NHS
Fife

Director of Public Health's Annual Report 2017

INTRODUCTION

In May 2016, Holyrood Magazine introduced an imaginary child, Kirsty, who was born in one of the most disadvantaged communities in Scotland.[1] They planned to watch how government policy might impact on her life chances. What if Kirsty were born in one of Fife's more disadvantaged communities? How might we be working to help her fulfill her potential? The challenge is significant. Right now, her life expectancy is 78 years, her brother Kevin's only 73 years, which is seven and nine years difference respectively from Fife children born into the most affluent families. In this DPH annual report, we focus on what might make a difference to her health across her lifetime.

To begin with, Kirsty's health is impacted before she was conceived. Was she planned? What kind of life is her mum Caley living? Does Caley have support from her husband, Ross, and wider family around her? Or is she worried about how to make ends meet with a new baby on the way?

In this report, we outline some key areas of maternal and child health where progress could be made.

It is not just in the early years that inequalities in health are experienced: they happen across the lifespan. This is particularly noticeable in premature mortality (under 75 years) where the inequalities gap is widening. Some of this is explained by deaths from alcohol, drugs and suicide. The new Scottish Burden of Disease study shows how these are problems particularly for younger men.[2] This study also reveals the extent to which smoking-related conditions blight the health of the population. Given this picture and its contribution to poorer outcomes in pregnancy, this report provides a special focus on reducing tobacco smoking in Fife.

In the final section of this report, we highlight how there are many ways partner agencies in Fife are working to improve Kirsty's life chances and for her brothers and sisters. They are set out in the Children's Services Plan and also the new Local Outcomes Improvement Plan, which aims to make Fife a fairer place, improving opportunities for all over the next ten years. Government policy in Scotland is also helping create the conditions for reducing inequalities in health. The introduction of a minimum unit price for alcohol is likely to make an immediate impact on alcohol-related harm. A Healthier Future[3] is a further set of proposals the Scottish Government has put out for consultation to address diet, physical activity and healthy weight which will provide opportunities for local partners to work together to reduce obesity-related health problems. Requirements for public bodies to report on socio-economic indicators of performance will help monitor the impact of services on reducing inequalities. Finally, the Child Poverty Act[4] which requires Local Authorities and Health Boards report on progress in reducing poverty in families will ensure inequalities in Fife will remain high on the agenda.

This report can only cover a fraction of the work being undertaken in Fife to reduce inequalities in health. There are many different agencies who work tirelessly to protect our health and prevent disease – Fife Council Environmental Health and Housing Departments, Fife Health and Social Care Partnership, third sector organisations working to reduce poverty and much more, Police Scotland, the Fire and Rescue Service, Scottish Water, Scottish Environmental Protection Agency, Food Standards Agency for Scotland and others.

Fifers have a history of resilience in the face of hardships – it has a history of living through feast and famine over the centuries. There is a commitment across political parties and agencies to align around greater fairness and the Local Outcome Improvement Plan published in November 2017 provides the vehicle to deliver this.

Health and care agencies now have the opportunity to make a step change in health outcomes for the people of Fife. I hope this report provides a source of helpful ways to achieve this.

Dr Margaret Hannah
Director of Public Health
December 2017

1) SETTING THE SCENE

Understanding our population; its size and structure, patterns of births, deaths and diseases and determinants of health including health behaviours, provides the basis for improving health and wellbeing, reducing health inequalities and ensuring our services take account of the needs of the population. As such it is important that each year we take stock of these issues examining the number of Fife residents affected, differences within Fife and changes over time.

In this section we provide an overview of population health in Fife, making best use of the data sources we have available to us. More detailed information and reports on the topics presented here and others published by ourselves and our partners in Fife are available at the KnowFife Partnership Hub.

Population

The population of Fife is now an estimated 370,330 individuals (Chart 1.1).[5] In the year June 2015 to June 2016 the population of Fife grew by 2,250 persons (0.6%). The number of deaths was greater than the number of births so this increase was largely the result of net inward migration including changes to armed forces personnel. The annual percentage growth rate of 0.6% in the Fife population was the same as seen for Scotland as a whole.[5]

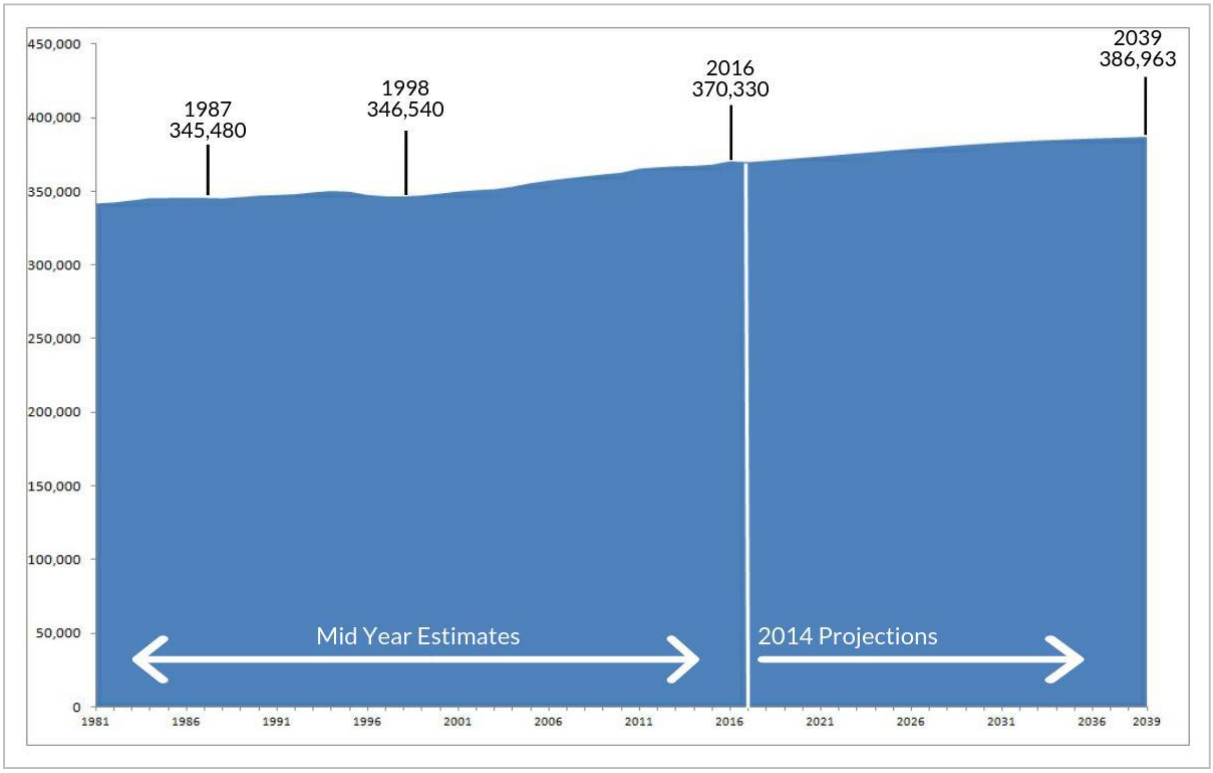
In 2016 the median age of Fife residents remained 43 years, two years older than the national median age.[5] Currently 17% of the population are children and young people up to age 16 which is the same proportion as Scotland. 63% are adults aged 16-64 years which is a slightly lower proportion compared to Scotland as a whole which is 65%.

There are almost 25,000 more people living in Fife now than there were in 1987 (Chart 1.1).[6] By 2039, the farthest we can look forward at present, the number of people living in Fife is expected to grow again by more than 16,000 people.[7] The proportion of children and working age adults both decreased between 1987 and 2016 and the proportion of working age adults will decrease further by 2039 (Chart 1.2).[6,7]

It is well documented that there is an increasing proportion of older people in the Fife population. Today 73,685 people in Fife are aged 65 and over. This represents a fifth of the total population compared to 30 years ago when the figure was 15%. In the next 23 years that proportion is projected to increase to 28%, which corresponds to 107,993 people living in Fife aged 65 and over. More than half of these people will be aged 75 and over.[6,7]

Fife's population is growing

Chart 1.1: Fife mid-year population estimates and projections 1981 to 2039.



Source: National Records of Scotland

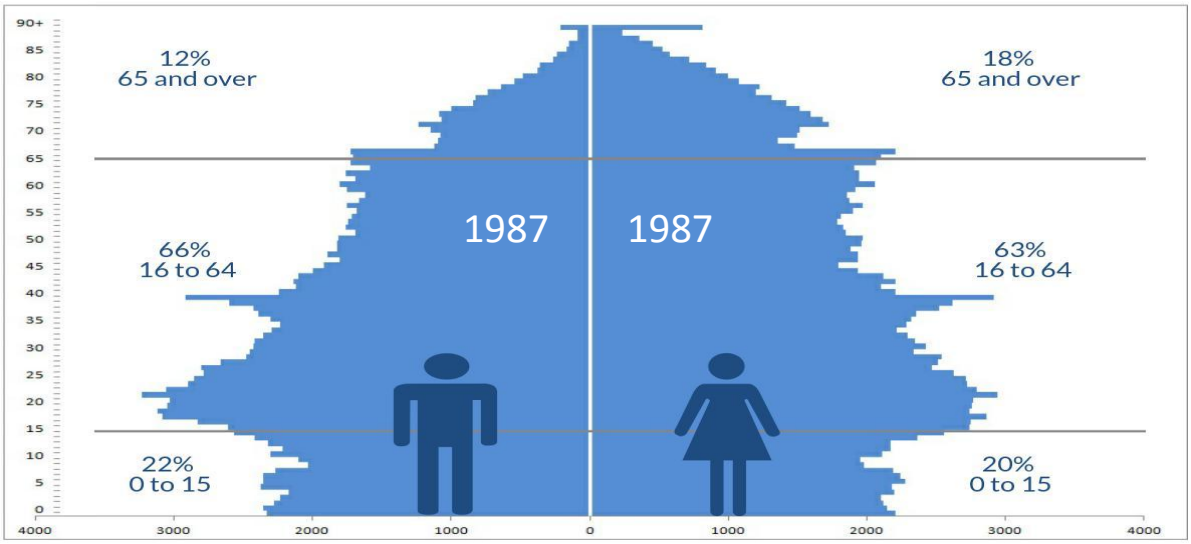
The pyramids in Chart 1.2 illustrate how Fife's population has aged. Over time the population 'bulges' have moved upwards from 20s to 30s in 1987 to mid 40s to 60 in 2016 and mid 60s to mid 70s in 2039. There has also been a narrowing of the age bands at the bottom of the pyramids and a gradually widening of the age bands at the top becoming less of a traditional pyramid shape.

