

# Adult Smoking in Ireland:

A Special Analysis of the Healthy Ireland Survey and the Irish Longitudinal Study on Ageing (TILDA)

A Sheridan, A O'Farrell, D Evans, P Kavanagh.

Report prepared on behalf of the Health and Wellbeing Division Tobacco Free Ireland Programme, Health Service Executive

2018



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive





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# Foreword

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I am pleased to introduce this Special Analysis of the Healthy Ireland Survey and the Irish Longitudinal Study on Ageing (TILDA) which focus on adult smoking.

The progress made in tackling smoking in Ireland lead to complacency and the false belief that the fight against the tobacco epidemic has been won. The reality is that the continuing toll of smoking-related disease is stark and there is still much to do, especially for high-burden population groups; furthermore, the face of the epidemic is changing and the context becoming more complex. Achieving each incremental step in the decline in smoking has become more and more challenging.

The challenge is changing utterly given the commitment in Ireland to bring the tobacco epidemic to an endgame through *Tobacco Free Ireland*. The step change from tobacco control to tobacco elimination will require innovation and new solutions.

Research and information are key to achieving this step change. Making best use of existing information through secondary analysis of large datasets is a good starting place. This is well-demonstrated by this report. A better understanding of the demographic factors independently associated with current smoking enables us to adopt more targeted approaches to tackling smoking. For people who currently smoke and for policy-makers, the health impacts of smoking can appear remote and depersonalised. While the international evidence base is extensive, through comprehensively describing the relationship between smoking and health in the Irish population, this work provides a catalyst for greater focus. Finally, insights into the factors associated with quitting and remaining smoke-free will provide further motivation to the many people who smoke interested in quitting, and underscores the need to ensure continuing access to effective supports for everyone.

Put simply, better research and information lead to better decisions and a better chance of bringing the tobacco epidemic to an end.

We are grateful to the Department of Health and the team at TILDA, Trinity College Dublin, for enabling access to the datasets used in this analysis. I would like to acknowledge and thank members of the HSE Tobacco Research Group for their commitment in taking forward this work: David Evan, Anne O'Farrell and Aishling Sheridan. The insights they have developed on the significant continuing challenge of tackling smoking in Ireland inform and support the HSE *Tobacco Free Ireland* Programme priorities in the short and medium term. We are pleased to share these results with partners for their consideration and hope that the discussion it generates will enable us to build broad-based action for a *Tobacco Free Ireland*.

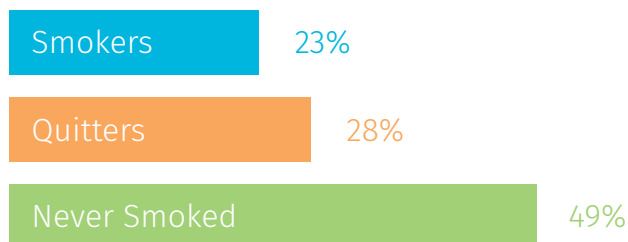


**Dr Paul Kavanagh**

*Consultant in Public Health Medicine, HSE Tobacco Free Ireland Programme*

# Smoking among adults in Ireland

There are now more  
Quitters than Smokers  
in Ireland



## Current Smoking Prevalence

- Males 24%, Females 21%
- Highest among those aged 25-34 years
- 864,000 current smokers in Ireland
- 1,050,000 ex-smokers in Ireland

## Products Used:

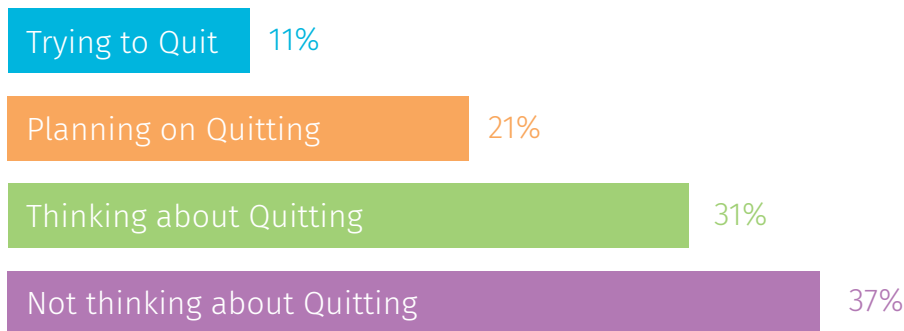
- 75% manufactured cigarettes
- 24% roll-your-own cigarettes
- 6% currently use e-cigarettes

## Who are more likely to smoke?

**SINGLE** (not in a relationship)  
**MALE**  
**YOUNG**  
**K**  
**UNEMPLOYED**  
**ROUTINE JOB**

## Health & Wellbeing Profile of those who Ever Smoked:

- Poorer self-reported health, both physical & mental
- Living with more smoking-related health conditions
  - More limited daily activities
  - More likely to use health services



533,000 smokers attempted to quit smoking in Ireland last year

Who are more likely to make a quit attempt?

?  
 YOUNG  
 EDUCATED 3RD LEVEL  
 NON-MANUAL JOBS  
 TEMPORARY  
 MARRIED

What aids/help are they using?

- ?
- Will power alone (47%)
  - E-cigarettes (27%)
  - Nicotine products (17%)
  - Prescribed medications (4%)

Who are more likely to successfully quit smoking?

152,000 smokers successfully quit smoking in Ireland last year

?  
 YOUNG  
 HIGH SOCIAL CLASS  
 EDUCATED

Sources: Healthy Ireland Survey 2015 & TILDA (wave 1)

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# Glossary of Terms

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	Healthy Ireland Survey	TILDA
Current Smoker	Somebody who currently smokes tobacco products daily or occasionally.	Somebody who currently smokes, or within the last 3 months.
Ex-Smoker	Somebody who smoked tobacco products daily or occasionally, in the past.	Somebody who smoked in the past, at least 3 months ago, for a period of at least 1 year.
Never Smoker	Somebody who never smoked tobacco products.	Somebody who never smoked tobacco products.
Non-Smoker	Somebody who does not currently smoke tobacco products (includes never smokers and ex-smokers).	Somebody who does not currently smoke tobacco products (includes never smokers and ex-smokers).

## Acknowledgements:

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Two sources provided data to inform this report. We wish to acknowledge the assistance and support of the following in providing data and ICT support:

- Sheona Gilsean, Kate O’Flaherty & Alan Cahill, Department of Health, Dublin for providing access to the Healthy Ireland Survey.
- Christine McGarrigle, Gearoid O’Donnell, TILDA, Trinity College Dublin for facilitating us with access to the TILDA datasets in the Mercer Institute of Successful Ageing.
- Irish Social Science Data Archive (ISSDA) for providing access to the TILDA datasets.
- Sean Donohoe & James Moriarty, HSE ICT, Kells for ICT support.

# 1. Introduction

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## 1.1 So, what is the problem?

Smoking is the leading cause of preventable death in Ireland. Each week, over 100 people die from diseases caused by tobacco use; this represents almost one in five of all deaths. In addition, many people live with conditions related to smoking, with people who smoke, on average, losing at least 10 quality years of life.<sup>1</sup> The Healthy Ireland Survey reports that one in five of the adult population continues to smoke on a daily basis;<sup>2</sup> similar smoking prevalence is observed among older persons (aged 50+ years) as reported by the Irish Longitudinal Study on Ageing (TILDA).<sup>3</sup>

Ireland is committed to becoming tobacco free by 2025.<sup>1</sup> A range of policy measures are being taken by the Department of Health and the Health Service Executive (HSE) to achieve this goal by strengthening the prevention of initiation and through further promoting smoking cessation. To inform and support its work, this secondary analysis of two national datasets in relation to smoking, namely the Healthy Ireland Survey and TILDA,<sup>2,3</sup> was undertaken to provide a better understanding of the determinants, patterns and impacts of tobacco consumption in the Irish context. A strength of the Healthy Ireland Survey is its large sample and representativeness. TILDA offers an important opportunity to understand the impact of smoking, given that its older sample has accumulated a longer lifetime exposure to smoking.

## 1.2 Why did we do this?

Secondary analysis maximises the value of existing information for health policy and planning through analysing pre-existing data to answer new or additional questions to those for which it was initially collected.<sup>4</sup> Large, population based datasets, like the Healthy Ireland Survey and TILDA, are especially good candidates for re-use by researchers. Good secondary analysis is driven by research questions rather than the existing data, following a clear, pre-defined plan, and is careful to consider the strengths and limitations of the data, given that it was not specifically collected for the purposes for which it is now being used.<sup>4</sup> These good practice principles underpinned this report.

The aim of this study is to undertake an analysis of smoking patterns among adults in Ireland, and to document the effects of smoking on their health and wellbeing.

More specifically, the study objectives are:

1. To measure the prevalence of smoking among adults (aged 15+ years) in Ireland, and to identify the demographic factors independently associated with current smoking by utilising the Healthy Ireland Survey;
2. To measure the health and wellbeing status of people who smoke and compare this with the status of ex-smokers and never smokers for the population, primarily using TILDA dataset for those aged 50 years and over, which best captures lifetime exposure, but also drawing on the Healthy Ireland Survey, and

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1 Tobacco Free Ireland – Report of the Tobacco Policy Review Group. Department of Health, Dublin, 2013.  
<http://health.gov.ie/wp-content/uploads/2014/03/TobaccoFreeIreland.pdf>

2 Healthy Ireland Survey 2015 – Summary of Findings. Department of Health (2016).

3 Fifty Plus in Ireland – First results from the Irish Longitudinal Study on Ageing (TILDA). The Irish Longitudinal Study on Ageing, Trinity College Dublin. Dublin 2.

