | | | | 10 | | | | | |
| 40-44 | | | 5 | 5 | 9 | 8 | | | |
| 45-49 | | 10 | | 15 | 18 | 20 | | | |
| 50-54 | 5 | | 21 | 60 | 36 | | | | |
| 55-59 | 10 | 10 | 16 | 20 | | | | | |
| 60-64 | 5 | 32 | 16 | | | | | | |
| 65-69 | 11 | | | | | | | | |
| 70-74 | 24 | | | | | | | | |

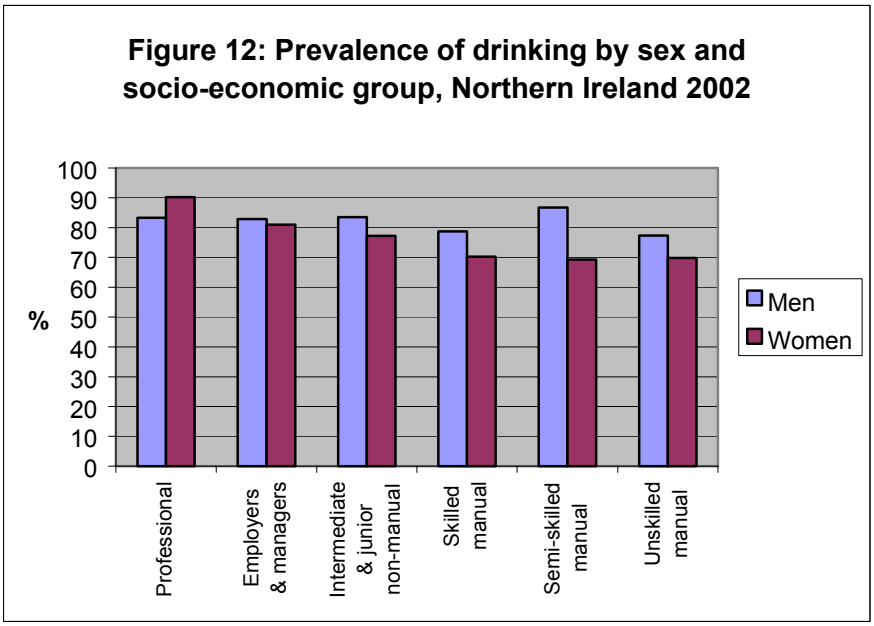
**Chronic liver disease and cirrhosis (ICD 571)**

| | 1921-25 | 1926-30 | 1931-35 | 1936-40 | 1941-45 | 1946-50 | 1950-55 | 1956-60 | 1961-65 |
|---|---|---|---|---|---|---|---|---|---|
| 25-29 | | | | | | | | | |
| 30-34 | | | | | 4 | 4 | | | |
| 35-39 | | | | 24 | 18 | 8 | | | |
| 40-44 | | | 30 | 15 | 18 | 32 | | | |
| 45-49 | | 54 | 51 | 25 | 49 | 61 | | | |
| 50-54 | 58 | 96 | 73 | 110 | 103 | | | | |
| 55-59 | 146 | 113 | 106 | 51 | | | | | |
| 60-64 | 140 | 132 | 115 | | | | | | |
| 65-69 | 164 | 150 | | | | | | | |
| 70-74 | 121 | | | | | | | | |

Source: derived by authors using unpublished data on deaths by cause and age for men and women and mid-year population estimates by single year of age and sex for the period 1971-2000 from GRO.

# 8. Socio-economic Differentials in Alcohol Consumption

Drinking varies with socio-economic group, with the highest prevalence of current drinkers in 2002 being amongst professional groups and the lowest amongst skilled manual women (69%) (Figure 12). There is little variation by socio-economic group in the prevalence of men who had never drunk alcohol (Table 10). However, women from a manual socio-economic background are significantly more likely to be lifetime abstainers than women from a non-manual background.




Source: Authors' own analysis CHS 2002.

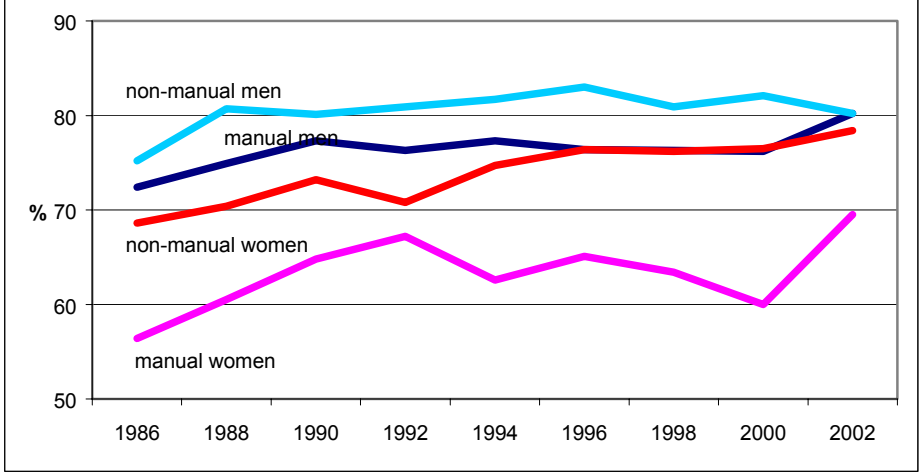
Table 10: Drinkers, ex-drinkers and lifetime abstainers by sex and socio-economic group (%), Northern Ireland 2002