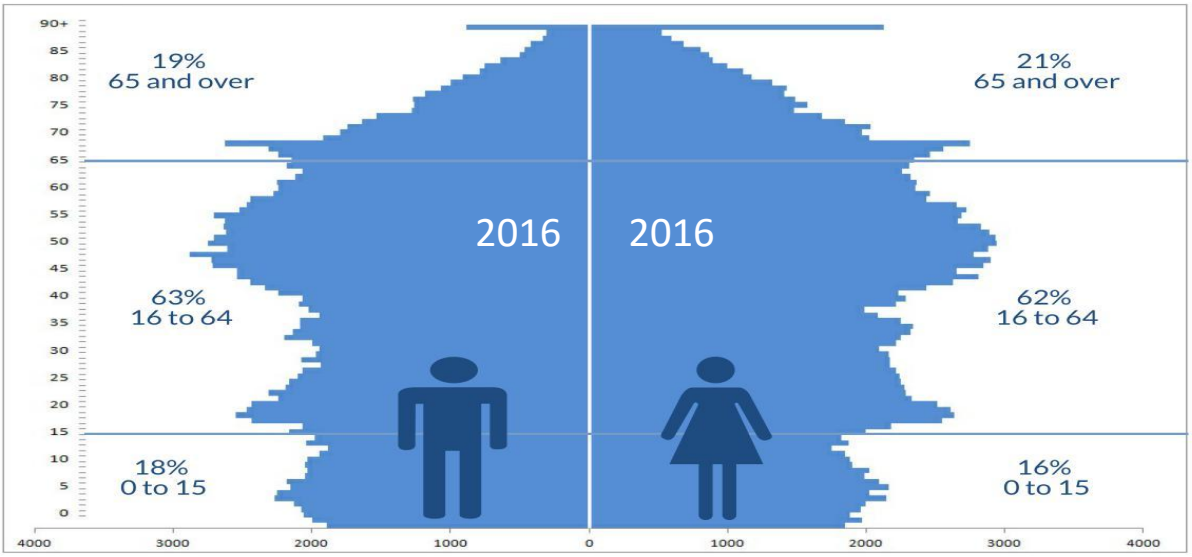
This reflects the considerable increases in the number of older adults in all age groups beyond 75 years. For example, in the space of a generation the number of the oldest older adults (aged 90+) in Fife more than doubled to from 1,021 in 1987 to 3,010 in 2016 and is projected to more than double again by 2039 to 8,487 persons. Nationally it has been reported that the number of people aged 100+ increased by 57% in the ten years to 2016 with more than 900 people in Scotland now aged 100 or more.[8]

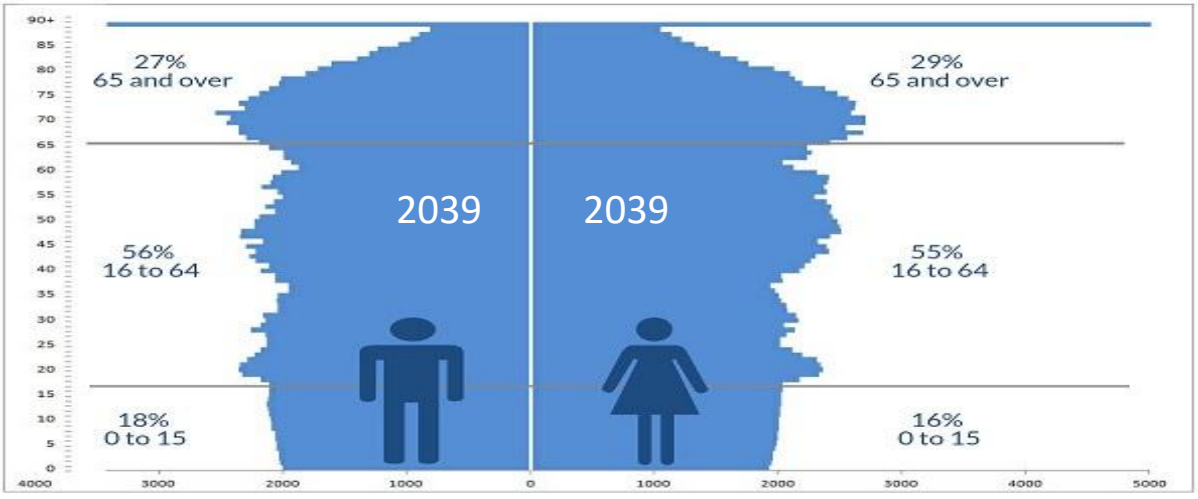
Older people are a valuable asset to our communities in Fife providing skills and expertise from life experience, and support as carers and volunteers. But with an ageing population, age-related conditions such as dementia increase. New responses to meet the needs of this population sustainably in the long term are needed. The Fife Shine Programme, as described in the DPH annual report of 2016, offers one such example.

Fife's population is ageing

Chart 1.2: Fife population structure1987, 2016 and 2039.







Source: National Records for Scotland

Births

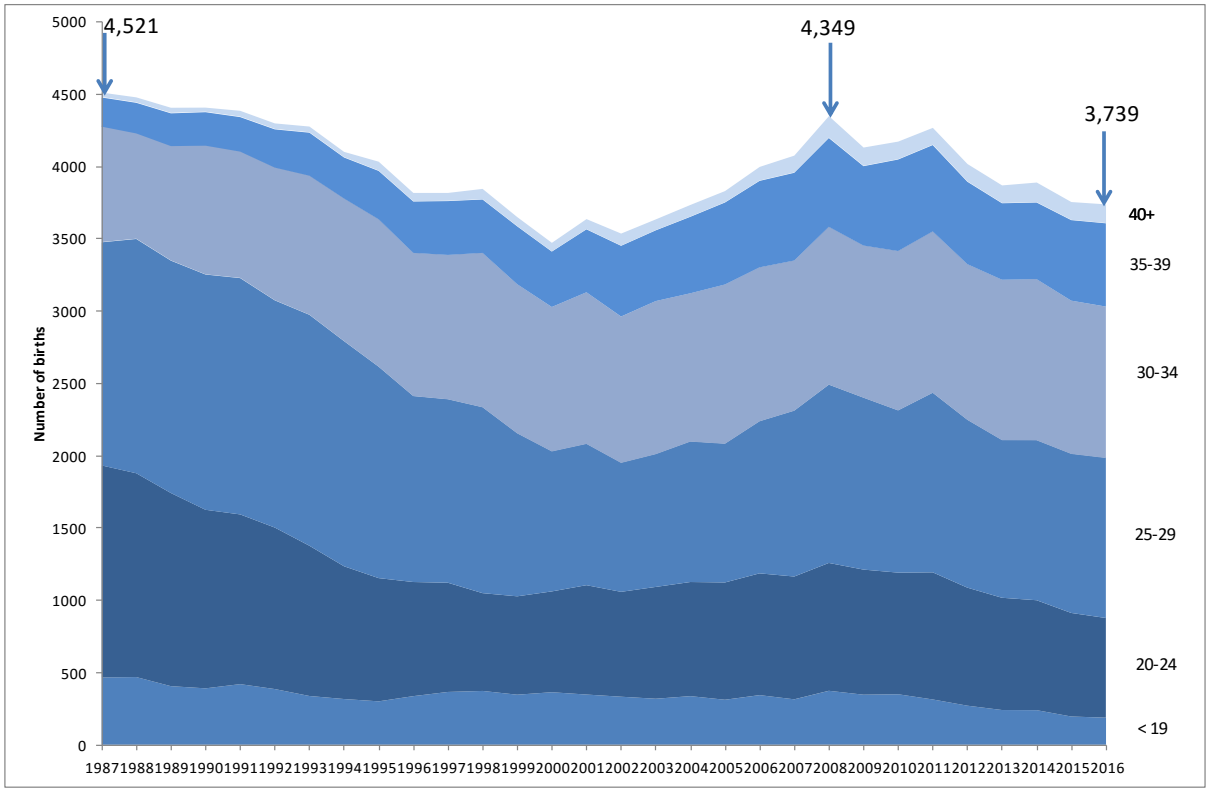
In 2016, 3,739 births were registered as Fife residents. This was the lowest annual number of births since 2004 and was considerably lower than the peak in 2008 and the previous peak in 1987(Chart 1.3).[9]

The majority of babies have continued to be born to mothers aged 25-34 but over this time an increasing number of babies are being born to older mothers (Chart 1.3). In 1987, 5% of babies born were to mothers aged 35 and over compared to 18% in 2016. By contrast the number of babies born to mothers aged 19 an under is now at its lowest ever total, 187 births (5% of all births) compared to 465 births in 1987 (10% of all births).[9]

Whilst the number of births in Fife has decreased in recent years more babies continue to be born per head of female population aged 15-44 in Fife than across Scotland as a whole, 55.3 per 1000 women compared to 52.6. This has been a consistent trend since 2001.[9]