4 Cheng HG, Phillips MR. Secondary analysis of existing data: opportunities and implementation. Shanghai Archives of Psychiatry, 2014, Vol 26, No. 6.

3. To measure the prevalence of quitting behaviours among people who smoke, and to identify the factors associated with attempting to quit smoking, and successfully quitting smoking, by utilising the Healthy Ireland Survey.

### 1.3 How did we do this?

- Application was made to the Department of Health, Dublin, for the research micro file (rmf) of **wave 1** of the **Healthy Ireland Survey 2015**. Permission was granted and data obtained on 13th September, 2017.
- Application was made to Irish Social Science Data Archive, University College Dublin, for access to the **TILDA dataset, wave 1**. Permission was granted and data obtained on 13th February, 2018.

## Background to the Healthy Ireland Survey



The Healthy Ireland Survey, commissioned by the Department of Health, and administered by IPSOS MRBI, utilises an interviewer-administered questionnaire, with interviews conducted on a face-to-face basis with individuals aged 15 years and over. Wave 1 of this survey involved 7,539 interviews, with the survey covering a variety of topics including general health, smoking, alcohol, physical activity, diet & nutrition, weight management, social connectedness, wellbeing, dementia & sexual health. A summary of the main findings is available at this link <http://health.gov.ie/blog/publications/healthy-ireland-survey-2015-summary-of-findings/>.

Across households, where it was possible to make contact, a response rate of 61% was achieved. Population weighting was employed to bring the profile of respondents in line with the population profile. The main survey weight involved both selection weights and non-response adjustments. The variables used in this respect were: age by gender, education, work status of the respondent and region. A more detailed description of the study sample, design and response rate is described in the summary of findings report.<sup>2</sup> This report analyses wave 1 of the data collection, which was collated between November 2014 and August 2015.

The Healthy Ireland Survey was funded by the Department of Health, Dublin, Ireland. The Department of Health takes no responsibility for the views expressed or outputs generated from the research undertaken on the RMF(s).

## Background to The Irish Longitudinal Study on Ageing (TILDA)



TILDA is a nationally representative sample of community dwelling adults, aged 50 years and older, living in Ireland. The TILDA questionnaires include questions on socio-demographics, living standards, income, wealth, physical health, lifestyle & behaviour, social support and use and perceived need for health and social care and attitudes to ageing. A profile of the cohort has been well-described elsewhere.<sup>5</sup>

Across households where it was possible to make contact to confirm eligibility, a response rate of 62% was achieved. Population weighting was employed to counteract bias introduced by differential non-response by age, gender and level of education. This analysis involves the first wave of the study which was collected between 2009 and 2011.

TILDA and ISSDA takes no responsibility for the views expressed or outputs generated from the research undertaken on the AMF(s).

## Statistical Analysis

For both datasets, only those with a smoking status were included in the analysis. All statistical analysis was carried out using JMP statistical package, SAS, version 12.<sup>6</sup>

Bivariate analysis using Pearson's Chi-squared & Fisher's Exact Tests were used to compare proportions. Multivariate analyses including logistic and ordinal regression modelling were carried out using discretionary backward elimination. Statistical significance was determined at the 0.05 level. Exact 95% confidence intervals were calculated for proportions of binomial variables and for regression adjusted odds ratios. For data that were approximately normally distributed; the two sample t test was used to compare means in independent groups. For data not normally distributed, non-parametric tests were used.

Given that the data is based on surveys that are representative of the population, the findings were reported as proportions, with estimated numbers of people who smoke derived using prevalence rates from these surveys and population numbers from Census 2016.<sup>7</sup>

## Derived Variables

A number of variables were derived during the course of this analysis; a full list and description of same is available in the appendix.

5 Kearney PM, Cronin H, O'Regan C, Kamiya Y, Savva GM, Whelan B, Kenny R. Cohort Profile: the Irish Longitudinal Study on Ageing. *International Journal of Epidemiology*. 2011 Aug 40 (4): 877-84.

6 JMP, Version 12. SAS, Cary, NC 27513-2414, USA

7 Census 2016 Results, Central Statistics Office, Cork.

## 2. Who is Smoking in Ireland?

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### Key Findings:

One in five Irish adults smoke daily; equating to approximately 714,000 people who smoke.

The highest prevalence of current smoking is among 25-34 year olds.

More males than females smoke. Males also begin smoking at a younger age and have longer lifetime exposure to smoking than females.

Manufactured cigarettes are the most popular tobacco product among people who smoke; however, one in four daily smokers currently use hand-rolled cigarettes.

Almost all people who smoke had knowledge of e-cigarettes, with 42% having tried them at some point, and 6% of current smokers currently using them.

The characteristics of those who are more likely to smoke in Ireland, are young, male, not currently married or in a civil partnership, either unemployed or in a routine manual occupation.

### What this means:

Significant reductions in current smoking required to meet 2025 target <5%

Comprehensive population-based tobacco control measures have served Ireland well in reducing smoking prevalence. Further progress will require complementing this approach with a focus on specific communities with greater needs. This profile of those who are more likely to smoke allows targeted interventions to try and prevent these people from starting smoking, and to help them to quit.

Welcome attention is being paid recently to use of roll-your-own tobacco products in Ireland. Tobacco control strategic planning should examine further ways to tackle this pattern of tobacco use since it offers potential to help reduce smoking in the population.

### Overview of Chapter

In this chapter we describe the demographic profile of people who smoke in Ireland in terms of gender, age, education status, socio-economic background and marital status. We describe the smoking behaviours of Irish adults, examining exposure to tobacco products, and tobacco products used. We also examine the use and knowledge of electronic cigarettes. Finally, we aim to determine which socio-demographic factors are associated with current smoking among adults in Ireland.

The primary sources of information for this chapter in terms of smoking prevalence and the determinants of smoking was the Healthy Ireland Survey, with information in relation to age of smoking initiation, duration of smoking, and exposure to tobacco products sourced from TILDA.

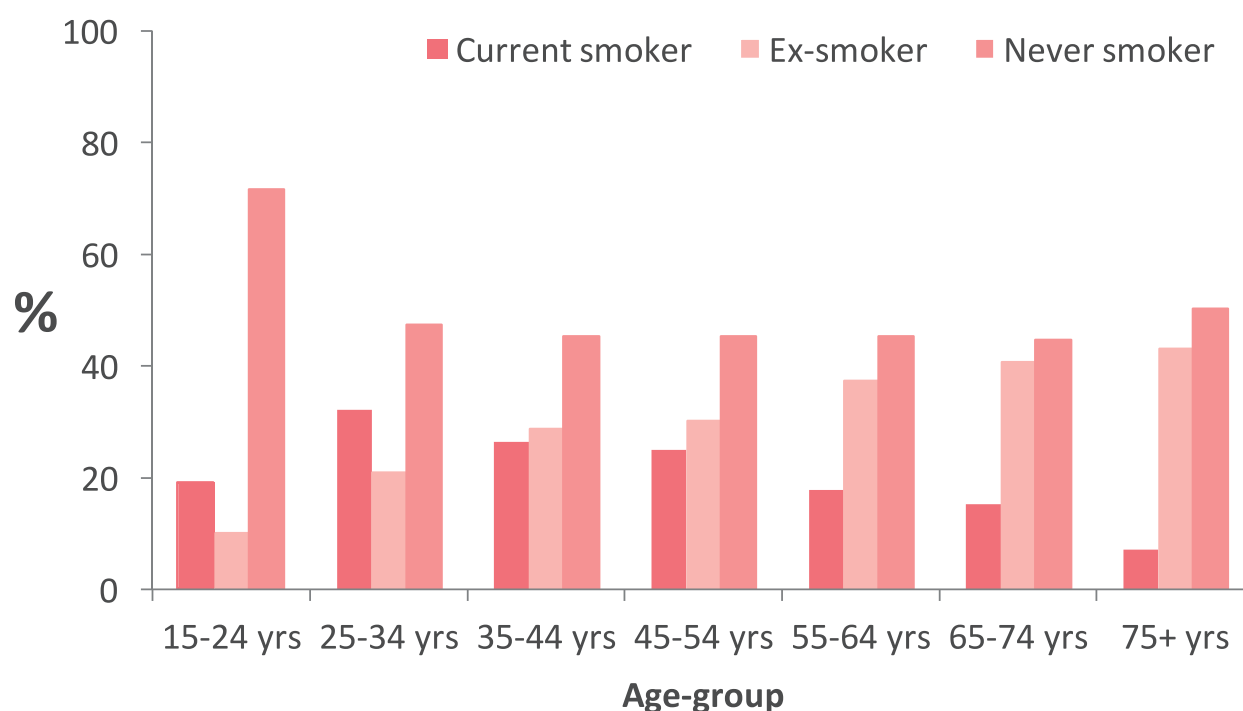
## 2.1 Age & Gender Profile

Using the Healthy Ireland Survey, we know that in 2015, 23% of the Irish population (aged 15+ years) smoked tobacco products (19% smoked daily and 4% smoked occasionally), 28% had smoked in the past, and 49% of the population had never smoked. These prevalence rates equate to approximately 864,000 current smokers (714,000 daily smokers); and 1,050,000 ex-smokers in Ireland in 2015.