| | Drinker | Ex-drinker | Lifetime abstainer | (N) |
|---|---|---|---|---|
| **Men** | | | | |
| Professional | 83 | 3 | 14 | (102) |
| Employers & managers | 83 | 3 | 14 | (164) |
| Intermediate & junior non-manual | 84 | 5 | 12 | (387) |
| Skilled manual | 79 | 8 | 13 | (652) |
| Semi-skilled manual | 87 | 3 | 10 | (211) |
| Unskilled manual | 77 | 14 | 9 | (124) |
| **Women** | | | | |
| Professional | 90 | 4 | 6 | (51) |
| Employers & managers | 86 | 4 | 10 | (94) |
| Intermediate & junior non-manual | 77 | 5 | 18 | (1098) |
| Skilled manual | 70 | 8 | 22 | (191) |
| Semi-skilled manual | 69 | 7 | 24 | (592) |
| Unskilled manual | 70 | 3 | 27 | (106) |

Source: Authors' own analysis CHS 2000.

Figure 13 shows trends in current drinking amongst men and women by socio-economic over the last two decades. Most striking is the rise in the prevalence of current drinking amongst women from non-manual backgrounds, whose rates of drinking now match those of manual men. There has also been a steep rise in the proportion of manual women who report current drinking in the last two years (up from 60% in 2000 to nearly 70% in 2002).

**Figure 13: Prevalence of drinking by socio-economic group and sex, Northern Ireland 1986 to 2002**




Source: Authors' own analysis CHS 1986-2002.

Tables 11 and 12 shed further light on recent trends in drinking by socio-economic group and gender, presenting the odds ratios of current drinking of men and women from non-manual occupations versus manual occupations (Table 11), and *within* occupations of men versus women (Table 12). Over the period 1986 to 2002 there has been a considerable amount of variability in the extent of socio-economic differentials in current drinking and conclusions as to whether these differentials have widened or narrowed depends on both the start and end date for comparison. For example, in 1986 the odds of drinking were 1.16 times greater when a man worked in a non-manual occupation than when he worked in a manual occupation; by 2000 this had increased to 1.43. The rise between 1986 and 2000 in the odds of a non-manual women drinking as compared to manual women was even greater; from 1.69 to 2.17 – leading to the conclusion that socio-economic differentials in drinking behaviour were widening. However a different conclusion would be reached if one compared the situation in 1988 with that in 2002, i.e. that the differential had stayed broadly the same or even narrowed.

Table 11: Socio-economic differentials in the prevalence of current drinking by sex (odds ratios of non-manual versus manual), NI 1986 - 2002.

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| **Year** | **Non-Manual** | **Manual** | **Odds ratio** | **Non-Manual** | **Manual** | **Odds ratio** |
| 1986 | 0.752 | 0.724 | 1.16 | 0.686 | 0.564 | 1.69 |
| 1988 | 0.807 | 0.749 | 1.40 | 0.704 | 0.605 | 1.55 |
| 1990 | 0.801 | 0.773 | 1.18 | 0.732 | 0.648 | 1.48 |
| 1992 | 0.809 | 0.763 | 1.32 | 0.708 | 0.672 | 1.18 |
| 1994 | 0.817 | 0.773 | 1.31 | 0.747 | 0.626 | 1.76 |
| 1996 | 0.83 | 0.764 | 1.51 | 0.764 | 0.651 | 1.74 |
| 1998 | 0.809 | 0.763 | 1.32 | 0.762 | 0.634 | 1.85 |
| 2000 | 0.821 | 0.762 | 1.43 | 0.765 | 0.6 | 2.17 |
| 2002 | 0.833 | 0.802 | 1.23 | 0.784 | 0.695 | 1.59 |

Source: Authors' own analysis CHS 1986-2002.

Overall, there has been little change in the relative propensity to currently drink by gender *within* occupational backgrounds; the odds of a non-manual man drinking as opposed to a non-manual women were around 1.4 in both 1986 and 2002, and men from manual backgrounds were over twice as likely to be current drinkers than manual women.

Table 12: Gender differentials in the prevalence of current drinking by socio-economic group (odds ratios of men versus women), NI 1986 - 2002.