Fife's births and increasing age of mothers

Chart 1.3: Number of births in Fife by age of mother 1987 to 2016



Source: National Records for Scotland

Life Expectancy

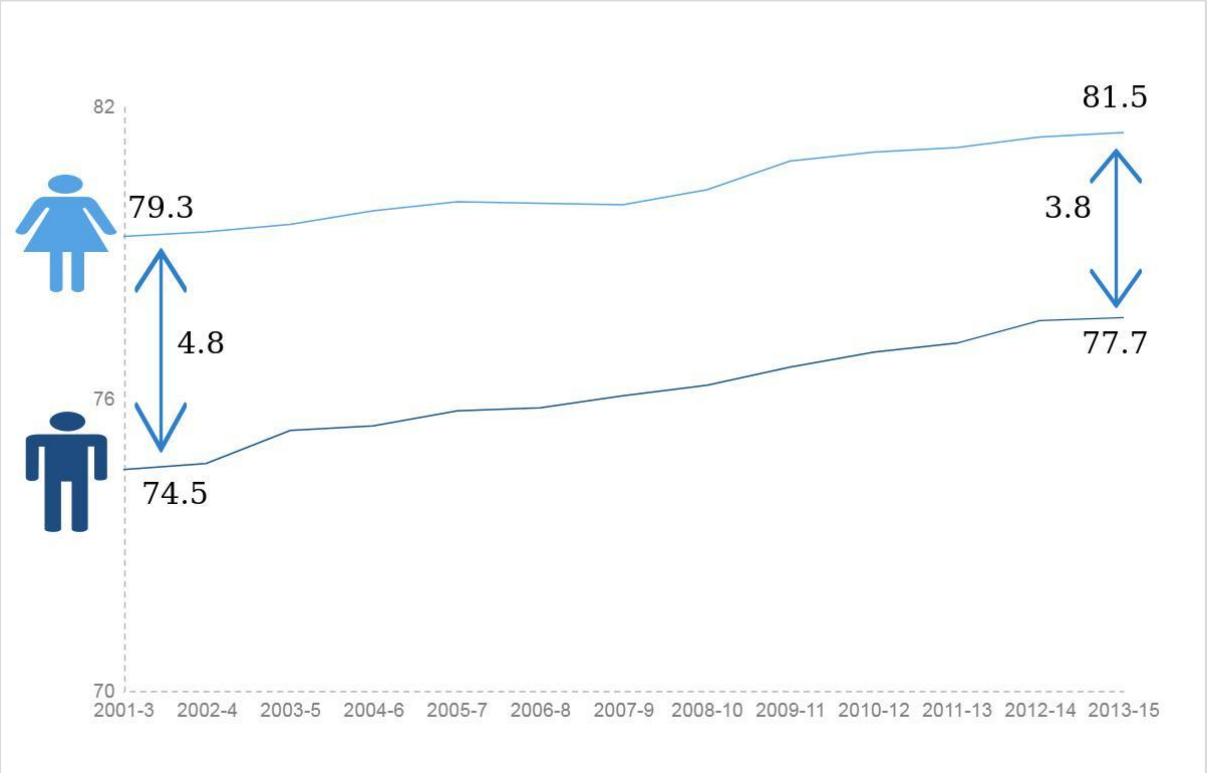
Recent reports from Scotland and across the UK have suggested that increases in life expectancy may be slowing with only small increases seen in recent years compared to significant gains in the past 30 years.[10] In Scotland life expectancy is currently 81.2 years for females and 77.1 years for males over this period.

However figures show that since 2012-14, annual increases have slowed. Between 2013-15 and 2014-16 national life expectancy was virtually unchanged increasing by 0.01 years for women and actually *decreasing by 0.02 years for men*. There was also little change in the year previously.[10]

Fife has also seen gains in life expectancy, increases of 3.1 years and 2.1 years for males and females respectively since 2001-3 to the current values of 77.7 and 81.5 years in 2013-15.[11] We await the publication of the 2014-16 Fife figures to see if the slowing of life expectancy will be evident here too.

Fife's increasing male and female life expectancy

Chart 1.4: Fife male and female life expectancy 2001-3 to 2013-15



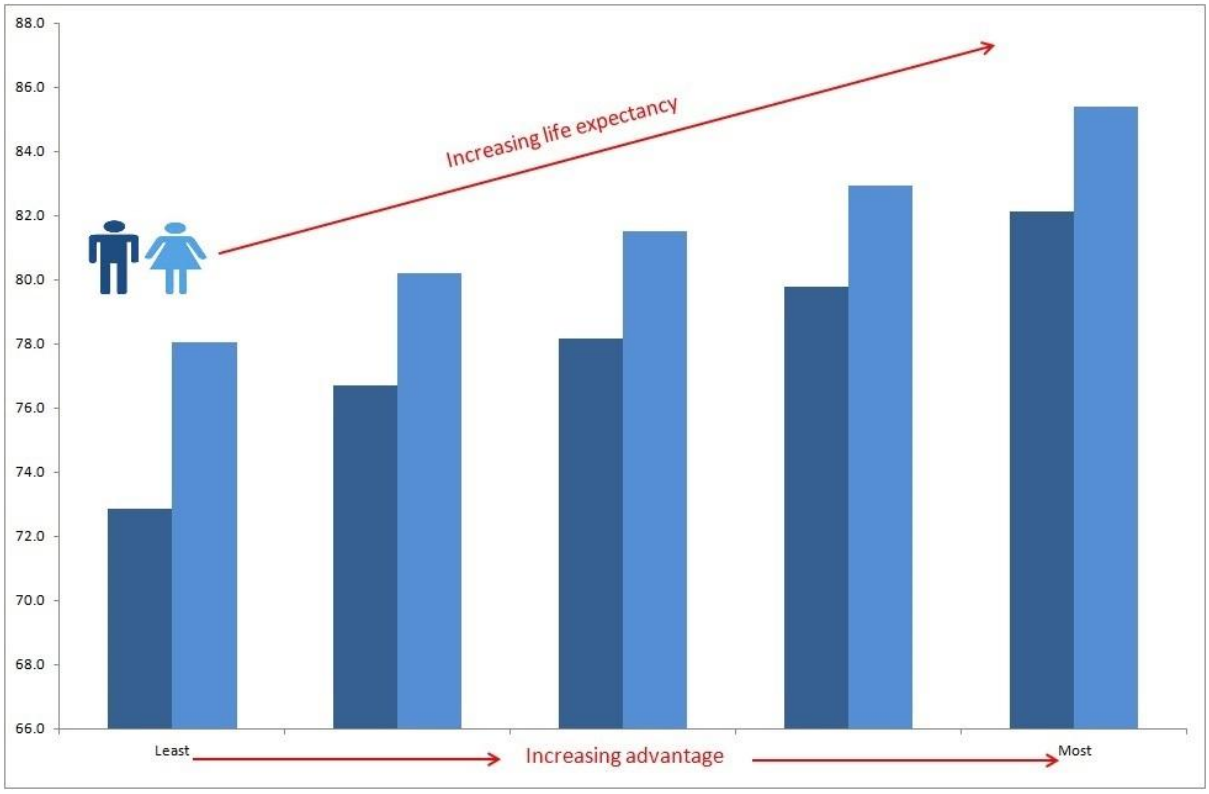
Source: National Records for Scotland

Females in Fife have consistently had higher life expectancy than males but the gap between them has decreased as male life expectancy has increased at a faster rate (Chart 1.4). However the gap in life expectancy between populations in the most

and least disadvantaged areas in Fife has remained.[a] Life expectancy increases with increasing advantage creating a gradient of inequality (Chart 1.5). *Currently the gap between the most and least disadvantaged areas is 9.2 years for men and 7.3 for women.* The steepness of this gradient is also important to consider: inequalities in health are not just experienced by those in the most disadvantaged areas but across the whole population.

Fife's life expectancy inequality gradient[a]

Chart 1.5: Difference between life expectancy in Fife SIMD quintiles, 2013-15



Source: Information Services NHS Fife

Deaths

In 2016 there were 4,091 deaths of Fife residents. This was a small increase on the figure of 4,027 recorded in 2015 and the highest number of deaths since 1992.[12] Of the total number of deaths 37% (1,511) occurred to Fife residents aged less than 75 years old.

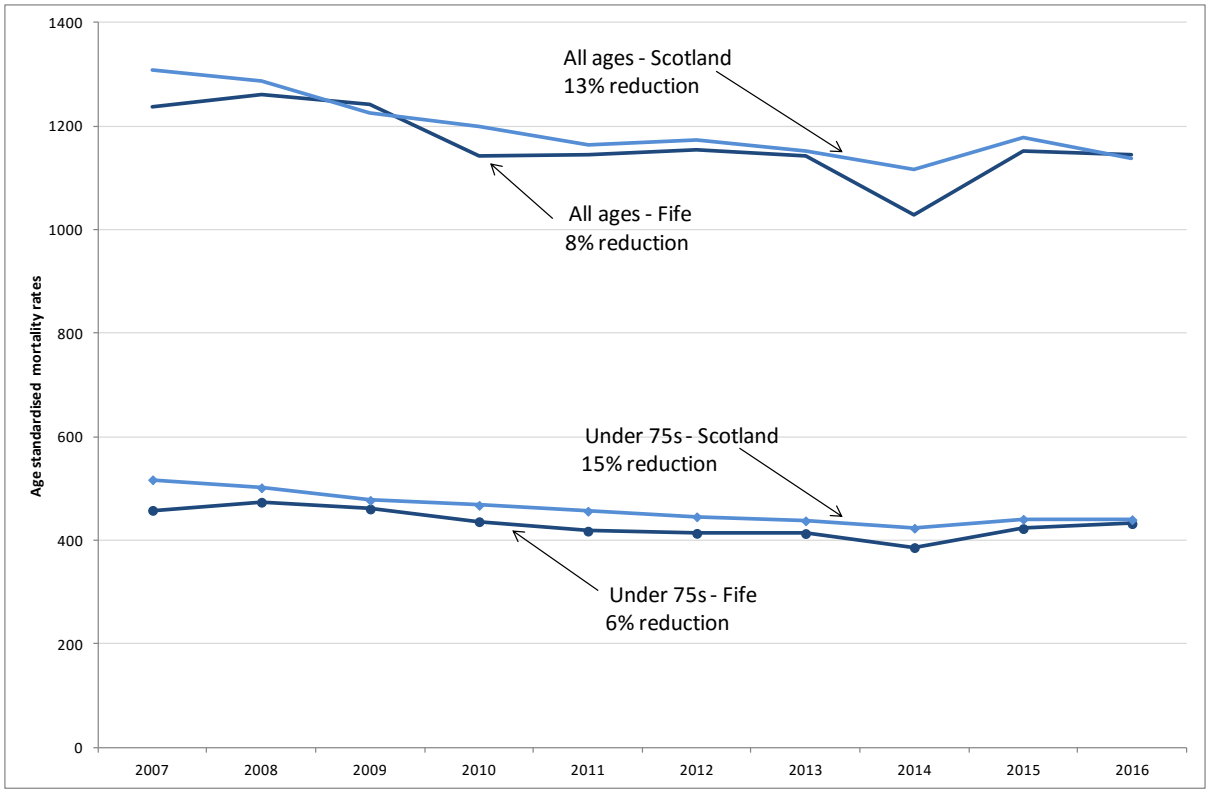
Since 2007, although rates have fluctuated annually, there has been an overall reduction in mortality rates from all causes in persons of all ages and under 75 (premature mortality) in both Fife and Scotland.[b] Scotland has seen greater reductions than Fife in both all age and premature mortality rates in the time period shown (Chart 1.6).