Males (M) were significantly more likely to be current smokers (M 24%, F 21%) or ex-smokers (M 30%, F 26%) than females (F); with males significantly less likely to have never smoked compared to females (M 46%, F 53%), ( $\chi^2=41.83$ ,  $p<0.0001$ ).

Figure 1 details an age profile of adult current smokers, ex-smokers and never smokers in Ireland in 2015. The highest prevalence of current smoking, among males and females, was in the 25-34 year age group. The proportion of ex-smokers in each age group increased with increasing age group, with highest rates (43%) in those aged 75+ years. The youngest age group (15-24 years) had the highest proportion (71%) of never smokers, as expected.

**Figure 1: Age-profile of current, ex- and never smokers in Ireland**



Source: Healthy Ireland Survey 2015

## 2.2 Education and Employment Status

Using the Healthy Ireland Survey, we examined levels of education and current employment status by smoking status, and learned that people who smoke (current smokers and ex-smokers) in Ireland were significantly more likely to have a lower education status (primary education only, or lower), compared to those who never smoked, (current 16%; ex 20%; never 12%,  $\chi^2=128.2$ ,  $p<0.0001$ ).

Table 1 details significant differences in current work situation by smoking status in 2015 ( $\chi^2=608.2$ ,  $p<0.0001$ ): for example, those who currently smoke were more likely to be unemployed compared to non-smokers (10.2% versus

ex 4.8%, never 3.4%); similarly, more current smokers were unable to work due to sickness or disability, compared to non-smokers (6.4% versus ex 3.8%, 2.5% never).

**Table 1: Current work situation among adults in Ireland by smoking status**

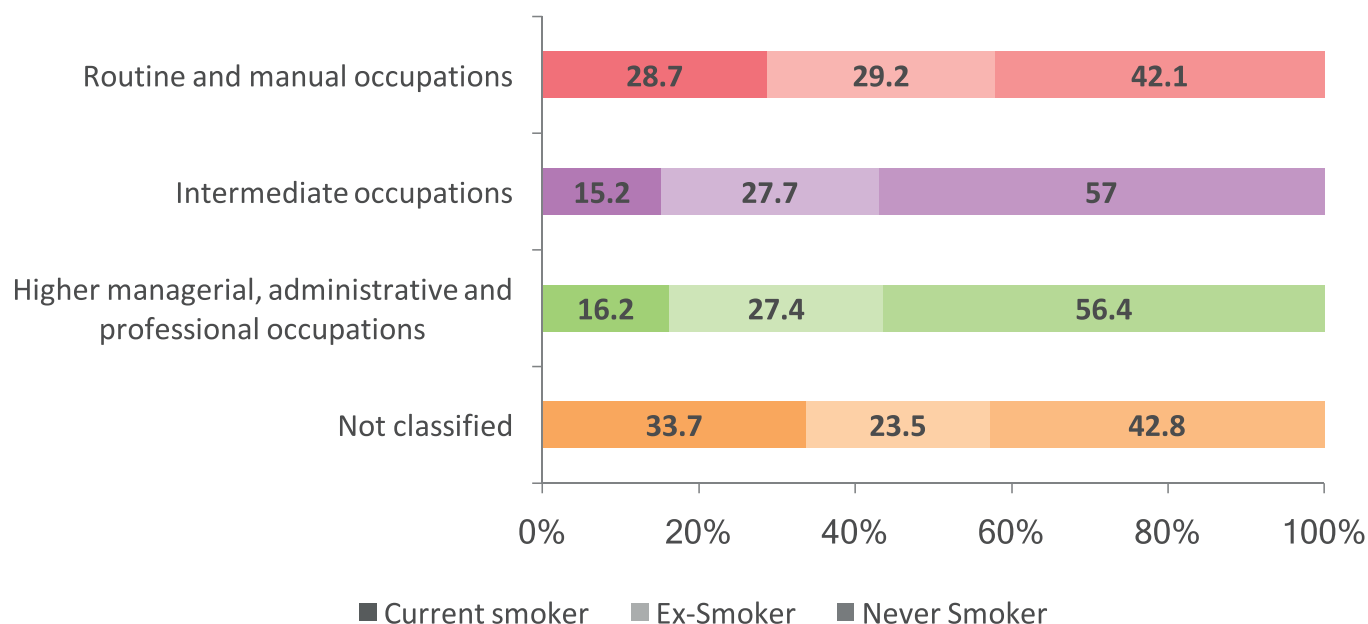
Current Situation with regard to Work	Current Smoker (%)	Ex- Smoker (%)	Never Smoker (%)
Working for payment or profit	51.2	54.3	50.6
Looking for 1st job	2.3	0.5	1.3
Unemployed	10.2	4.8	3.4
Student / pupil	6.1	4.6	17.7
Engaged on home duties	14.3	12.2	13.2
Retired	6.4	18.6	10.0
Unable to work due to sickness / disability	6.4	3.8	2.5
Other	3.2	1.1	1.2
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Healthy Ireland Survey 2015

## 2.3 Socio-economic Status

The Healthy Ireland Survey utilises the National Statistics Socio-Economic Classification from the UK.† We observed a significant association between socio-economic classification and smoking, whereby a higher proportion of persons with occupations of a routine or manual nature were people who smoke compared to higher classifications as displayed in Figure 2, ( $\chi^2=264.0$ ,  $p<0.0001$ ).

**Figure 2: Socio-economic classification by smoking status**



† Note: Socio-economic classification is per The National Statistics Socio-Economic Classification, UK (NS SEC-3)

Source: Healthy Ireland Survey 2015

## 2.4 Marital Status

According to the Healthy Ireland Survey, those who describe themselves as being currently married or in a civil partnership were significantly less likely to be current smokers than those who had other marital status (including single, widowed, divorced, separated), (18.9% versus 27.8% respectively,  $\chi^2 = 190.1$ ,  $p < 0.0001$ ).

## 2.5 Smoking Behaviours

This section provides information on age of smoking initiation and duration of smoking, and the resulting exposure to tobacco (as measured by pack years – *see derived variables*) among current and ex-smokers in Ireland; this information is sourced from the TILDA study and refers only to adults in Ireland aged 50+ years. A pack year is a quantification of cigarette smoking; a unit of measuring the amount a person has smoked over their smoking lifetime.

The Healthy Ireland Survey is also utilised for this section to provide information on the tobacco products used by current smokers (aged 15+ years) in Ireland today, and the quantities of tobacco products consumed by people who smoke.

### 2.5.1 Age of Smoking Initiation:

The average (mean) age of smoking initiation, among those who *ever smoked*, as reported by older adults in Ireland, was 20.9 years (range: 5 to 76 years). Males who ever smoked started smoking at a slightly younger age than females who ever smoked (M: 19.7 years, F: 22.5 years, F-statistic=107.5,  $p < 0.0001$ ).

### 2.5.2 Duration of Smoking:

Older adults who were *ex-smokers* reported duration of smoking, on average, of 22.0 years before quitting. Male ex-smokers reported a significantly longer duration of smoking, on average, than females (M: 22.8 years, F: 20.9 years, F-statistic=15.2,  $p < 0.0001$ ).

Older adults who were *current smokers* reported duration of smoking, on average, of 38.7 years at the time of survey. Male current smokers reported a significantly longer duration of smoking, on average, (M: 40.2 years, F: 37.3 years, F-statistic=19.6,  $p < 0.0001$ ).

### 2.5.3 Exposure to Tobacco as measured by Pack Years

In older adults, the average (median) number of pack years among people who smoke (current & ex-) was 20 (range: 0.05 to 180 pack years). The average (median) number of pack years for current smokers was significantly higher than the average number for ex-smokers (30 versus 15 pack years,  $\chi^2=256.7$ ,  $p < 0.0001$ ). Male current smokers had a significantly higher average (median) number of pack years than females (30 (M), 25 (F),  $\chi^2=25.6$ ,  $p < 0.0001$ ), as did male ex-smokers compared to female ex-smokers (20 (M), 10.5 (F),  $\chi^2=131.9$ ,  $p < 0.0001$ ).

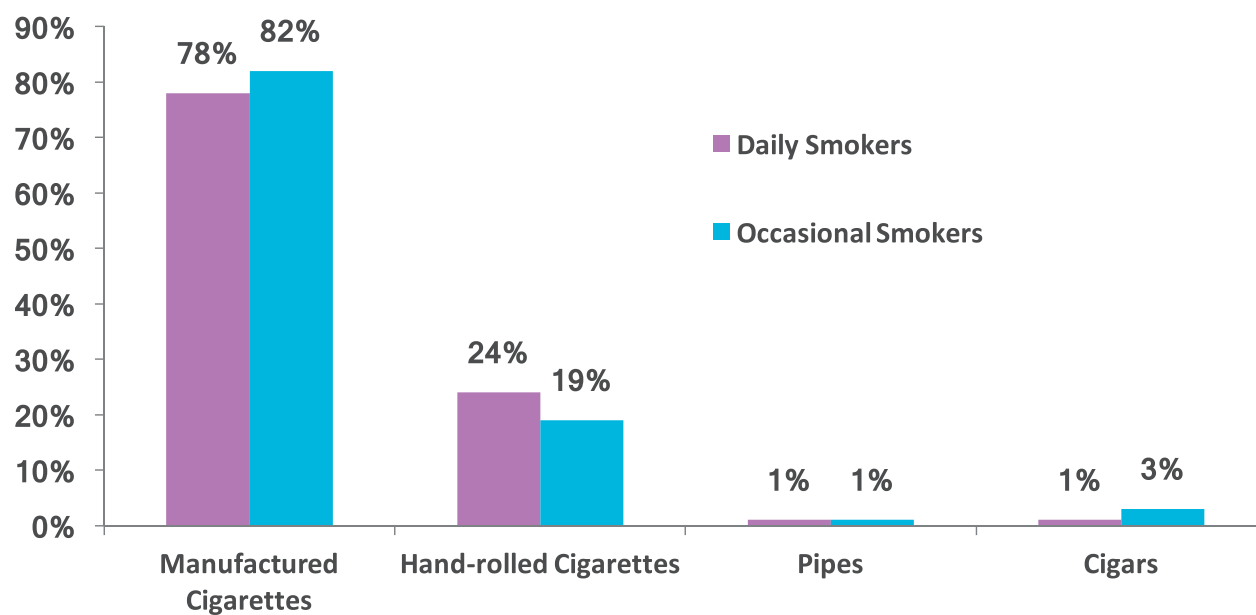
Approximately one-in-five (19%) occasional smokers smoke less than weekly, and therefore are not included in this analysis.