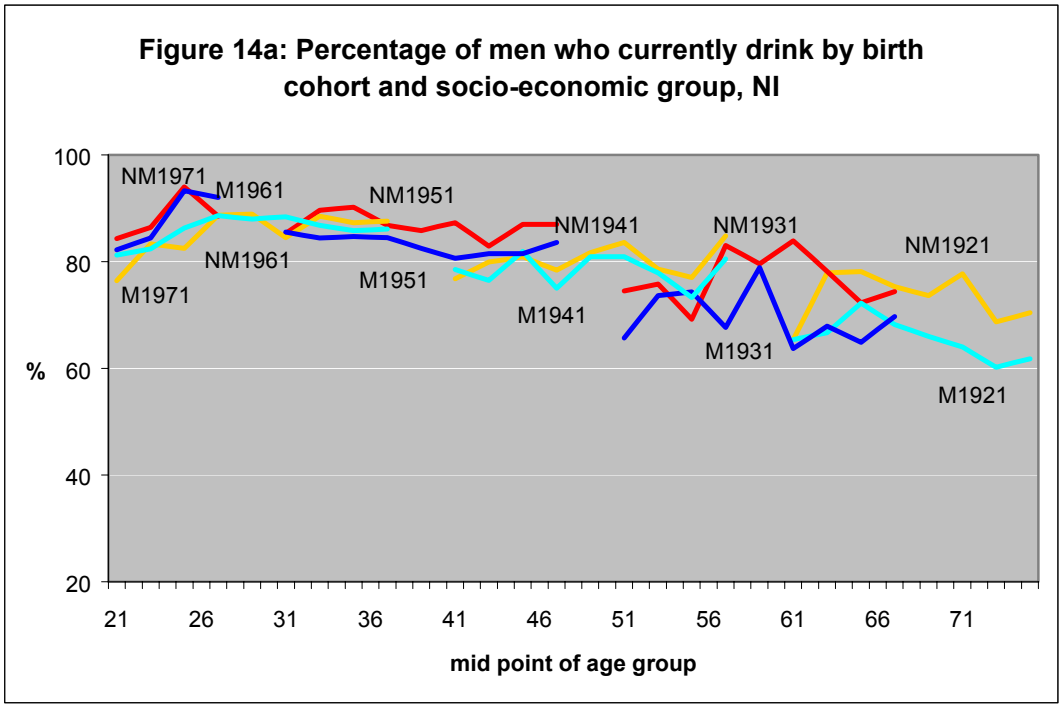
| | Non-manual | | | Manual | | |
|---|---|---|---|---|---|---|
| **Year** | **Men** | **Women** | **Odds ratio** | **Men** | **Women** | **Odds ratio** |
| 1986 | 0.752 | 0.686 | 1.39 | 0.724 | 0.564 | 2.03 |
| 1988 | 0.807 | 0.704 | 1.76 | 0.749 | 0.605 | 1.95 |
| 1990 | 0.801 | 0.732 | 1.47 | 0.773 | 0.648 | 1.85 |
| 1992 | 0.809 | 0.708 | 1.75 | 0.763 | 0.672 | 1.57 |
| 1994 | 0.817 | 0.747 | 1.51 | 0.773 | 0.626 | 2.03 |
| 1996 | 0.83 | 0.764 | 1.51 | 0.764 | 0.651 | 1.74 |
| 1998 | 0.809 | 0.762 | 1.32 | 0.763 | 0.634 | 1.86 |
| 2000 | 0.821 | 0.765 | 1.41 | 0.762 | 0.6 | 2.13 |
| 2002 | 0.833 | 0.781 | 1.40 | 0.802 | 0.695 | 1.78 |

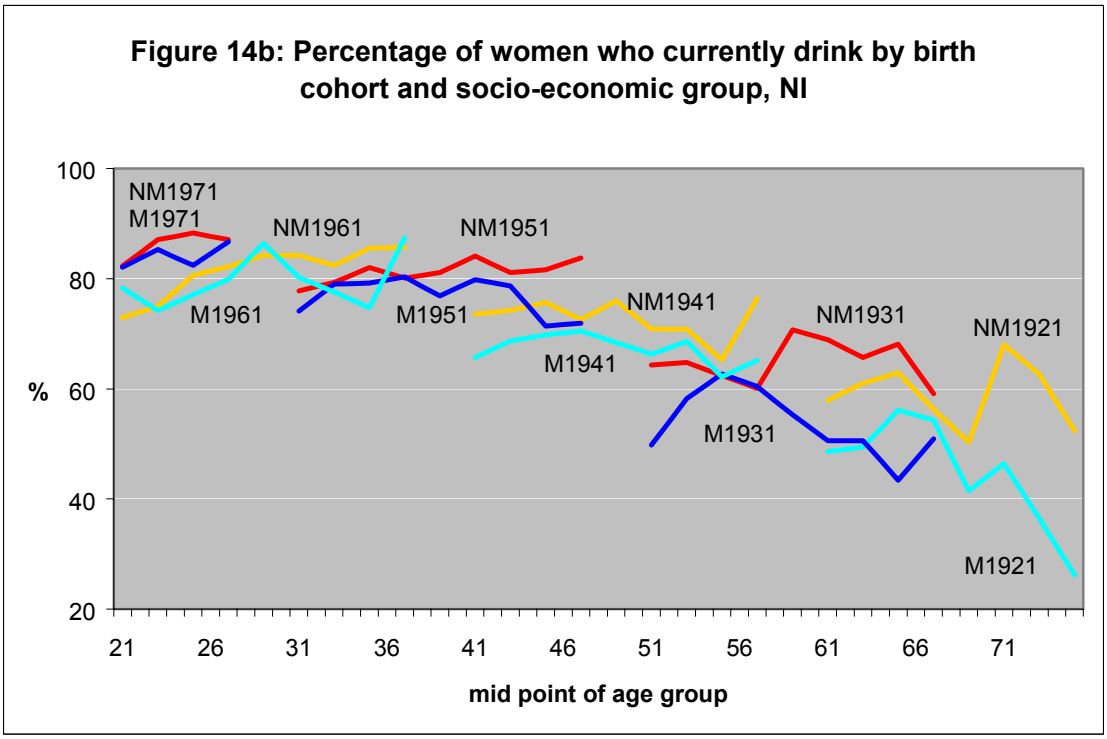
Source: Authors' own analysis CHS 1986-2002.