[a] Least advantaged and most advantaged are used here to refer to the most deprived and least deprived Fife SIMD 2012 quintiles as measured by Scottish Index of Multiple Deprivation, http://www.gov.scot/Topics/Statistics/SIMD

[b] Age standardised rates which different age structures in different populations and populations over time allow us to accurately compare deaths over time and across areas although the time trends available are smaller

Fife's all-cause mortality rates

Chart 1.6: Standardised all-age and premature mortality rates; Fife and Scotland 2007 to 2016



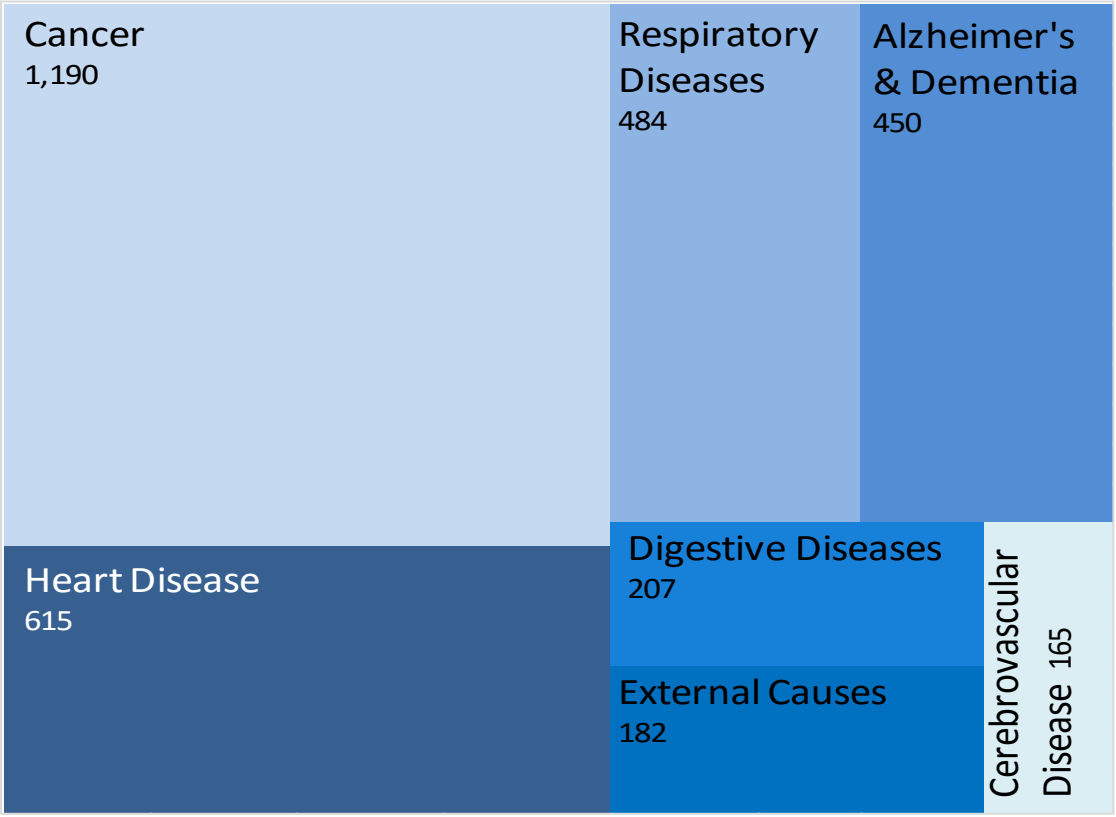
Source: National Records for Scotland

Causes of Death

Chart 1.7 shows the main causes of death in Fife in 2016, which account for 80% of the total number of deaths. A further 20% of deaths (798) result from other, multiple causes. Cancer was the main cause of death in Fife in 2016. Standardised cancer mortality rates in Fife have reduced by 12% since 1990.[b,13] However as cancer is a common disease among older people the actual number of cancer deaths has increased as the proportion of older people has increased. The number of deaths from cancer in Fife has risen from 918 in 1990 to 1,190 in 2016 and now accounts for 29% of all deaths.[13]

The most common cause of death from cancer was lung cancer, responsible for 309 deaths, a quarter of all cancer deaths.[14] Rates of death from lung cancer have decreased by 18% among men in the last ten years in Fife but have *increased by 9% among women*. This is mostly explained by differences in historic smoking prevalence for men and women. Prostate was the second most common cause of cancer death in men and breast cancer among women.[14]

Chart 1.7: Number of deaths from main causes in Fife (80% of total) in 2016



Source: NRS

Heart disease was the second most common cause of death, accounting for 615 deaths in Fife in 2016.[15] The majority (81%) of heart disease deaths were as a result of ischaemic heart disease (IHD). There has been a significant reduction in the number of deaths at all ages from IHD in Fife from 629 in 2007 to 498 in 2016. This corresponds to a reduction in Fife of more than 40% in IHD standardised mortality rates for all ages in ten years.[15]

One impact of a higher proportion of people living to older ages has been an increase in the number of deaths from dementia and Alzheimer's disease in Scotland and Fife.[13] The number of deaths from these causes has more than doubled in ten years in Fife. In 2007 there were 195 deaths which was 5.2% of all deaths. In 2016 these diseases were recorded as the cause of 450 deaths in Fife, 11% of all deaths compared with 10% of all deaths in Scotland.[13]

Other important causes of death

Suicide and self related harm, drug use disorders and alcohol dependence are all in the top 25 conditions that cause the most burden of disease in Scotland (Chart 1.8). The burden experienced is a combination of both early deaths from these causes and years spent living with these conditions. For these conditions the burden has a significant impact on young men aged 15-34.

Suicide

There were on average 54 deaths as a result of suicide each year in Fife during 2012-16 using the 2011 WHO classification.[c] Numbers and age standardised rates of suicide have declined in Fife since 1997-2001 but as Table 1.1 shows, there is a marked difference in the rates among men and women.[16]

Table 1.1: Deaths from suicide in Fife; five year average age-sex standardised rates and number

	1997-2001	2002-2006	2007-2011	2012-2016	
Males - ASR	23.9	23.3	21.7	19.2	
Females - ASR	8.0	7.7	5.7	6.2	
Persons - ASR	16.0	15.5	13.7	12.7	
Persons - five year average number	54 Old	53 Old	48 Old	45 Old	54 New

Source: NRS

There is a strong relationship between suicide and deprivation among both men and women. Suicide rates in the most disadvantaged areas of Scotland were more than two and a half times greater than those in the least disadvantaged areas.[16]

Drug-Related Deaths

In the previous five years there were on average 42 drug-related deaths per year in Fife.[17] This corresponds to a rate of 0.12 per 1,000 population which is the same as the rate for Scotland as a whole. Drug-related deaths are more common among men than women with two thirds of all drug deaths in men. In both sexes there has been an increase in drug-related deaths between 2006 and 2016. Rates of drug related deaths are highest among the 35-44 year old age group followed by those aged 25-34.[17] Almost half of the total number of drug-related deaths in 2015 in Fife were to residents living in the most disadvantaged areas in Fife.[18, d]

Alcohol-Related Deaths

Alcohol was the underlying cause of an average of 62 deaths each year between 2014 and 2016 in Fife.[19] Fife has lower rates of alcohol-related death than Scotland, both of which have seen decreases in recent years.[20] As with suicides and drug-related deaths, alcohol-related deaths are more common among men, with 60% of these deaths in men. Rates of alcohol-related deaths were highest among those

[c] In 2011 the classification of deaths was amended in Scotland in line with changes in World Health Organization coding rules. The new coding rules classify drug abuse deaths due to acute intoxication, previously classified under mental and behavioural disorders due to psychoactive substance use, as poisoning. Where the intent is undetermined, these are recorded as death by undetermined intent and included in the suicide statistics. https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/suicides

[d] Least disadvantaged and most disadvantaged are used here to refer to the least and most deprived Fife SIMD2012 quintiles as measured by Scottish Index of Multiple Deprivation, http://www.gov.scot/Topics/Statistics/SIMD

aged 55-59 followed by 65-74. Inequalities are evident in alcohol-related deaths with rates among those living in the most disadvantaged areas almost *three times greater* than those in the least disadvantaged areas.[19, d]

Burden of Disease

A report recently published by NHS Health Scotland aims to quantify the burden of disease in the Scottish population by the estimating the total amount of illness, disability, injury or early death at a specific point in time.[2] For 132 diseases researchers calculated the fatal burden, defined as years of life lost due to dying from that condition and the non-fatal burden, defined as number of years living in less than ideal health with that condition (using hospital data, GP records, prescribing, and survey data).

Together these produce a single measure (disability adjusted life years DALYs) which allows us to see which diseases create the most burden in Scotland but they can also be presented separately to show the leading causes of early death and leading causes of health problems or disability. Both of these are important for planning prevention activities and health services. The report highlights that 25 individual categories of diseases, conditions and injuries accounted for 70% of the total burden of disease in Scotland in 2015.[2] It is not yet possible to look at the burden of disease in Fife using this methodology but this should be possible next year.