### 2.5.4 Tobacco Products Used by People who Smoke

Figure 3 details the products used by smokers in 2015, with the majority of people who smoke smoking manufactured cigarettes.

One-in-four daily smokers smoke hand-rolled cigarettes compared to one-in-five occasional smokers. Cigars were significantly more popular among occasional smokers than daily smokers ( $\chi^2=13.07$ ,  $p<0.001$ ).

**Figure 3: Tobacco Products Used in 2015**



Source: Healthy Ireland Survey 2015

### 2.5.5 Amount of Tobacco Products Used by People Who Smoke in 2015:

Table 2 details the amount of products smoked daily by daily smokers and weekly by occasional smokers.

**Table 2: Amount of Tobacco Products Used by Smoker Type**

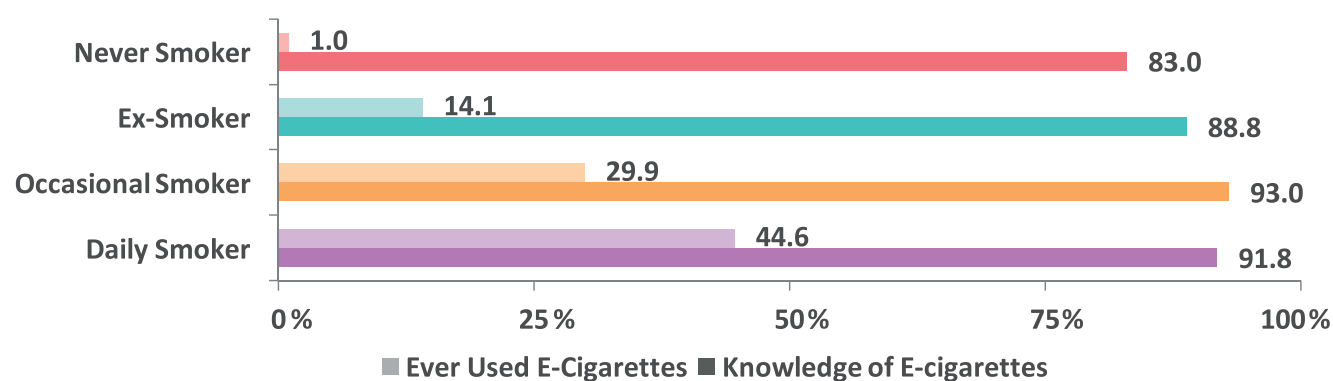
Product	Type of Smoker	Average (Median)	Middle 50% (Interquartile Range)	Range (min – max)
Manufactured Cigarettes	Daily	12.5 per day	10 – 20 per day	1 – 100 per day
	Occasional	10 per week	3 – 20 per week	1 – 80 per week
Hand-rolled Cigarettes	Daily	10 per day	8 – 20 per day	1 – 150 per day
	Occasional	5 per week	3 – 10 per week	1 – 50 per week

**Source: Healthy Ireland Survey 2015**

## 2.6 Knowledge & Use of Electronic Cigarettes (e-cigarettes)

Knowledge and use of electronic cigarettes among the Irish population was determined using the Healthy Ireland Survey. (See Fig.4) Almost all (92%) current smokers had knowledge of e-cigarettes. Less than half (42%) of current smokers had tried e-cigarettes at some point, with 6% currently using them. In addition, 6% of ex-smokers reported currently using e-cigarettes at the time of survey; 52% of these ex-smokers had quit smoking for a period of less than 12 months.

**Figure 4: Knowledge & use of e-cigarettes by smoking status**



Source: Healthy Ireland Survey 2015

Both knowledge and use of e-cigarettes varied by smoking status, and were highest among smokers.

## 2.7 Demographic Factors Associated with Current Smoking

The previous sections have described the demographic factors found to be associated with current smoking among Irish adults utilising the Healthy Ireland Survey. However, many of these factors are inter-related. Therefore, further analysis using multivariate regression statistical methods was undertaken to identify those factors that were independently associated with current smoking; these independent factors are detailed in Table 3.

**Table 3: Independent demographic factors associated with current smoking in Ireland among the adult population (aged 15+ years), 2015**

Factors	Odds ratio	95% CI	P value
Male†	1.11	1.01, 1.24	P<0.05
Young (<35 years)	1.16	1.01, 1.34	P=0.05
Routine Manual Occupations	1.90	1.67, 2.16	P<0.0001
Not married (or living as married)	1.41	1.23, 1.62	P<0.0001
Unemployed†	2.18	1.75, 2.72	P<0.0001

† Some interaction was observed between these variables

\*\* The factors included in this model were: age, gender, education, social class, marital status\*\*

The characteristics of those who are more likely to smoke in Ireland are summarised in Figure 5.

**Figure 5: Characteristics of those who are more likely to smoke in Ireland**

**S**INGLE (not in a relationship)  
**M**ALE  
**Y**OUNG  
**K**  
**U**N**E**MPLOYED  
**R**OUTINE JOB

Source: Healthy Ireland Survey 2015

### 3. What is the Impact of Smoking on Health and Wellbeing?

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#### Key Findings:

People who smoke are more likely to self-report poor health; both poorer physical health and mental health.

The prevalence of smoking-related chronic diseases is highest among ex-smokers; and among all people who smoke, the prevalence of these diseases is related to the amount smoked.

Many smokers experience limitations in activities of daily living as a result of their smoking, particularly in later life and, again, the prevalence of limitations is related to the amount smoked.

People who smoke are more likely to encounter healthcare services, at all ages.

#### What this means:

Smoking has a negative impact on all aspects of health and wellbeing; resulting in poorer health at individual level and increased demands for healthcare services.

The main benefit of quitting is better health; with increased mental health problems and the presence of smoking-related chronic diseases among those who ever smoked, and the extent of these conditions is related to the amount of tobacco the individual smoked.

#### Overview of Chapter

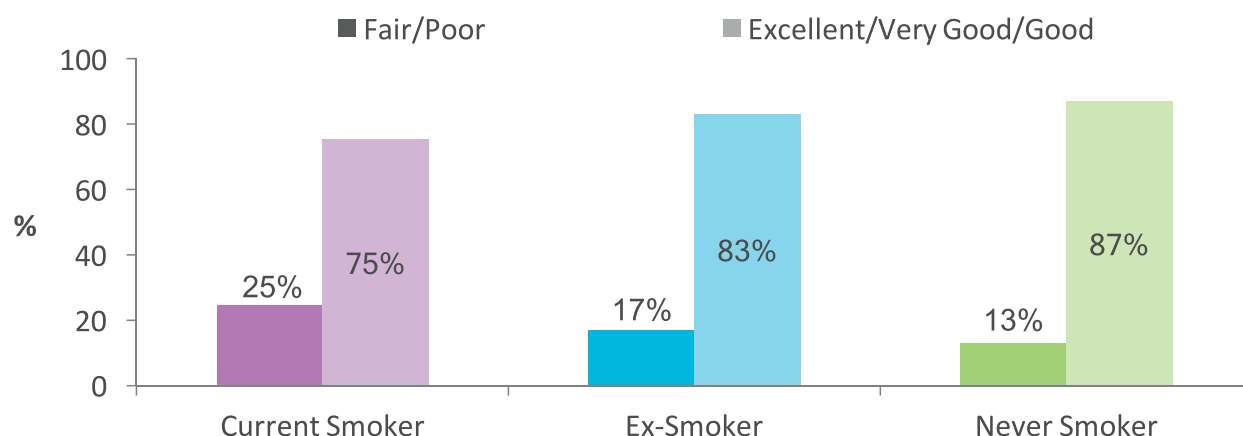
In this chapter, we outline the impact of smoking on the health and wellbeing of adults in Ireland. Self-rated health is a simple, easy to administer measure of general health, and is a proven predictor of mortality, particularly among older persons. A large body of evidence now exists to demonstrate the effects of tobacco use on almost every organ of the body. As chronic conditions usually occur in later life, we sourced data on the prevalence of smoking-related chronic diseases from the TILDA dataset, and present findings for those aged 50+ years in Ireland by smoking status. As well as these physical conditions, some measures of negative mental health were also analysed, and the resulting limitations in the activities of daily living that people experience as a result of their physical and mental ill-health. Finally, we examine healthcare utilisation by smoking status.

The primary source of information for this chapter in terms of chronic diseases, mental health, limitations in daily activities and healthcare utilisation was TILDA, with measures of health among the general adult population sourced from the Healthy Ireland Survey.