# 9. Socio-economic Differentials in Alcohol Consumption Across Cohorts

Figures 14a and 14b show trends in the prevalence of current drinking amongst men and women by socio-economic background amongst the six birth cohorts since 1921.There are a couple of key points to note. First, there is an upward trend in current drinking amongst successive cohorts within each socio-economic group. This is most marked amongst women. For example, at age 45, 76% of women of non-manual backgrounds born in 1941-50 were current drinkers. However, amongst non-manual women born in 1951-60 at the same age, 82% were current drinkers (see also Table 13). Second, the gap between non-manual and manual groups appears to be narrowing between successive cohorts (i.e. the gap between the blue/light blue and red/orange lines is becoming smaller). Amongst men born in 1971-81 and 1961-71, there is little difference in the prevalence of current drinking by socio-economic group. However, socio-economic differentials remain amongst younger cohorts of women.

**Figure 14a: Percentage of men who currently drink by birth cohort and socio-economic group, NI**






Source: Authors' own analysis CHS 1986-2000.

Table 13: Prevalence of current drinking at selected ages by sex, socio-economic group and birth cohort, NI.

| | Men | | Women | |
|---|---|---|---|---|
| | Non-manual | Manual | Non-manual | Manual |
| **Age 25** | | | | |
| 1961-70 | 82.5 | 86.3 | 80.6 | 77.1 |
| 1971-80 | 94.0 | 93.3 | 88.3 | 82.4 |
| **Age 35** | | | | |
| 1951-60 | 90.2 | 84.7 | 82.2 | 79.2 |
| 1961-70 | 87.3 | 85.8 | 85.5 | 74.7 |
| **Age 45** | | | | |
| 1941-50 | 80.9 | 81.9 | 75.7 | 69.8 |
| 1951-60 | 80.7 | 81.5 | 81.6 | 71.4 |
| **Age 55** | | | | |
| 1931-40 | 69.2 | 74.3 | 62.4 | 62.7 |
| 1941-50 | 77.0 | 73.3 | 65.3 | 62.2 |
| **Age 65** | | | | |
| 1921-30 | 78.1 | 72.2 | 62.9 | 56.1 |
| 1931-40 | 72.3 | 64.9 | 68.1 | 43.4 |

Source: Authors' own analysis CHS 1986-2000.

# 10. Drinking Trends Summary

- The proportion of men and women who are current drinkers has *increased* significantly during the last two decades, from 73% of men and 59% of women in 1986 to 81% and 73% respectively in 2002.
- Men were more likely than women to drink alcohol in each year over this period (1986-2002), although the gap has narrowed across time.
- In 2002, a significantly higher proportion of women reported being lifetime abstainers than men.
- Older women were significantly more likely to have never drunk alcohol than younger women. For example, over two-fifths (42%) of women over 60 reported being lifetime abstainers compared with just 10% of women aged 25-34.
- Looking at changes across birth cohorts, drinking is more common amongst successive birth cohorts at the same age.
- The trend towards an increased prevalence of current drinking between birth cohorts is significantly more marked amongst women than men. These changes in the patterns of drinking by gender and birth cohort may have implications for the future health of women.

- Drinking varies with socio-economic group, with the highest prevalence of current drinkers in 2002 being amongst professional men and women and the lowest amongst skilled manual women (69%).
- Women from a manual socio-economic background are significantly more likely to be lifetime abstainers than women from a non-manual background.
- Current drinking has increased amongst men and women from all socio-economic groups. Most striking is the rise in the prevalence of current drinking amongst women from non-manual backgrounds, whose rates of drinking now match those of manual men.