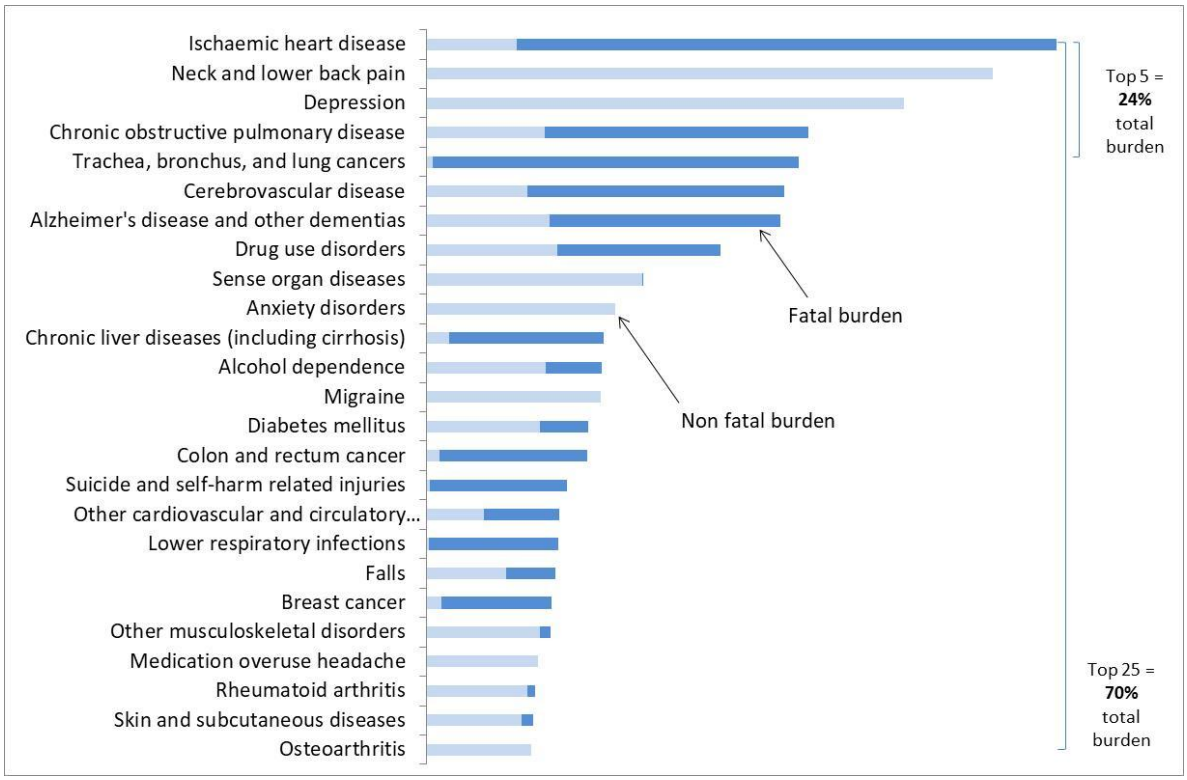
The largest total burden was from ischaemic heart disease (IHD) followed by neck and lower back pain, depression, chronic obstructive pulmonary disease (COPD) and lung cancer (Chart 1.8). These five conditions accounted for nearly a quarter of the total burden of disease across the whole population.[2]

There are some notable differences in the burden of disease that results from fatal burden and non-fatal burden. For some conditions the majority of the burden comes from early deaths from these conditions and the causes of these early deaths in Scotland are well known. For example nearly all (98%) of the burden of lung cancer is accounted for by fatal burden as is 86% of the burden of IHD (Chart 1.8).

By comparison the majority of the burden for other conditions is as a result of the years spent living in less than ideal health with that condition.[2] This is the case for the burden of neck and lower back pain (100% non-fatal burden) and diabetes with 70% of non-fatal burden and 30% fatal burden. Other health conditions which cause the most non-fatal burden include depression, anxiety, dementia and drug use disorders (Chart 1.9). These conditions have a significant impact on demand for healthcare services, particularly in primary care.

Scotland's Burden of Disease

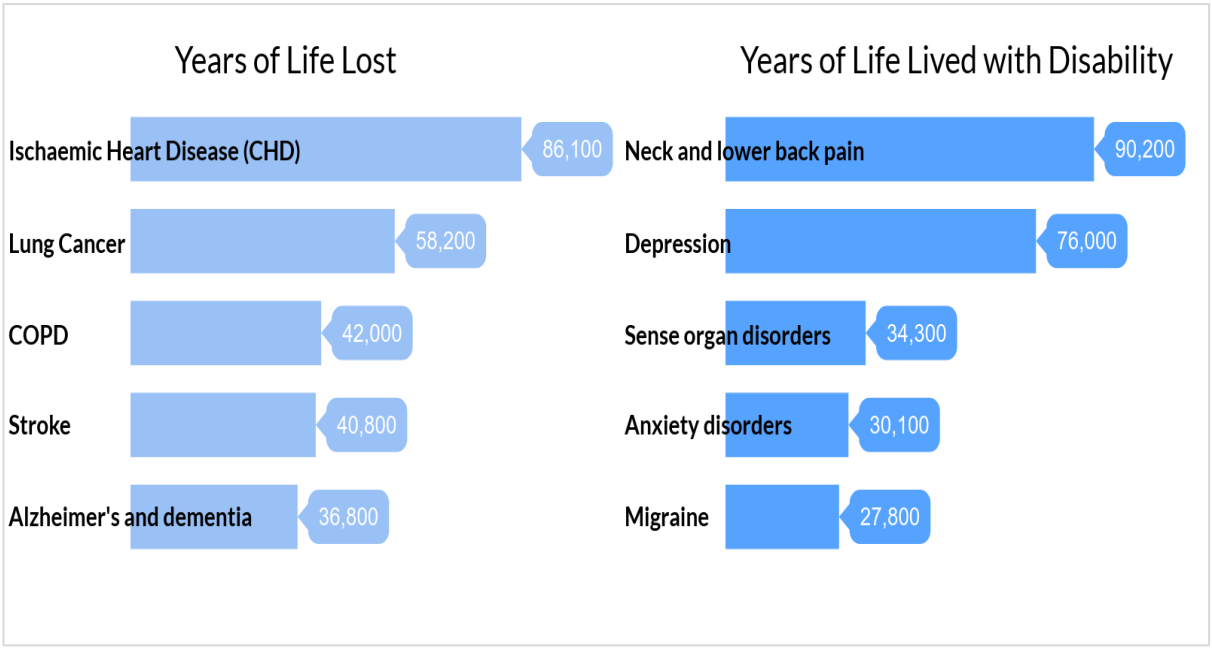
Chart 1.8: Burden of diseases ranked by individual conditions, Scotland 2015



Source: NHS Health Scotland

Scotland's years lived in less than ideal health and lost to early death

Chart 1.9: Top 5 conditions for years of life lost and years of life lived with disability, Scotland 2015

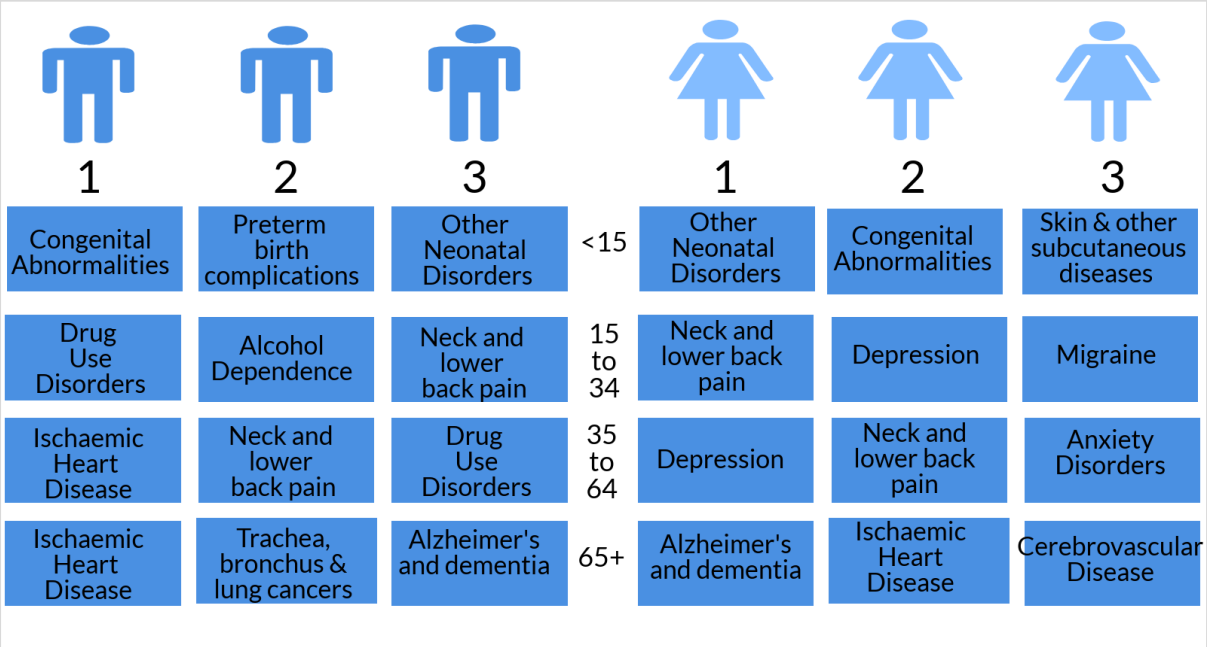


Source: NHS Health Scotland

The burden of disease is experienced differently by men and women and at different stages in life.[21] For example ischaemic heart disease caused the most burden among men aged 35-64 but in women in this age group the most burden was caused by depression (Chart 1.10). In young men aged 15-34 drug misuse disorders caused the most burden followed by alcohol dependence. Neck and lower back pain accounted for the most burden among women in this age group. Persons aged 65 and over experienced 45% of the total burden of disease in Scotland in 2015.[21]

Scotland's differing disease burden across the life course

Chart 1.10: Top 3 conditions with cause the most total burden by age group and gender, Scotland 2015



Source: NHS Health Scotland

2) A GOOD START IN LIFE

In this chapter, we explore how Holyrood baby Kirsty's health can be enhanced in a number of ways. First attending to the health needs of her mother, Caley. Second ensuring Kirsty enjoys the health benefits of breastfeeding and vaccination. Finally, we explore the value of preventing adverse childhood experiences.

Preconception, reproductive and maternal health

Preconception health is of particular importance, not only in those at risk of physical health complications in pregnancy, but in relation to improved health behaviours.

Maternal smoking, obesity, and drug and alcohol use are associated with complications for the health of mothers and babies, and in some cases permanent disability eg foetal alcohol syndrome. These issues, along with maternal age and deprivation can affect fertility and lead to low birthweight and/or preterm births. Fife is currently above the Scottish average for smoking at pregnancy booking (see chapter on tobacco smoking) and maternal obesity.

Obesity in pregnancy

More than 50% of women who become pregnant in Scotland are already overweight or obese. As many pregnancies are unplanned, this is best tackled by promoting healthy weight in women of reproductive age, as an important part of whole community health improvement programmes.

In 2016, Almost 30% of women in Fife at maternity booking were overweight, plus 25% were obese, the second highest rate in mainland Scotland and above the Scottish average.