### 3.1 Self-rated General Health in Later Life

TILDA reports self-rated health among persons aged 50+ in Ireland, compared to other people of their own age; the findings by smoking status are detailed in Figure 7. Current smokers, in particular, were significantly more likely to rate their own health as fair/poor, when compared to others of their own age, ( $p < 0.0001$ ).

**Figure 7: Self-rated health compared to others of the same age**



Source: TILDA, Wave 1, TCD

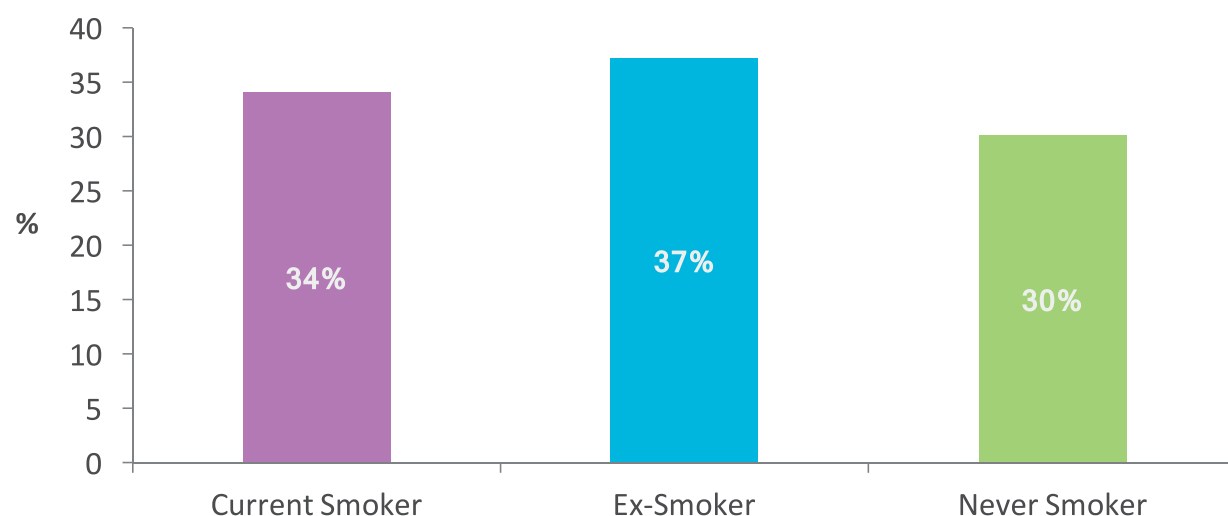
### 3.2 Smoking-related Chronic Conditions in Later Life

Using information from TILDA, this section details the prevalence of one or more self-reported doctor-diagnosed, smoking-related chronic diseases; respiratory disease, cardiovascular disease or smoking-related cancers, (See Derived Variables in Appendix) among persons aged 50 years and older in Ireland. These diseases are not exclusively caused by smoking, but smoking is known to be a major risk factor for each of these diseases.<sup>8</sup>Prevalence of smoking-related chronic diseases by smoking status is displayed in Figure 8.

Overall, one third (33%) of those aged 50+ years reported having at least one of these (potentially) smoking-related chronic conditions (as defined above). Almost four in ten (36.2%) of those who ever smoked reported having at least one of these chronic diseases. The burden of these diseases was significantly higher among ex-smokers compared to current smokers (37.3% versus 34.2%,  $\chi^2=645.9$ ,  $p < 0.0001$ ).

<sup>8</sup> The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. 2014. Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

**Figure 8: Prevalence of self-reported doctor-diagnosed smoking-related chronic conditions by smoking status**



Source: TILDA, Wave 1, TCD

Furthermore, the prevalence of these potentially smoking-related conditions was significantly higher among those with a higher exposure to tobacco; those with pack years >35 were 60% more likely to report having a smoking-related chronic disease, compared to those with ≤35 pack years, (Odds ratio=1.63, 95%CI: 1.41, 1.87,  $p<0.0001$ ).

(Note: due to small numbers, not all data could be included here, so the prevalence of self-reported, doctor-diagnosed, smoking-related chronic diseases here should be considered an under-estimate of the total burden of these diseases among adults aged 50+ years in Ireland).

### 3.3 Mental Health

In Ireland, according to the Healthy Ireland Survey, approximately one in ten (9%) of the adult population (aged 15+ years) reports psychological distress to the extent of indicating a probable mental health problem as scored on the Mental Health Index-5.†

Table 4 illustrates a significant variation in the prevalence of probable mental health problems among adults by smoking status ( $\chi^2=62.5$ ,  $p<0.0001$ ): for example, compared with never smokers (7.7%) a higher proportion of people who smoke (14.5%), both current and occasional, report distress indicative of probable mental health problems.

**Table 4: Prevalence of probable mental health problems by smoking status, 2015**

Smoking Status	Probable mental health problem
Daily smoker	14.5%
Occasional smoker	14.4%
Ex-smoker	8.1%
Never Smoker	7.7%

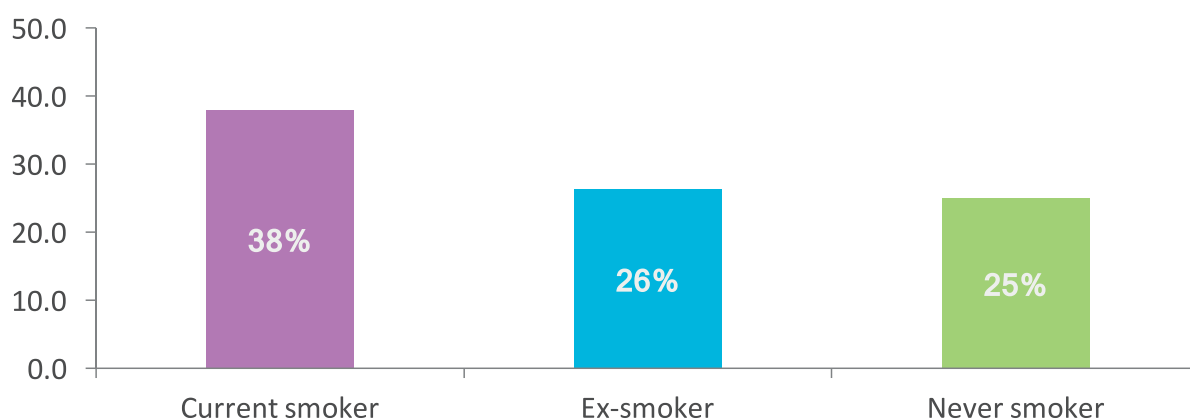
† Mental Health Index-5. The Short Form (36) Health Survey, Medical Outcome Study, RAND Corporation.

Source: Healthy Ireland Survey 2015

Current smokers were over 70% more likely to report distress indicative of probable mental health problems, compared to non-smokers, independent of age, gender and social class, (odds ratio=1.72, 95% CI: 1.41, 2.10,  $p<0.0001$ ).

Similarly, among older adults, as per TILDA, current and former smoking was significantly associated with been classified as having depressive symptoms, using CES-D scale† (Fig. 10). Current smokers were 1.5 times more likely as never smokers, to be classified as having depressive symptoms (Odds ratio=1.51, 95% CI: 1.49, 1.54,  $p<0.0001$ ). Ex-smokers were also more likely to be classified as having depressive symptoms compared to never smokers (Odds ratio=1.13, 95% CI: 1.12, 1.15,  $p<0.0001$ ), independent of age, gender and social class.

**Figure 9: Depressive symptoms by smoking status**



† Radloff, L. S. (1977). The CES-D scale: A self report depression scale for research in the general population. *Applied Psychological Measurements*, 1, 385-401.

Source: TILDA, Wave 1, TCD

### 3.4 Limitations in Activities due to Health Problems in Later Life

Among older adults in TILDA, 70.5% reported having some difficulties with activities of daily living, as a result of a physical or mental health problem (*See Derived Variables*). People who smoke (current and ex-) were 40% more likely to report difficulties compared to those who never smoked, after controlling for age, gender and social class (Odds ratio=1.40, 95%CI: 1.38, 1.41,  $p<0.0001$ ). Furthermore, people who smoke with higher exposure to tobacco (>35 pack years) were over 40% more likely to report difficulties when compared to those with lower levels of tobacco exposure, (Odds ratio=1.42, 95%CI: 1.39, 1.45,  $p<0.0001$ ), independent of age, gender and social class.

## Healthcare Utilisation

A quarter (26%) of Irish adults reported a GP consultation (on their own behalf, excluding nurse only consultations) within the four weeks prior to the Healthy Ireland Survey; with females more likely to consult with their GP in recent weeks than males (M 23%, F 29%,  $\chi^2=45.7$ ,  $p<0.0001$ ). Table 6 details the likelihood of adults who smoke consulting with their GP within four weeks of survey, compared to never-smokers. Ex-smokers were almost 50% more likely to consult their GP, and current smokers were 20% more likely to consult their GP than never-smokers, independent of age, gender and social class. This reflects that ex-smokers include individuals who have developed chronic disease and have quit smoking for that reason.

**Table 6: GP Utilisation in previous 4 weeks by smoking status**

Smoking Group	Odds Ratio	Lower 95% CI	Upper 95% CI	P value
Never Smoker	1.00			
Ex-Smoker	1.44	1.26	1.65	P<0.0001
Current Smoker	1.21	1.04	1.41	P<0.05

Source: Healthy Ireland Survey 2015

Using TILDA data, the relationship between smoking and GP utilisation was measured (Table 7). Current smokers were 62% more likely to report attending a GP in the previous 12 months compared to those who never smoked and ex-smokers; these findings were independent of age, gender and social class.