- Socio-economic differentials in current drinking have varied over the period 1986 to 2002, both widening and narrowing.
- There is an upward trend in current drinking amongst successive birth cohorts within each socio-economic group. This is most marked amongst women. For example, at age 45, 76% of women of non-manual backgrounds born in 1941-50 were current drinkers. However amongst non-manual women born ten years later, in 1951-60, 82% were current drinkers at the same age.
- The gap between non-manual and manual groups appears to be narrowing somewhat between successive cohorts and there is little difference in the prevalence of current drinking by socio-economic group amongst men born in 1971-81 and 1961-71. However, socio-economic differentials remain amongst younger cohorts of women.

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# Appendix

## Tables

Table A1 Sample size of ten year birth cohorts in selected years of the Continuous Household Survey (CHS), Northern Ireland, 1986-2002

| | Birth Cohort | | | | | | |
|---|---|---|---|---|---|---|---|
| **Year** | **1911-20** | **1921-30** | **1931-40** | **1941-50** | **1951-60** | **1961-70** | **1971-80** |
| **1986** | | | | | | | |
| All | 628 | 792 | 818 | 1017 | 1114 | 1325 | |
| Male | 282 | 367 | 392 | 492 | 543 | 667 | |
| Female | 346 | 425 | 426 | 525 | 571 | 658 | |
| **1988** | | | | | | | |
| All | 642 | 855 | 867 | 1110 | 1283 | 1422 | |
| Male | 275 | 383 | 419 | 548 | 629 | 700 | |
| Female | 367 | 472 | 448 | 562 | 654 | 722 | |
| **1990** | | | | | | | |
| All | 578 | 856 | 890 | 1066 | 1232 | 1252 | |
| Male | 253 | 415 | 435 | 520 | 590 | 593 | |
| Female | 325 | 441 | 455 | 546 | 642 | 659 | |
| **1992** | | | | | | | |
| All | | 687 | 794 | 1060 | 1260 | 1193 | |
| Male | | 323 | 391 | 529 | 610 | 573 | |
| Female | | 364 | 403 | 531 | 650 | 620 | |
| **1994** | | | | | | | |
| All | | 787 | 796 | 968 | 1196 | 1192 | |
| Male | | 341 | 398 | 461 | 578 | 573 | |
| Female | | 446 | 398 | 507 | 618 | 619 | |
| **1996** | | | | | | | |
| All | | 642 | 727 | 899 | 1030 | 1168 | 1039 |
| Male | | 297 | 348 | 442 | 496 | 531 | 525 |
| Female | | 345 | 384 | 457 | 534 | 637 | 514 |
| **1998** | | | | | | | |
| All | | 548 | 698 | 884 | 989 | 1047 | 952 |
| Male | | 233 | 319 | 428 | 490 | 464 | 466 |
| Female | | 315 | 379 | 456 | 499 | 583 | 486 |
| **2000** | | | | | | | |
| All | | 448 | 633 | 868 | 960 | 1155 | 892 |
| Male | | 197 | 297 | 433 | 453 | 532 | 426 |
| Female | | 251 | 336 | 435 | 507 | 623 | 466 |
| **2002** | | | | | | | |
| All | | 417 | 560 | 814 | 912 | 1057 | 913 |
| Male | | 184 | 266 | 375 | 455 | 510 | 426 |
| Female | | 233 | 294 | 439 | 457 | 547 | 487 |

Table A2: Prevalence of cigarette smoking amongst adults aged 16 and over by sex (%), Northern Ireland 1986 to 2002

| | Men | Women |
|---|---|---|
| 1986 | 35.4 (33.4 - 37.4) | 32.1 (30.3 – 33.8) |
| 1988 | 34.0 (32.2 – 35.9) | 30.8 (29.2 – 32.5) |
| 1990 | 33.9 (32.1 – 35.8) | 31.9 (30.2 – 33.5) |
| 1992 | 30.8 (29.0 – 32.7) | 28.8 (27.2 – 30.4) |
| 1994 | 29.1 (27.2 – 30.9) | 27.4 (25.9 – 29.0) |
| 1996 | 31.0 (29.0 – 33.0) | 27.4 (25.7 – 29.1) |
| 1998 | 27.9 (25.9 – 29.2) | 29.2 (27.4 – 30.9) |
| 2000 | 26.0 (23.9 – 28.0) | 27.6 (25.9 – 29.4) |
| 2002 | 26.5 (24.8 – 28.3) | 25.9 (24.2 – 27.5) |

Note: numbers in brackets indicate 95% confidence interval around point estimate.
Source: authors' own analysis CHS 1986-2000.