Obesity in pregnancy is associated with a higher rate of stillbirth, obstetric complications and risks to maternal health. The Scottish Government consultation document A Healthier Future on diet, physical activity and healthy weight proposes a number of useful interventions to prevent people developing weight problems.[3]

These include restricting the promotion of unhealthy foods and drinks, providing better labelling and curtailing the location of fast food outlets (e.g. near schools). Further action is proposed around the promotion of healthy eating and helping families shop, cook and eat healthily. More investment is proposed for weight management interventions as a core part of treatment for people with or at risk of Type 2 diabetes.

A Healthier Future builds on the Commonwealth Games legacy programme, with the proposal that Scotland becomes a "Daily Mile" nation and takes measures to make towns and cities friendlier and safe for pedestrians and cyclists. In addition, the Chief Medical Officer for Scotland has released new guidance on physical activity in pregnancy to emphasize encouraging exercise but at safe levels, and supporting a healthy lifestyle for new families.[22]

Alcohol in pregnancy

The commonest preventable cause of learning disabilities and behavioural difficulties in Scotland is foetal alcohol spectrum disorders. As rates of drinking among women increase, the likelihood of pregnancies being affected also increases, and harm can occur very early, even before confirming the pregnancy. The safest message is 'no alcohol, no harm' but very low amounts are much less likely to cause any problems compared to heavy use. The minimum unit price for alcohol being introduced from May 2018 in Scotland will provide a disincentive for those who are heavy drinkers to reduce their consumption.

Breastfeeding

Boosting breastfeeding rates for infants below 6 months of age to 45% in the UK would cut treatment costs of common childhood illnesses (eg, pneumonia, diarrhoea, and asthma) and save the NHS over £30 million. In Fife, only 28% of women breastfeed exclusively at 6-8 weeks, slightly lower than the rate for Scotland which is 30%.

Breastfeeding promotes strong positive bonding between mother and baby which can be very powerful in terms of early brain development. Encouraging more breastfeeding in Fife involves creating supportive family, community and work environments which enable women who choose to breastfeed to continue for as long as they wish.

Importantly, exclusive breastfeeding goes a long way towards reducing health inequalities.

As James Grant, former Director of UNICEF said, "It is almost as if breastfeeding takes the infant out of poverty for those few vital months in order to give the child a fairer start in life and compensate for the injustices of the world into which it was born."

It is therefore a double injustice that in Fife today, babies born into poverty are less likely to be breastfed than their contemporaries born to professional, more highly educated mothers. This is why improving rates of breastfeeding across all social strata is a priority area in the Fife Children's Service Plan 2017-20.

Safe Childbirth

The UK Confidential Enquiry into Maternal Deaths points out that giving birth in this country remains safer than ever - less than 9 in every 100,000 women die in pregnancy and around childbirth.[23] More than two-thirds of women die from medical and mental health conditions – and there has been no change in the overall rate by which women die from these conditions since 2003. Heart disease is the leading cause of maternal death during or up to six weeks after the end of pregnancy.

Maternity services in Fife actively participate in this programme and other quality improvement initiatives. Through rigorous investigations the enquiry recognises the importance of learning from every woman's death, during and after pregnancy, not

only for staff and health services, but also for the family and friends she leaves behind.

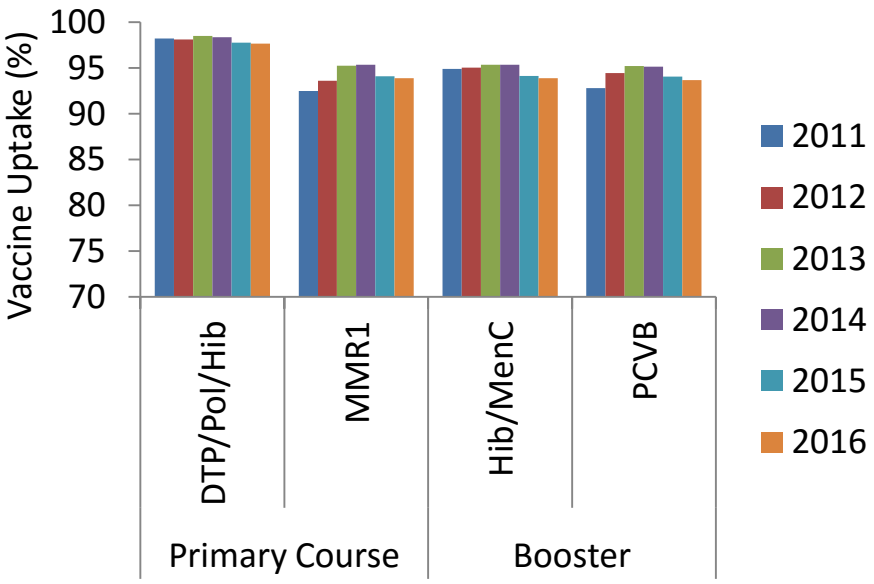
Child Health

Two areas for reducing health inequalities in childhood are highlighted in this section – vaccination and adverse childhood experiences.

Vaccination

Vaccine preventable diseases (for example, whooping cough (pertussis), measles, mumps and rubella) account for a small but significant proportion of notifications in Fife. Primary immunisations are a major strategy in the prevention of these infections. Chart 2.1 shows the uptake rates in Fife by 24 months.[24]

Chart 2.1: Fife Primary and booster immunisation uptake rates by 24 months of age, by calendar year



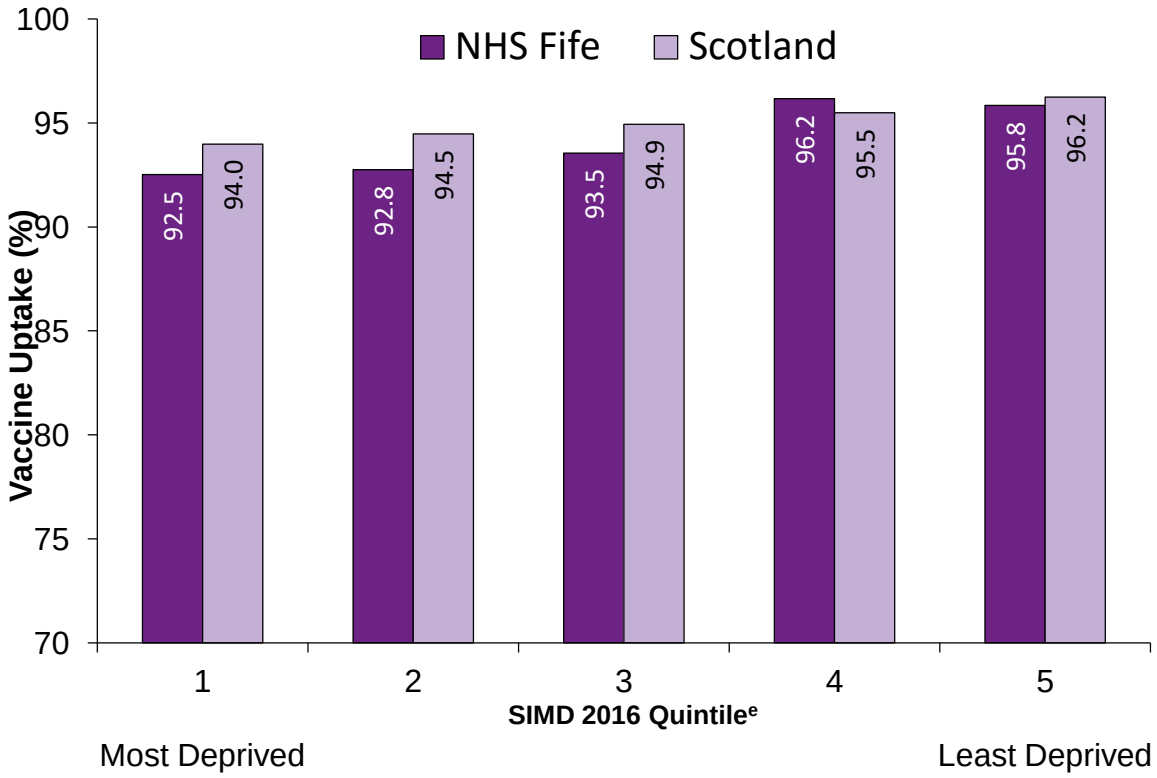
Source: SIRS

DTP/Pol/Hib = The 5-in-1 vaccine which protects against diphtheria, tetanus, pertussis, polio and Haemophilus influenzae type b (Hib).
MMR1 = Measles, mumps, and rubella vaccine (1st dose)
Hib/MenC = Hib/MenC booster vaccine
PCVB = Pneumococcal conjugate vaccine booster

Immunisation rates can be further explored by looking at the gap between the most and least disadvantaged populations within Fife. For example, Chart 2.2 shows that

MMR coverage is lower in the most disadvantaged populations within Fife, and that a similar trend is seen across Scotland.

Chart 2.2: MMR1 vaccine uptake rates by 24 months of age by SIMD 2016 quintile in Fife 2016



Source: SIRS [e]

As vaccine delivery becomes more complex the Scottish Government are transferring responsibility for the delivery of vaccination programmes from general practice to other parts of the healthcare system as part of a wider reform of Primary Care. Within Fife an Immunisation Team approach is being developed. This will enable NHS Fife and the Health and Social Care Partnership to be in a position of strength to manage the future transformation of the vaccination programme, and to work towards improving vaccination rates and reducing health inequalities in vaccine coverage in the population.

Adverse Childhood Experiences

Adverse childhood experiences (ACEs) include abuse and neglect, household substance misuse, domestic violence, parental incarceration, household mental illness and loss of a parent (for any reason). They can have significant cumulative lasting effects on health.[25]

[e] Scottish Index of Multiple Deprivation (SIMD) 2016 (Scotland level) quintile (population-weighted).

Whilst there have been no published studies to date on the prevalence of ACEs in the population of Scotland, studies elsewhere have reported that ACEs are common. Results from an English study showed 50% of people reported at least one ACEs and over 8% reported four or more ACEs which equates to about 153,000 adults in Fife with at least one ACEs and 24,500 with four or more.

There is a strong relationship between increasing numbers of ACEs and poorer health and determinants of health. Adults who reported more than four ACEs were shown to be three times more likely to smoke, have poorer mental wellbeing and educational outcomes, have a greater risk of chronic health conditions and develop illnesses at a younger age compared to those with no or fewer ACEs.[25]

Many ACEs are preventable and the impact of others can be mitigated. One of the most important protective factors is for a child to have “one good adult” in their lives. Understanding the scale of current ACEs is an important part of the work in Fife which is focussing on prevention and early intervention in relation to the wellbeing of children. There is a need to break the cycle of neglect, child abuse and domestic violence in families in Fife. Helping services become more “trauma-informed” is a step in this direction.