**Table 7: Healthcare Utilisation in previous 12 months by smoking status, later life**

GP consultation in previous 12 months				
Smoking Group	Odds Ratio	Lower 95% CI	Upper 95% CI	P value
Never Smoker	1.00			
Ex-Smoker	0.99	0.98	1.01	0.55
Current Smoker	1.62	1.59	1.66	<0.0001

Source: TILDA, Wave 1, TCD

## 4. Intention to Quit Smoking & Quitting Behaviours

### What we found

Almost 2 in 3 people who smoke want to quit smoking.

In the past 12 months, 533,000 people who smoke attempted to quit smoking, with 152,000 successful.

A typical person who smokes in Ireland actively attempting to quit smoking is aged less than 35 years, married, with a tertiary education, and with an occupation of a non-routine/non-manual nature.

Almost half of those attempting to quit smoking used willpower alone, with e-cigarettes and nicotine products most common among those who used smoking cessation aids.

Successful quitters are more likely to be young, educated to levels higher than primary level, and with occupations of non-routine/non-manual nature.

### What this means

Strong interest in quitting and a high number of quit attempts demonstrate the impact of tobacco control efforts and debunk myths that smokers are content in their habit.

The effectiveness of quit attempts could be increased 23 fold if smokers were encouraged to access evidence-based supports.

Independent factors identified to be associated with making a quit attempt and being successful need to be taken into account in planning the promotion and delivery of cessation services so all smokers benefit from support to become smoke free.

### Overview of Chapter

This chapter examines the intentions and behaviours of people who smoke regarding quitting smoking. We explore quitting intentionality of people who smoke, and estimate the number of people who smoke attempting to quit smoking each year, and the number that successfully quit. We also attempt to describe the 'typical' person who smokes attempting to quit by describing the independent demographic characteristics associated with attempting to quit smoking. Finally, we determine what supports or smoking cessation aids those attempting to quit smoking use.

The primary source of information for this chapter was the Healthy Ireland Survey.

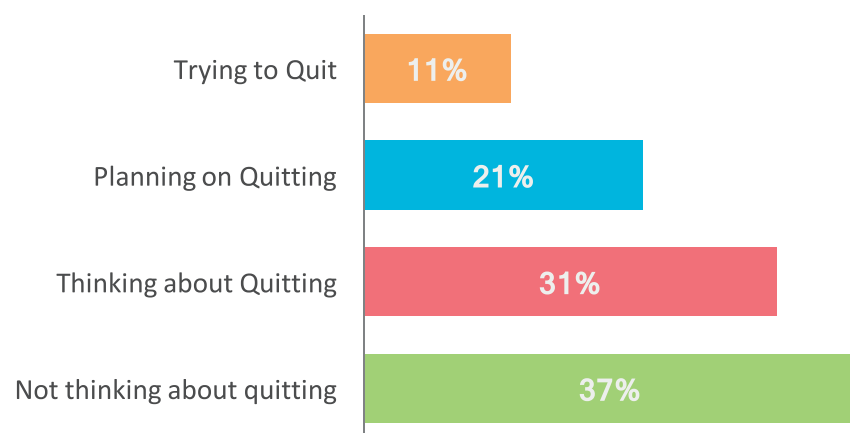
### 4.1 Intention to Quit Smoking & Quit Attempts

#### 4.1.1 Intention to Quit Smoking:

When asked in the Healthy Ireland survey what changes they would like to make to improve their health and wellbeing, almost half of people who smoke answered 'to stop smoking.'

Figure 10 details current smokers' attitudes to quitting; with two-thirds of them at least thinking about quitting smoking.

**Figure 10: Attitudes to quitting among current smokers**



#### 4.1.2 Attempts to Quit Smoking

Almost half (45%) of current smokers have stopped smoking for one day or longer during the last 12 months, because they were trying to quit smoking. Not all quit attempts are successful however, of those who have smoked in the past 12 months, 28.5% of those who attempted to quit smoking succeeded during this time.

It is estimated that, in the past 12 months:

- 1,000,000 adults were current or recent smokers
- 533,000 adults attempted to quit smoking, and
- 152,000 successfully quit smoking.

#### 4.2 Factors Associated with Making an Attempt to Quit Smoking

Table 8 outlines the independent demographic characteristics of those people who smoke who attempted to quit smoking compared to those who did not.

**Table 8: Characteristics of people who smoke (current & recent) who made a quit attempt in previous 12 months compared to those who did not**

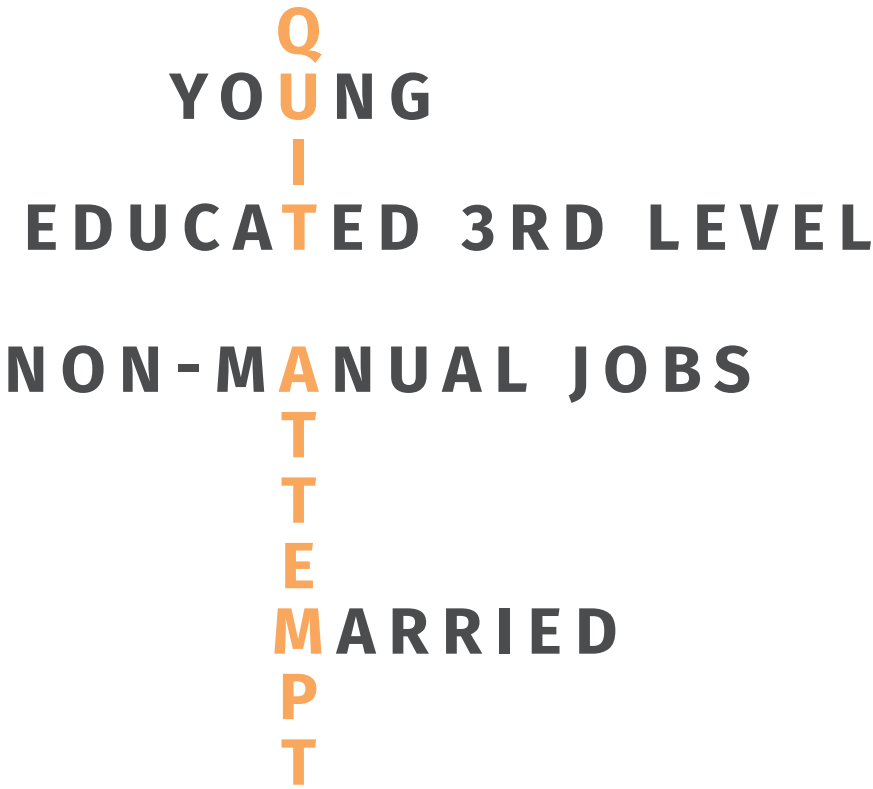
Characteristic	Odds Ratio	95% CI	P value
Young (aged <35 years)	1.59	1.27, 1.98	P<0.0001
3rd level education (compared to primary only)	1.60	1.08, 2.36	P<0.05
Intermediate/Higher Managerial/Professional Social Classes (compared to routine/manual)	1.28	1.04, 1.57	P<0.05
Married/Civil Partnership (Compared to not married/Civil Partnership)	1.25	1.01, 1.54	P<0.05

Source: Healthy Ireland Survey 2015 rmf

**\*\*The factors included in this model were: age, gender, education, social class, marital status\*\***

The characteristics of a typical person who smokes in Ireland actively attempting to quit are summarised in Figure 11.

**Figure 11: Characteristics of those attempting to quit smoking in Ireland**



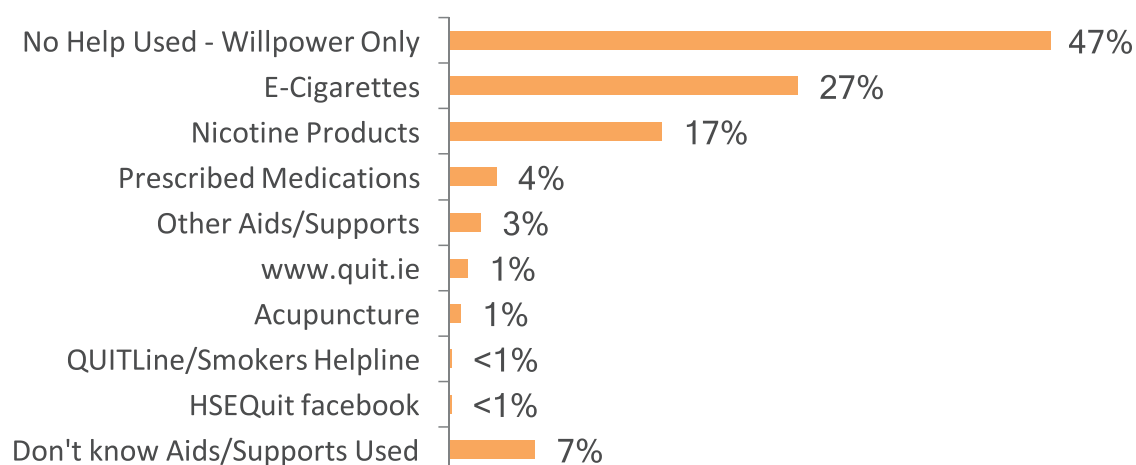
Source: Healthy Ireland Survey 2015 rmf

### 4.3 Quitting Aids & Supports

Half (47%) of those who attempted to quit smoking in the last 12 months did not seek any help or use any quitting aid in their attempt to quit smoking, using willpower alone.