Table A3: Prevalence of cigarette smoking by age and sex (%), Northern Ireland 1986 to 2002

| | 1986 | 1992 | 1996 | 2002 |
|---|---|---|---|---|
| **Men** | | | | |
| 16-24 | 35.9 (30.6-41.3) | 32.0 (27.2-36.8) | 31.5 (26.2-36.9) | 32.4 (27.8-36.9) |
| 25-34 | 42.8 (38.2-47.4) | 33.5 (29.4-37.7) | 38.8 (33.8-43.8) | 31.9 (27.3-36.4) |
| 35-49 | 38.0 (34.1-42.0) | 34.1 (30.5-37.7) | 34.2 (30.2-38.1) | 26.4 (23.1-29.6) |
| 50-64 | 33.9 (29.6-38.2) | 31.5 (27.4-35.5) | 28.9 (24.7-33.1) | 25.5 (21.9-29.2) |
| 65 and over | 24.5 (20.3-28.7) | 20.6 (16.7-24.5) | 21.3 (17.3-25.4) | 16.1 (12.4-19.8) |
| **Women** | | | | |
| 16-24 | 35.2 (30.3-40.1) | 28.4 (24.4-32.5) | 26.3 (21.6-31.1) | 31.4 (26.8-36.1) |
| 25-34 | 39.3 (35.2-43.5) | 32.9 (29.2-36.6) | 37.0 (33.0-41.0) | 32.7 (28.5-36.8) |
| 35-49 | 39.2 (35.6-42.8) | 35.5 (32.3-38.8) | 32.1 (28.6-35.5) | 28.6 (25.3-31.8) |
| 50-64 | 32.7 (29.0-36.5) | 27.9 (24.2-31.6) | 24.4 (20.8-28.1) | 25.6 (22.0-29.1) |
| 65 and over | 12.9 (10.1-15.7) | 16.3 (13.3-19.3) | 15.3 (12.3-18.3) | 11.8 (9.1-14.6) |

Note: numbers in brackets indicate 95% confidence interval around point estimate.
Source: authors' own analysis CHS 1986-2002.

Table A4: Cigarette smoking behaviour by age and sex (%), Northern Ireland 2002

| | Smoker | Ex-smoker | Never smoked | Total | (N) |
|---|---|---|---|---|---|
| Men | | | | | |
| 16-24 | 32.4 | 28.5 | 39.2 | 100% | (411) |
| 25-34 | 31.9 | 25.8 | 42.3 | 100% | (411) |
| 35-49 | 26.4 | 29.5 | 44.1 | 100% | (709) |
| 50-64 | 25.6 | 36.2 | 38.2 | 100% | (544) |
| 65 and over | 16.1 | 46.7 | 37.2 | 100% | (379) |
| | | | | | |
| Women | | | | | |
| 16-24 | 31.4 | 29.1 | 39.4 | 100% | (388) |
| 25-34 | 32.7 | 24.8 | 42.5 | 100% | (499) |
| 35-49 | 28.6 | 27.3 | 44.1 | 100% | (732) |
| 50-564 | 25.6 | 36.1 | 38.3 | 100% | (579) |
| 65 and over | 11.8 | 31.1 | 57.1 | 100% | (524) |

Source: authors' own analysis CHS 2002.

Table A5a: Percentage of men who have ever smoked by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 53.8 | 51.2 |
| 23 | | | | | | 58.7 | 52.4 |
| 25 | | | | | | 63.8 | 54.2 |
| 27 | | | | | | 62.6 | 60.2 |
| 29 | | | | | | 60.2 | |
| 31 | | | | | 70.7 | 62.7 | |
| 33 | | | | | 71.6 | 59.4 | |
| 35 | | | | | 74.5 | 57.4 | |
| 37 | | | | | 64.0 | 51.9 | |
| 39 | | | | | 66.5 | | |
| 41 | | | | 79.2 | 66.3 | | |
| 43 | | | | 75.6 | 67.0 | | |
| 45 | | | | 76.5 | 65.5 | | |
| 47 | | | | 75.0 | 60.3 | | |
| 49 | | | | 73.7 | | | |
| 51 | | | 75.8 | 77.9 | | | |
| 53 | | | 73.7 | 74.0 | | | |
| 55 | | | 80.8 | 71.1 | | | |
| 57 | | | 73.6 | 64.1 | | | |
| 59 | | | 75.5 | | | | |
| 61 | | 79.9 | 74.1 | | | | |
| 63 | | 83.3 | 68.9 | | | | |
| 65 | | 80.9 | 70.1 | | | | |
| 67 | | 80.1 | 55.8 | | | | |
| 69 | | 77.3 | | | | | |
| 71 | 81.9 | 75.2 | | | | | |
| 73 | 81.8 | 76.5 | | | | | |
| 75 | 77.5 | 77.6 | | | | | |

Source: authors' own analysis CHS 1986-2002.