3) TOBACCO SMOKING

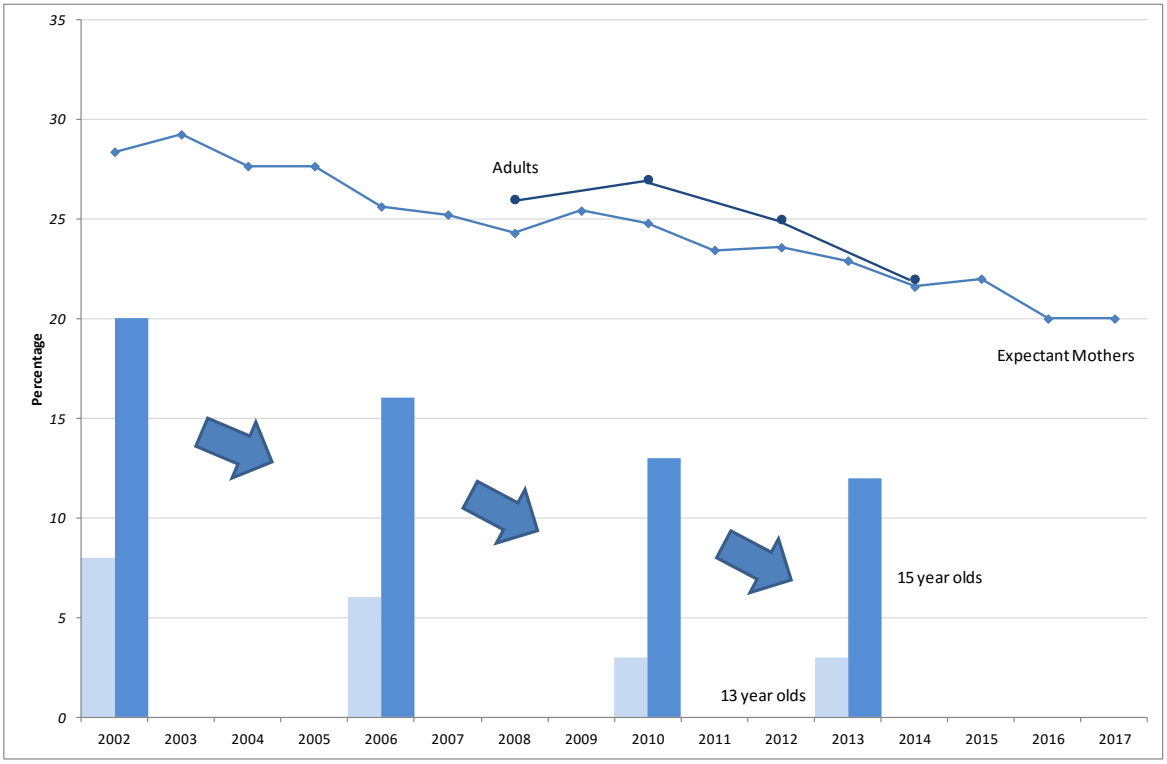
Kirsty's life chances are impacted by whether her mum and dad smoke. In pregnancy, smoking can lead to low birth, premature delivery and stillbirth. As she grows up in a household with smoking, she is more likely to develop asthma and acute respiratory infections. There is also a greater chance she will start smoking herself as a teenager and face the prospect of poor health in adulthood through heart disease, cancer and chronic obstructive pulmonary disease.
In this chapter, we will look at what is currently being done around smoking in Fife and what the future holds in terms of new policies and possible research.

How big is the problem?

Smoking is the most important preventable cause of ill-health in Scotland, shown to cause almost 10,000 deaths a year and linked to many of the diseases with the most burden in Scotland including cancer, COPD and heart disease.

Each year *700 people die of smoking-related diseases in Fife*, which comprises 23% of all deaths.[26] There are more than 9000 hospital admissions. Around 370 people are diagnosed with lung cancer and 3400 with chronic lung disease (COPD). Although Fife has made good progress in recent years in reducing smoking in adults, expectant mothers and young people (Chart 3.1), we are not performing so well compared to Scotland and other Health Board areas (Chart 3.2). Overall smoking rates in Fife are the *third highest* in Health Board areas in Scotland. Among young people aged 15 years, Fife has the *highest* smoking rates for all Health Boards in Scotland and is the *third highest* for smoking at pregnancy booking. There are also widening inequalities in smoking rates between those living in affluent areas compared to those in more disadvantaged areas (Chart 3.3). It is estimated that NHS Fife spends £3.4m treating lung cancer and £7.1m treating COPD each year.

Chart 3.1: Smoking prevalence among Fife adults, expectant mothers and young people; 2002/3-16/17

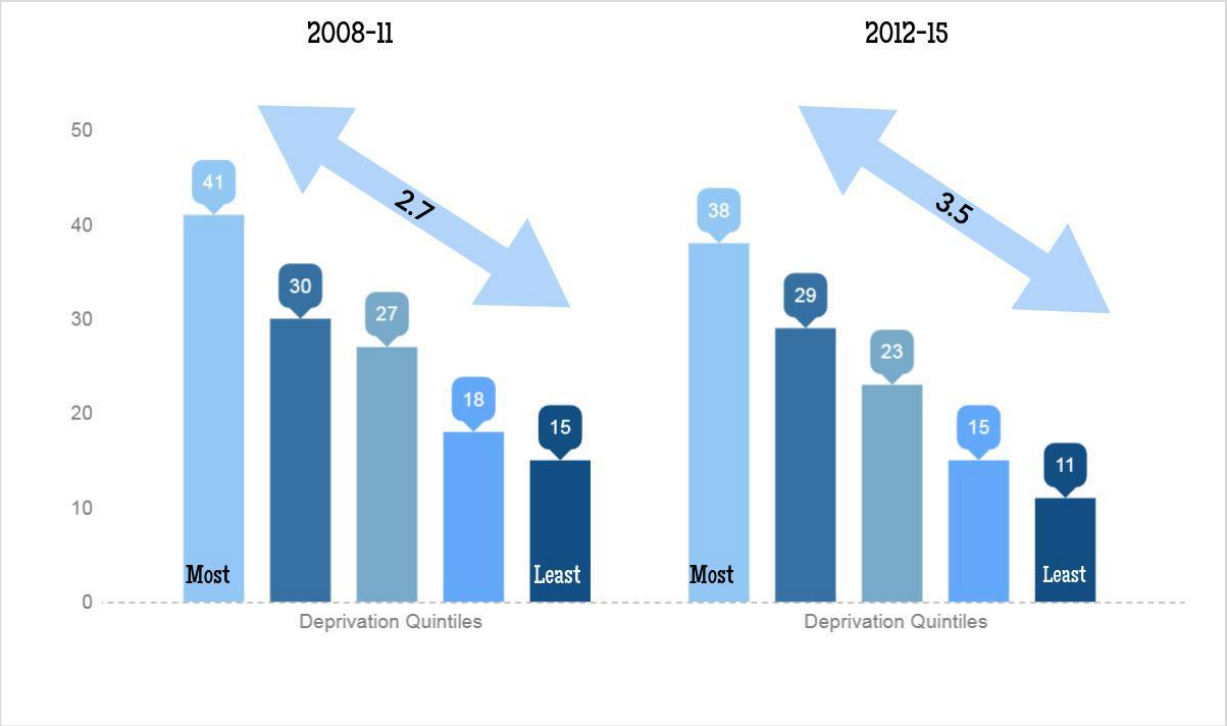


Source: SHeS, Information Services (NHS Fife) & SALSUS

Chart 3.2: Health Board rankings by smoking prevalence

Source: SHeS, ScotPHO

Chart 3.3: Proportions of adults smoking by Fife SIMD quintiles 2008-11 & 2012-15
Source: SheS



What are we doing about it?

In August 2016, NHS Fife Board signed up to ASH Scotland's Charter for a Tobacco-free Generation.[27] This aims to inspire organisations to take action to reduce the harm caused by tobacco, raise awareness of the goal of creating a tobacco-free generation of Scots by 2034 and support organisations whose work impacts on children, young people and families to address tobacco issues.

The Charter has six key principles that encourage discussion and enable organisations to examine how their own policy and practice can best contribute to the tobacco-free goal:

1. every baby should be born free from the harmful effects of tobacco;
2. children have a particular need for a smoke-free environment;
3. all children should play, learn and socialise in places that are free from tobacco;
4. every child has the right to effective education that equips them to make informed positive choices on tobacco and health;
5. all young people should be protected from commercial interests which profit from recruiting new smokers;
6. any young person who smokes should be offered accessible support to help them to become tobacco-free.

These principles are also supported by the Children in Fife strategic partnership which, has a priority in the Children's Service Plan to reduce alcohol, tobacco and drugs in 15 years olds.

Fife Health and Wellbeing Alliance supported local stakeholders in Fife to create a tobacco-free Fife launching a strategy in October 2016 to take forward the principles set out in the ASH Charter.

The strategy aimed to:

- Work collaboratively across partnerships, topics, settings, firmly putting tobacco control on all stakeholders' agendas
- Ensure that workers, partners and community members have the skills and knowledge around tobacco issues
- Work with communities and the youth to co-produce innovative action plans from the bottom up to tackle tobacco control based on their needs, assets and aspirations
- Create a network of partners, including community members, that collectively generates and shares evidence and evaluations.

Support for women who smoke in pregnancy

The pattern of smoking in pregnancy in Fife is strongly linked to inequalities. Currently 35% of expectant mothers from the most disadvantaged areas are smoking at the start of pregnancy compared to 4% from the least disadvantaged areas, almost eight times greater. Thus an important way to reduce health inequalities in childhood is to help women stop smoking in pregnancy but also to help young women not smoke at all.

Under the *Maternity and Children Quality Improvement Collaborative* (*MCQIC*), pregnant women in Fife are supported to stop smoking. This is beneficial at any stage in pregnancy but even with support, it can be hard to quit. In addition, since many pregnancies are unplanned, it is important to ensure young people do not take up smoking, and that smoking cessation services are widely available for those who wish to quit at any age.