Figure 12 details the quitting aids used by those who attempted to quit smoking recently; the most commonly used were e-cigarettes, nicotine products, and prescribed medications.

**Figure 12: Help and quitting aids used by those who attempted to quit smoking**



Source: Healthy Ireland Survey 2015 rmf

#### 4.4 Factors Associated with Successfully Quitting Smoking

Table 9 outlines the characteristics and behaviours that were independently associated with successfully quitting smoking, (having controlled for age, gender, social class); having an education higher than primary level, being young, and having a non-routine/non-manual occupation.

**Table 9: Factors associated with having a successful quit attempt in the past 12 months compared to not having a successful quit attempt**

Characteristic	Odds Ratio (95% CI)	P value
Young (aged <35 years)	1.40 (1.02, 1.93)	P<0.0001
Secondary Level Education (compared to primary only)	7.30 (2.74, 27.78)	<0.0001
Tertiary Level Education (compared to primary only)	7.23 (2.62, 28.0)	<0.0001
Managerial/Professional /Intermediate (Compared to routine/manual)	1.55 (1.14, 2.12)	P<0.01

**\*\*The factors included in this model were: age, gender, education, social class, marital status\*\***

The characteristics of a successful quitter can be summarised as in Figure 13.

**Figure 13: Characteristics of a successful quitter**

**Q  
YOUNG  
HIGH SOCIAL CLASS  
EDUCATED**

## 5. Discussion

The Healthy Ireland Survey (2015) reported that 23% of people aged 15 years and older were current smokers; 19% were daily smokers and 4% were occasional smokers; most recent Healthy Ireland Survey results for 2017 show this has reduced to 22%. This compares to a smoking prevalence of 29% in 2007.<sup>9</sup> Tobacco Free Ireland sets a target that less than 5% of the population will be current smokers by 2025;<sup>1</sup> requiring a significant reduction in the current smoking prevalence rate. According to the OECD Health Statistics 2017, Ireland still ranks in the Top 20 (19th) for current daily smoking among adults.<sup>10</sup>

This secondary analysis of the HI survey (2015) and TILDA (wave 1) was undertaken with the objective to further analyse the demographic profile of people in Ireland by smoking status; to identify factors associated with current smoking; as well as documenting the health and wellbeing profile by smoking status; and finally, the factors associated with quitting behaviours.

### 5.1 Demographic Profile

Our results indicate that being male, being young (aged <35 years), being unemployed, or having a routine/manual occupation, and not being married (or living as married) were all significantly associated with being a current smoker in Ireland. This is not a unique position to Ireland. Results from this study confirm findings from previous studies regarding the relationship between unemployment and smoking; it has been suggested that unemployment may not only have a direct effect on smoking, but also an indirect effect mediated by psychosocial factors and such as the inability to control important matters in life and emotional isolation.<sup>11</sup> This underscores the wider socioeconomic influences on smoking. The creation of work opportunities and policies aimed at full employment are essential to promote healthy behaviours and psychosocial wellbeing among the population.

There is also a social gradient in smoking, and this was also evident in our study, with higher rates among those from routine/manual background; these individuals are often from a disadvantaged background, and therefore less susceptible to health messages and more likely to engage in additional risky behaviours such as binge-drinking, poor diet etc. Therefore, there is a need to identify the specific supports and multi-faceted interventions needed by this group and to target the behaviours together, rather than in isolation.

The higher rates of smoking among those not married has also been found in previous studies, this is referred to as the marriage-protection theory, whereby married people have greater social and psychological supports, and therefore are less likely to feel the need to smoke.<sup>12</sup>

### 5.2 Health & Wellbeing Profile

It is well documented that smoking causes death and disability on a huge scale.<sup>8</sup> The US Surgeon General's Report 2014 concluded that cigarette smoking has been causally linked to diseases of nearly all organs of the body, to diminished health status, and to foetal harm. In 2014, newly identified diseases caused by smoking were added, including such common diseases as diabetes mellitus, rheumatoid arthritis, and colorectal cancer. In Ireland, each year, one in five deaths is smoking-related.<sup>13</sup> In addition, there are an estimated 31,000 inpatient

9 SLAN 2007 - Survey of Lifestyle, Attitudes & Nutrition in Ireland, Department of Health & Children. 2008.

10 Adult population smoking daily by gender, 2015 (or nearest year). OECD Health Statistics 2017.

<http://www.oecd.org/els/health-systems/health-data.htm>

11 De Vogli R, Santinello M. Unemployment & Smoking: does psychosocial stress matter? Tobacco Control 2005; 14:389-395. doi:10.1136/tc.2004.010611

12 Zhijun Li et al. Smoking Prevalence and Associated Factors as well as Attitude & Perceptions towards Tobacco Control in North East China. International Journal of Environmental research & Public Health ISSN 1660-4601. [www.mdpi.com/journal/ijerph](http://www.mdpi.com/journal/ijerph)

13 HSE Tobacco Free Ireland Programme. State of Tobacco Control Report (forthcoming) HSE. 2018.

hospital admissions and 19,000 day case admissions attributed to smoking.

This analysis of smoking in Ireland found that current and past smokers in Ireland reported poorer physical and mental health than those who never smoked; as a result, they are more impacted in carrying out activities of daily living, and also have higher healthcare utilisation rates.

This increased healthcare utilisation presents an opportunity. National Institute of Health and Clinical Excellence (NICE) clinical guidelines recommend the ascertainment of smoking status and the delivery of smoking cessation interventions in all health consultations.<sup>14</sup> An Irish study on the recording of tobacco use among inpatients in Irish hospitals reported that just a quarter of discharges had a recording of tobacco use.<sup>15</sup> The Making Every Contact Count Programme, developed by the HSE, aims to capitalise on the opportunities that occur every day for every health professional to support patients and to make healthy lifestyle choices to support chronic disease prevention and self-management of existing chronic diseases.<sup>16</sup> Implementing this programme will result in patients being routinely asked about the main lifestyle risk factors for chronic disease - tobacco use, alcohol & substance use, diet, physical activity.

### 5.3 Intention to Quit

It is clear that most people who smoke want to quit smoking; in this study two-thirds of current smokers reported at least thinking about quitting smoking. Almost half of current smokers had attempted to quit within the 12 months before this survey, and of those who attempted to quit, 28% succeeded. This report concluded that those attempting to quit were most likely to be young, married, have a 3rd level education and have occupations that are classified as professional/managerial/intermediate classifications. It is reassuring to note that younger people who smoke are more likely to attempt quitting. Large epidemiological studies have shown that stopping smoking before age 34 reverts life expectancy close to that of a non-smoker.<sup>17</sup> However, the majority of people who smoke are relying on willpower alone to successfully quit; efforts should be made to develop strategies and age-appropriate supports for this cohort, to assist younger people who smoke, in particular, in their quit attempts.

### 5.4 Successfully Quitting Smoking

As well as intention to quit, successful quitting was also associated with age, higher levels of education, and belonging to higher social classes. Census 2016 reports that levels of education in Ireland are increasing; 42% of Irish people reported having a 3rd level education at census 2016, compared with 14% at census 1991.<sup>18</sup> This will be positive for smoking prevalence in Ireland, however, there are regional variations (61% Dun Laoghaire/Rathdown, 32% Longford, Wexford), and challenges remain among deprived areas, where early school leaving may be more prevalent.

For most people who smoke, cessation requires a determined attempt to stop and then sufficient resolve in the weeks and months following to overcome powerful urges to smoke; this study found that those who successfully quit were most likely to report willpower as a method to quit. The marriage protection theory may also play a role in smoking cessation;<sup>11</sup> evidence from this study suggests that those who were married were more likely to attempt quitting smoking; however, this association was not significantly associated with successfully doing so.

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14 National Institute for Health and Care Excellence. Brief Interventions and referral for smoking cessation in primary care and other settings. London. 2006.

15 Sheridan A, Howell F. An Analysis of the Recording of Tobacco Use Among Inpatients in Irish Hospitals. Irish Medical Journal. Vol 107, Number 9. October 2014.

16 Making Every Contact Count Programme. Health Service Executive. 2017. [www.hse.ie](http://www.hse.ie)

17 Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. BMJ 2004 Jun 26;328(7455):1519-28.

18 Census 2016 Profile 10 – Education, Skills & the Irish Language. Central Statistics Office. Cork. 2017.

## 6. Conclusions

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Through *Tobacco Free Ireland* a commitment has been made by government to moving from tobacco control to tobacco elimination. The goal is to bring the tobacco epidemic in Ireland to the endgame. This represents a huge opportunity for public health, but it is also a significant challenge since it will require implementation of a range of initiatives and solutions, some of which have yet to be conceived.

Effective delivery of current measures and innovation in tackling smoking must be underpinned by a deep and comprehensive understanding of the problem. Research and information are key levers in affecting the step change required to move to a tobacco endgame.

This report demonstrates the value of secondary analysis, which maximises the value of existing information for health policy and planning through analysing pre-existing data to answer new or additional questions to those for which it was initially collected. Healthy Ireland Survey and TILDA are key large health-related datasets in Ireland and have been the focus of this research report.