Table A5b: Percentage of women who have ever smoked by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 52.5 | 45.9 |
| 23 | | | | | | 53.9 | 56.5 |
| 25 | | | | | | 53.3 | 51.1 |
| 27 | | | | | | 53.8 | 57.2 |
| 29 | | | | | | 56.6 | |
| 31 | | | | | 63.0 | 58.0 | |
| 33 | | | | | 58.5 | 53.6 | |
| 35 | | | | | 64.8 | 53.3 | |
| 37 | | | | | 58.9 | 56.1 | |
| 39 | | | | | 58.3 | | |
| 41 | | | | 57.3 | 57.0 | | |
| 43 | | | | 57.0 | 59.8 | | |
| 45 | | | | 58.9 | 55.5 | | |
| 47 | | | | 58.6 | 59.3 | | |
| 49 | | | | 53.6 | | | |
| 51 | | | 56.0 | 52.0 | | | |
| 53 | | | 53.7 | 55.4 | | | |
| 55 | | | 54.2 | 53.0 | | | |
| 57 | | | 47.8 | | | | |
| 59 | | | 49.3 | | | | |
| 61 | | 54.6 | 48.7 | | | | |
| 63 | | 50.5 | 43.6 | | | | |
| 65 | | 50.1 | 51.1 | | | | |
| 67 | | 51.7 | 48.9 | | | | |
| 69 | | 42.6 | | | | | |
| 71 | 41.0 | 44.0 | | | | | |
| 73 | 36.7 | 41.2 | | | | | |
| 75 | 42.5 | 40.8 | | | | | |

Source: authors' own analysis CHS 1986-2002.

Table A6a: Percentage of men who currently smoke by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 37.7 | 32.8 |
| 23 | | | | | | 36.0 | 31.6 |
| 25 | | | | | | 40.0 | 28.8 |
| 27 | | | | | | 36.9 | 32.1 |
| 29 | | | | | | 34.1 | |
| 31 | | | | | 42.2 | 38.1 | |
| 33 | | | | | 41.0 | 36.5 | |
| 35 | | | | | 40.8 | 27.0 | |
| 37 | | | | | 32.8 | 27.2 | |
| 39 | | | | | 31.8 | | |
| 41 | | | | 39.6 | 34.2 | | |
| 43 | | | | 35.7 | 28.9 | | |
| 45 | | | | 36.0 | 26.4 | | |
| 47 | | | | 33.7 | 25.5 | | |
| 49 | | | | 31.7 | | | |
| 51 | | | 35.4 | 32.2 | | | |
| 53 | | | 34.0 | 29.5 | | | |
| 55 | | | 34.1 | 26.5 | | | |
| 57 | | | 34.2 | 27.5 | | | |
| 59 | | | 30.9 | | | | |
| 61 | | 32.3 | 27.2 | | | | |
| 63 | | 31.6 | 26.1 | | | | |
| 65 | | 28.0 | 24.0 | | | | |
| 67 | | 24.9 | 22.1 | | | | |
| 69 | | 22.7 | | | | | |
| 71 | 26.5 | 25.2 | | | | | |
| 73 | 23.9 | 18.4 | | | | | |
| 75 | 19.0 | 19.4 | | | | | |

Source: authors' own analysis CHS 1986-2002.

Table A6b: Percentage of women who currently smoke by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 36.1 | 27.7 |
| 23 | | | | | | 39.2 | 35.7 |
| 25 | | | | | | 34.8 | 37.0 |
| 27 | | | | | | 33.9 | 33.5 |
| 29 | | | | | | 36.0 | |
| 31 | | | | | 39.7 | 35.7 | |
| 33 | | | | | 38.9 | 37.4 | |
| 35 | | | | | 38.7 | 31.5 | |
| 37 | | | | | 34.3 | 30.7 | |
| 39 | | | | | 32.0 | | |
| 41 | | | | 39.2 | 32.4 | | |
| 43 | | | | 33.8 | 34.6 | | |
| 45 | | | | 37.5 | 32.5 | | |
| 47 | | | | 34.3 | 27.8 | | |
| 49 | | | | 30.2 | | | |
| 51 | | | 36.3 | 28.0 | | | |
| 53 | | | 29.5 | 30.7 | | | |
| 55 | | | 30.7 | 25.7 | | | |
| 57 | | | 25.1 | 26.0 | | | |
| 59 | | | 23.3 | | | | |
| 61 | | 28.8 | 22.5 | | | | |
| 63 | | 26.8 | 22.1 | | | | |
| 65 | | 26.0 | 24.6 | | | | |
| 67 | | 26.6 | 17.6 | | | | |
| 69 | | 18.5 | | | | | |
| 71 | 16.8 | 19.4 | | | | | |
| 73 | 14.7 | 13.2 | | | | | |
| 75 | 18.5 | 13.7 | | | | | |

Source: authors' own analysis CHS 1986-2002.

Table A7: Prevalence of drinking by sex (%), Northern Ireland 1986 to 2000

| | Men | Women |
|---|---|---|
| 1986 | 72.9 (71.0-74.7) | 58.8 (57.0-60.6) |
| 1988 | 76.7 (75.0-78.3) | 62.8 (61.1-64.5) |
| 1990 | 77.8 (76.2-79.4) | 66.1 (64.4-67.7) |
| 1992 | 77.0 (75.3-78.6) | 66.7 (65.1-68.4) |
| 1994 | 77.7 (76.0-79.4) | 67.2 (65.6-68.9) |
| 1996 | 78.7 (76.9-80.4) | 69.8 (68.1-71.6) |
| 1998 | 77.1 (75.3-79.0) | 68.3 (66.5-70.1) |
| 2000 | 77.6 (75.7-79.5) | 67.2 (65.4-69.0) |
| 2002 | 80.5 (78.7-82.4) | 72.5 (70.7-74.2) |

Note: numbers in brackets indicate 95% confidence interval around point estimate.
Source: authors' own analysis CHS 1986-2002.

Table A8: Prevalence of drinking by sex (%), Northern Ireland 1986 to 2002

| | 1986 | 1990 | 1996 | 2000 |
|---|---|---|---|---|
| Men | | | | |
| 16-19 | 71.0 | 71.9 | 67.9 | 76.4 |
| 20-24 | 78.4 | 81.1 | 86.6 | 89.3 |
| 25-34 | 84.9 | 85.7 | 87.4 | 88.3 |
| 35-49 | 77.3 | 84 | 84.2 | 84.9 |
| 50-59 | 67.7 | 72.7 | 75.7 | 80.3 |
| 60 and over | 60.0 | 68.6 | 69.0 | 70.1 |
| | | | | |
| Women | | | | |
| 16-19 | 63.3 | 69.8 | 61.3 | 73.8 |
| 20-24 | 69.7 | 78.1 | 84.5 | 87.5 |
| 25-34 | 78.3 | 77.8 | 82.4 | 86.4 |
| 35-49 | 66.3 | 76.5 | 81.1 | 82.2 |
| 50-59 | 50.2 | 60.6 | 63 | 70.7 |
| 60 and over | 37.7 | 45.1 | 50.2 | 48.9 |

Source: authors' own analysis CHS 1986-2002.

Table A9a: Percentage of Men who currently drink by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 77.0 | 79.4 |
| 23 | | | | | | 80.9 | 83.7 |
| 25 | | | | | | 83.5 | 93.2 |
| 27 | | | | | | 88.4 | 88.7 |
| 29 | | | | | | 87.9 | |
| 31 | | | | | 85.5 | 86.9 | |
| 33 | | | | | 86.1 | 86.7 | |
| 35 | | | | | 87.1 | 86.5 | |
| 37 | | | | | 85.1 | 86.0 | |
| 39 | | | | | 84.0 | | |
| 41 | | | | 77.7 | 83.3 | | |
| 43 | | | | 78.3 | 82.4 | | |
| 45 | | | | 81.3 | 82.9 | | |
| 47 | | | | 75.8 | 84.7 | | |
| 49 | | | | 80.8 | | | |
| 51 | | | 68.3 | 82.1 | | | |
| 53 | | | 74.3 | 78.2 | | | |
| 55 | | | 72.7 | 74.2 | | | |
| 57 | | | 72.7 | 80.7 | | | |
| 59 | | | 78.9 | | | | |
| 61 | | 65.5 | 71.4 | | | | |
| 63 | | 69.5 | 71.2 | | | | |
| 65 | | 73.8 | 67.2 | | | | |
| 67 | | 69.7 | 71.1 | | | | |
| 69 | | 68.1 | | | | | |
| 71 | 65.0 | 69.0 | | | | | |
| 73 | 68.8 | 63.3 | | | | | |
| 75 | 64.5 | 64.8 | | | | | |

Source: authors' own analysis CHS 1986-2002.

Table A9b: Percentage of Women who currently drink by birth cohort

| Mid point of age group | 1911-20 | 1921-30 | 1931-40 | 1941-50 | 1951-60 | 1961-70 | 1971-80 |
|---|---|---|---|---|---|---|---|
| 21 | | | | | | 70.4 | 75.1 |
| 23 | | | | | | 73.3 | 85.1 |
| 25 | | | | | | 78.2 | 83.2 |
| 27 | | | | | | 80.6 | 86.0 |
| 29 | | | | | | 85.5 | |
| 31 | | | | | 76.5 | 82.5 | |
| 33 | | | | | 79.0 | 80.0 | |
| 35 | | | | | 80.7 | 81.3 | |
| 37 | | | | | 79.7 | 85.5 | |
| 39 | | | | | 79.6 | | |
| 41 | | | | 67.7 | 82.2 | | |
| 43 | | | | 71.2 | 79.8 | | |
| 45 | | | | 72.0 | 77.4 | | |
| 47 | | | | 70.5 | 78.1 | | |
| 49 | | | | 70.9 | | | |
| 51 | | | 53.8 | 68.8 | | | |
| 53 | | | 58.7 | 67.7 | | | |
| 55 | | | 60.6 | 62.3 | | | |
| 57 | | | 58.0 | 70.6 | | | |
| 59 | | | 60.6 | | | | |
| 61 | | 48.0 | 59.7 | | | | |
| 63 | | 51.5 | 58.2 | | | | |
| 65 | | 53.5 | 54.1 | | | | |
| 67 | | 54.0 | 52.7 | | | | |
| 69 | | 44.2 | | | | | |
| 71 | 39.9 | 51.1 | | | | | |
| 73 | 37.3 | 45.3 | | | | | |
| 75 | 37.1 | 35.2 | | | | | |

Source: authors' own analysis CHS 1986-2002.

## Figures