This work provides a better understanding of the demographic factors independently associated with current smoking and this enables us to adopt more targeted approaches to tackling smoking. For people who currently smoke and for policy-makers, the health impacts of smoking can appear remote and depersonalised. While the international evidence base is extensive, through demonstrating the relationship between smoking and health in the Irish population, this work provides a catalyst for greater focus; the toll of smoking on health is stark and demands action. Finally, this work provides keen insights into the factors associated with quitting and remaining smoke-free. The results should provide further motivation to the many people who smoke interested in quitting, and also underscores the need to ensure continuing access to effective supports for everyone.

The HSE *Tobacco Free Ireland* will consider these results in the context of its *State of Tobacco Control* report to better understand the challenges and priorities for its Programme Plan 2018-2021.

## 7. Appendices

Appendix A	Derived Variables
Appendix B	Tobacco-related questions from Healthy Ireland Survey 2015
Appendix C	Smoking-related Questions from TILDA Main Questionnaire, Wave 1.

### Appendix A: Derived Variables

Variable	Explanation	Definition
Pack Year (TILDA dataset only)	A quantification of cigarette smoking	1 pack year = (packs smoked per day) X (years as a smoker)
Smoking-related Chronic Diseases (TILDA dataset only)	The presence of any <u>one or more</u> self-reported doctor diagnosed smoking-related diseases (respiratory disease, cardiovascular disease, or smoking-related cancers)	<p><u>Respiratory disease</u> was defined as answering 'Yes' when asked if they were ever told by a doctor that they had 'chronic lung disease such as chronic bronchitis or emphysema'</p> <p><u>Cardiovascular disease</u> was defined as answering 'Yes' when asked if they were ever told by a doctor that they had 'angina', 'a heart attack (including myocardial infarction or coronary thrombosis)', 'congestive heart failure,' 'high cholesterol', 'a stroke (cerebral vascular disease)' or 'Mini-stroke or TIA'.</p> <p><u>Smoking-related cancer</u> was defined as answering 'Yes' when asked if they were ever told by a doctor that they had cancer in any of the following sites: lung; colon or rectum; stomach; oesophagus; bladder; liver; cervix; kidney; pancreas; oral cavity; larynx; other pharynx. These sites were identified based on the 2014 Surgeon General's report.</p> <p><i>*Cancer of the lip, the renal pelvis and acute myeloid leukaemia were not included as these were not specified in the TILDA study</i></p>

Variable	Explanation	Definition
<b>Difficulties with Activities of Daily Life</b> (TILDA dataset only)	The presence of difficulties with <u>one or more</u> of the following activities of daily life.	<ol style="list-style-type: none"> <li>1. Walking 100 metres (100 yards)</li> <li>2. Running or jogging about 1.5 km (1 mile)</li> <li>3. Sitting for about 2 hours</li> <li>4. Getting up from a chair after sitting for long periods</li> <li>5. Climbing several flights of stairs without resting</li> <li>6. Climbing one flight of stairs without resting</li> <li>7. Stooping, kneeling or crouching</li> <li>8. Reaching or extending your arms above shoulder level</li> <li>9. Pulling or pushing large objects like a living room chair</li> <li>10. Lifting or carrying weights over 10 pounds/5 kilos, like a heavy bag of groceries</li> <li>11. Picking up a small coin from the table</li> </ol>
<b>Hospital Encounters</b> (TILDA dataset only)	Respondent visited a hospital for <u>one or more</u> of the following reasons:	<ul style="list-style-type: none"> <li>• Accident &amp; Emergency (as a patient)</li> <li>• Outpatients Department (as a patient)</li> <li>• Admitted to hospital overnight</li> </ul>
<b>Recent Smoker</b> (Healthy Ireland dataset only)	Somebody who currently describes themselves as an ex-smoker, but has smoked within the last 12 months.	<p>Do you smoke tobacco products? – No</p> <p>AND</p> <p>Did you ever smoke tobacco products? – Yes daily or yes occasionally</p> <p>AND</p> <p>About how long has it been since you last smoked tobacco products? – Within the past month OR Within the past 3 months OR Within the past 6 months OR Within the past year (but &lt; 1 year)</p>

Variable	Explanation	Definition
<b>Successful Quitter</b> <b>(Healthy Ireland dataset only)</b>	Somebody who currently describes themselves as an ex-smoker, but has smoked within the last 12 months.	Do you smoke tobacco products? – No AND Did you ever smoke tobacco products? – Yes daily or yes occasionally AND About how long has it been since you last smoked tobacco products? – Within the past month OR Within the past 3 months OR Within the past 6 months OR Within the past year (but < 1 year)

## Appendix B: Tobacco-related questions from Healthy Ireland Survey 2015 Questionnaire.

A full copy of the questionnaire can be sourced from [healthyireland@health.gov.ie](mailto:healthyireland@health.gov.ie)

### Q.6 Do you smoke tobacco products?

Yes, daily . . . . .1 GO TO Q9a

Yes, occasionally . . . . .2 GO TO Q9b

No. . . . .3 GO TO Q7

Don't Know (DNRO) . . . .4 GO TO Q10

Refused (DNRO) . . . . .5 GO TO Q10

### Q.7 Did you ever smoke tobacco products (in the past)?

Yes, daily . . . . .1 GO TO Q8

Yes, occasionally . . . . .2 GO TO Q8

No. . . . .3 GO TO Q10

Don't Know (DNRO) . . . . .3 GO TO Q10

Refused (DNRO) . . . . .3 GO TO Q10

### Q.8 About how long has it been since you last smoked tobacco products?

Within the past month (anytime < than 1 month ago). . . . .1

Within the past 3 months (1 month but < than 3 months ago). . . . .2

Within the past 6 months (3 months but < than 6 months ago). . . . .3

Within the past year (6 months but < than 1 year ago). . . . .4

Within the past 5 years (1 year but < than 5 years ago). . . . .5

Within the past 10 years (5 years but < than 10 years ago). . . . .6

10 or more years ago . . . . .7

Don't Know (DNRO) . . . . .8

Refused (DNRO) . . . . .9

**Q.9a On average how many of the following tobacco products do you smoke each day?**

RECORD NO. OF CIGARETTES ETC. SMOKED DAILY

Manufactured cigarettes	
Hand-rolled cigarettes	
Pipes full of tobacco	
Cigars	
Any others (please specify)	

**Q.9b On average how many of the following tobacco products do you smoke each week?**

Manufactured cigarettes	
Hand-rolled cigarettes	
Pipes full of tobacco	
Cigars	
Any others (please specify)	
Smokes less often than once a week	

**Q.10 Which of the following statements BEST applies to you?**

- I have never heard of e-cigarettes and  
have never tried them . . . . . 1
- I have heard of e-cigarettes but  
have never tried them . . . . . 2
- I have tried e-cigarettes but do not use them (anymore) . . . . . 3
- I have tried e-cigarettes and still use them . . . . . 4
- Don't know (DNRO) . . . . . 5
- Refused (DNRO) . . . . . 6

**Q.11 During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?**

- Yes . . . . . 1
- No. . . . . 2
- Don't Know (DNRO) . . . . . 3
- Refused (DNRO) . . . . . 4

**Q.12 During your last attempt to give up, did you use any help?**

Nicotine patches, gum, lozenges, spray . . . . .	1
Varenicline/Champix or Bupropion/Zyban (prescribed medication) . . . . .	2
Acupuncture . . . . .	3
Smokers telephone Quitline/Helpline . . . . .	4
www.quit.ie . . . . .	5
www.facebook.com/HSEquit . . . . .	6
E-cigarettes . . . . .	7
Other aid, help, support (please specify). . . . .	8
No help used . . . . .	9
Don't Know (DNRO) . . . . .	10
Refused (DNRO) . . . . .	11

**Q.13 Are you currently...?**

Trying to quit . . . . .	1
Actively planning to quit . . . . .	2
Thinking about quitting but not planning to . . . . .	3
Not thinking about quitting . . . . .	4
Don't Know (DNRO) . . . . .	5
Refused (DNRO) . . . . .	6

## Appendix C: Smoking-related Questions from TILDA Main Questionnaire, Wave 1.

A full version of the questionnaire can be requested from [tilda@tcd.ie](mailto:tilda@tcd.ie)

SECTION 13. BEHAVIOUAL HEALTH (BH)

### Smoking

**BH001: Have you ever smoked cigarettes, cigars, cigarillos or a pipe daily for a period of at least one year?**

1.. . . . . Yes

5. . . . . No

98. . . . . DK

99. . . . . RF

**BH002: Do you smoke at the present time?**

1.. . . . . Yes

5. . . . . No, I have stopped

98.. . . . . DK

99.. . . . . RF

**BH003: How old were you when you stopped smoking?**

1. . . . . 100

98.. . . . . DK

99.. . . . . RF

**BH004: For how many years do/did you smoke altogether?**

1. . . . . 00

98.. . . . . DK

99.. . . . . RF

**BH005: What do/did you smoke (before you stopped)?**

- 1.. . . . .Cigarettes
- 2. . . . .Pipe
- 3. . . . .Cigars or cigarillos
- 98.. . . .DK
- 99.. . . .RF

**BH006: How many cigarettes do/did you smoke on average per day?**

- 1. . . . .100
- 98. . . . .DK
- 99. . . . .RF

**BH007: How many pipes do/did you smoke on average per day?**

- 1. . . . .100
- 98.. . . .DK
- 99. . . . .RF

**BH008: How many cigars or cigarillos do/did you smoke on average per day?**

- 1. . . . .100
- 98.. . . .DK
- 99.. . . .RF

[illegible]