Protecting Children and Young People from Tobacco

Health Promotion staff working on tobacco prevention have implemented a number of innovative approaches during 2017. A smoke free care placements policy for Fife Council's Social Work Service and Looked After Children and Young People has been completed and approved and is being implemented, to protect vulnerable children from the serious health risks posed by second-hand smoke. The stop smoking team have also made links with social work services with the aim of raising awareness across staff groups to encourage team managers and staff to think of ways to normalise conversations with service users about stopping smoking.

Staff working on tobacco prevention have teamed up with Youth1st to create a small grants programme which looks to galvanise youth groups to get behind a message of a tobacco free generation. Youth1st's experience in youth-led approaches together with the tobacco expertise of health promotion staff is expected to generate new innovative projects to increase local awareness of tobacco issues.

Changing how we help people to quit

Currently 58% of quits achieved through the local stop smoking service are in areas of high deprivation. The health promotion service hopes to increase this proportion further and achieve the ambitious target of 799 successful quits in the 40% most disadvantaged areas of Fife, by introducing a mobile service and by piloting a stop smoking app developed with St. Andrews University.[28]

However, in Fife, as across Scotland, the percentage of all smokers making quit attempts each year via smoking cessation services has declined steadily in recent years, dropping from 9.5% in 2012/13 to 5.4% in 2015/16. Part of the reason is likely to be that e-cigarettes have become a much more popular aid to stop smoking.

As they become more widely used and accessible, evidence is emerging that e-cigarettes are significantly less damaging than normal cigarettes and exposure to e-cigarette vapour is not harmful. In addition, evidence is building for the effectiveness of using e-cigarettes to stop smoking.

For example in unsupported quit attempts, 1 year quit rates are increased by half if the quitter uses e-cigarettes, compared to no product or over-the-counter nicotine products. For those using stop smoking services, the use of e-cigarettes has recently been shown to be effective (58% 4-week quit rate v. 47% for NRT, 61% for Varenicline and 51% for all methods).

We need to review the use of e-cigarettes as a quit aid and consider the role they may have in reducing smoking-related harm in Fife. This includes examining how stop smoking services could support people who wish to use e-cigarettes to quit, and review e-cigarette use in policies for health and care agencies.

We also need to make the link between smoking behaviours and ACEs as discussed in the Child Health section of this report. Supporting people to quit may involve changing the style of interaction to include Good Conversations (what matters to you?) and a trauma-informed approach.

Smoke-free Hospitals

Scotland's tobacco control strategy Creating a Tobacco-Free Generation (2013) called for all NHS Boards to be exemplars in providing smoke-free environments by April 2015.[29] NHS Fife launched 'a place to be smoke-free campaign in March 2015 in line with requirements of the national strategy. The initiative has led to a decrease

in number of people smoking but it has not eliminated smoking on hospital grounds in Fife.

In 2018, new offences will be introduced which will impose a penalty charge on people found smoking in hospital grounds. These offences are not intended to replace the existing hospital grounds no-smoking ban but mean that staff will be able to do more than just ask smokers to respect this. They will be able to seek support from local authority enforcement officers who can issue fixed penalty notices or refer extreme cases to the Procurator Fiscal.

Work is taking place in Fife to review smoking policies in line with the evidence for e-cigarettes and the new legislative requirements.

4) WORKING COLLABORATIVELY TO REDUCE HEALTH INEQUALITIES

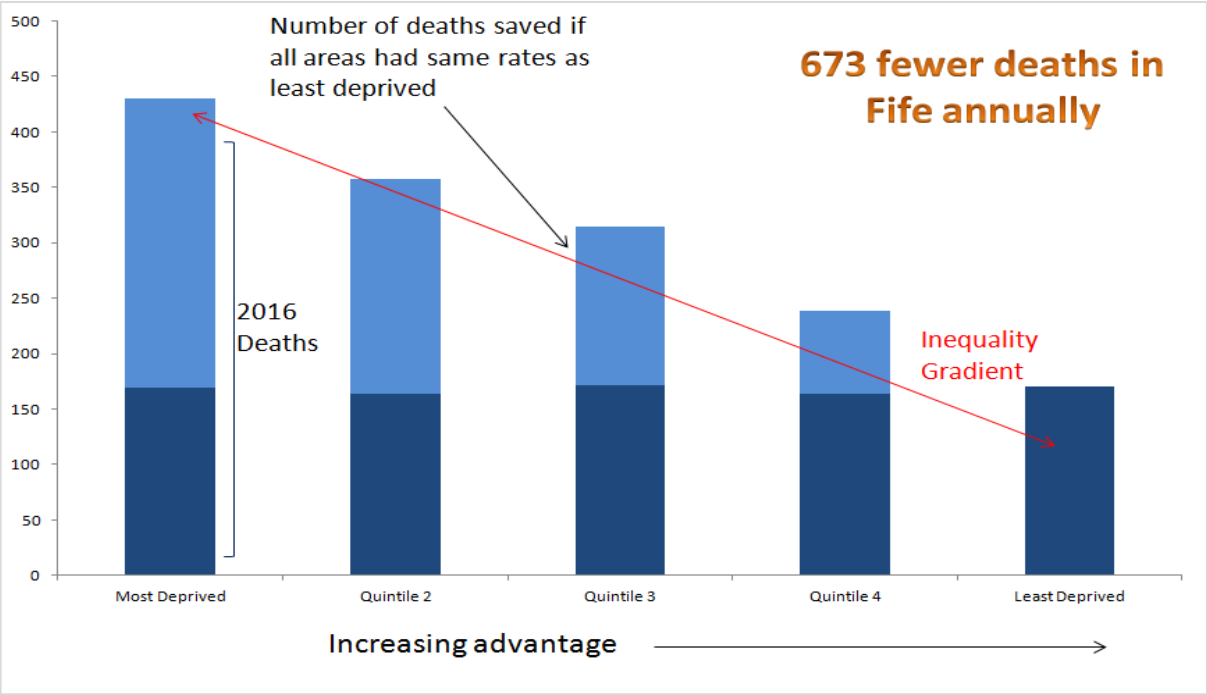
In November 2017, the Scottish Parliament passed the Child Poverty (Scotland) Bill into law.[4] This will mean all Local Authorities and Health Boards will be required to report on child poverty in their areas and the steps they are taking to address this. For Kirsty, this means a much greater attention on the family's income and what can be done to improve their situation. If the family finances improve, Kirsty is likely to have better health through being kept warm, clothed and fed adequately. With fewer worries about money, her mum Carley's health, particularly her mental health, will also improve.

In this chapter, we explore ways in which Kirsty's life prospects might be improved through collaborative working to reduce health inequalities.

How big is the problem?

As described in earlier parts of this report, the difference in mortality rates between people living in the least and most affluent areas have remained at least twice as high over the last ten years. For example, in 2016, if the rate of under 75 mortality for people living in the most affluent areas was the same across the whole population, there would have been 673 fewer premature deaths, which is 45% of all deaths under 75, in Fife (Chart 4.1). Chart 4.2 shows the size of the inequalities in Fife across a range of measures. For example life expectancy remains much better in more affluent areas and this effect is felt across all income groups.

Chart 4.1: Under 75 mortality rates by SIMD quintile in Fife in 2016



Source: Information Services NHS Fife

The Joseph Rowntree Foundation (JRF) has pointed out how poverty has a cost to the whole of society.[30] Reduced earnings affect the economy and with reduced tax income, along with increased demand, public services are doubly hit. Those most at risk of poverty are families with children, particularly single-parent households, those with a disabled person and those who are unemployed.

In a recent report, JRF proposed four areas for action to reduce poverty: in people's pockets, improving their prospects, taking measures to prevent people falling into poverty and improving the quality of places through community safety measures, quality housing and good transport links to help people access work and services.[30]

In Fife, many of these measures are incorporated into the Local Outcomes Improvement Plan which is structured across four themes: Opportunities for All (prospects), Inclusive Growth and Jobs (pockets), Thriving Places (places) and Community-led Services (prevention).

A further report by JRF suggests Scotland is doing better in comparison to other UK nations in terms of poverty reduction.[31] This suggests we can build from a strong position in Fife. Partner agencies have been working on a specific range of programmes to reduce health inequalities. The following provides some examples.

Helping people get into work

As part of the Health Inequalities Partner Programme, Fife ETC (Employability and Training Consortium) are working to ensure employability services can better demonstrate how interventions impact on health inequalities, and how services can work differently to improve their impact. This work is particularly focused on supporting people with mental health problems into work.

One-stop shop services for women who offend

This work aims to give women who have been in contact with the criminal justice services access to a range of health services. The holistic approach offers an enhanced service's and has shown a positive impact on women's mental, physical and sexual health, and their views on offending.

Protecting the public from trading scams

Fife Council Trading Standards staff are working with Adult Protection and Police Scotland to help protect residents again scams and doorstep crime. Often victims face the stress and anxiety of having lost large sums of money. Trading Standards provide advice and guidance, and ensure victims have the skills and knowledge to avoid this happening again.

Research into the ageing workforce

Research has been undertaken this year to investigate current knowledge, understanding and management of an ageing workforce and older workers amongst

workplaces in Fife.[32] The research was carried out by the Employment Research Institute at Edinburgh Napier University. The research found that the working population is ageing in Fife along similar patterns across Scotland. While employers are aware that the ageing population will affect their workforce, they have not considered the suitability of the workplace for older workers.

Becoming more aware of Adverse Childhood Experiences (ACEs) on health outcomes

As part of becoming more 'trauma-informed' around ACEs, a new model of care in general practice is being developed. Self-help coaches from LinkLiving, working under supervision of NHS Fife Psychology, have piloted this model in a GP practice in Kirkcaldy, offering safety and stabilisation to those who had experienced trauma. The pilot showed positive impacts on mental wellbeing, improved family relationships, increased confidence and self-esteem and improved ability to manage long term health conditions. Where individuals were referred on to other services for specialist support, they were found to be more stable, using the tools they had learned to cope with anxiety, depression and other symptoms of trauma. Following on from this success, the model is being extended to practices across Kirkcaldy and Levenmouth over the next three years.

Workforce development to help reduce health inequalities

During 2016-17 the health promotion training team worked in partnership with a wide range of local services and organisations to deliver 118 training courses and 23 bespoke workshops attended by a total of 2379 local workers. It also led on the organisation and commissioning of a Poverty Awareness Training Programme. This involved delivery of 26 training courses and workshops to 483 people, the production of an e-learning module and an online resource with supporting information.

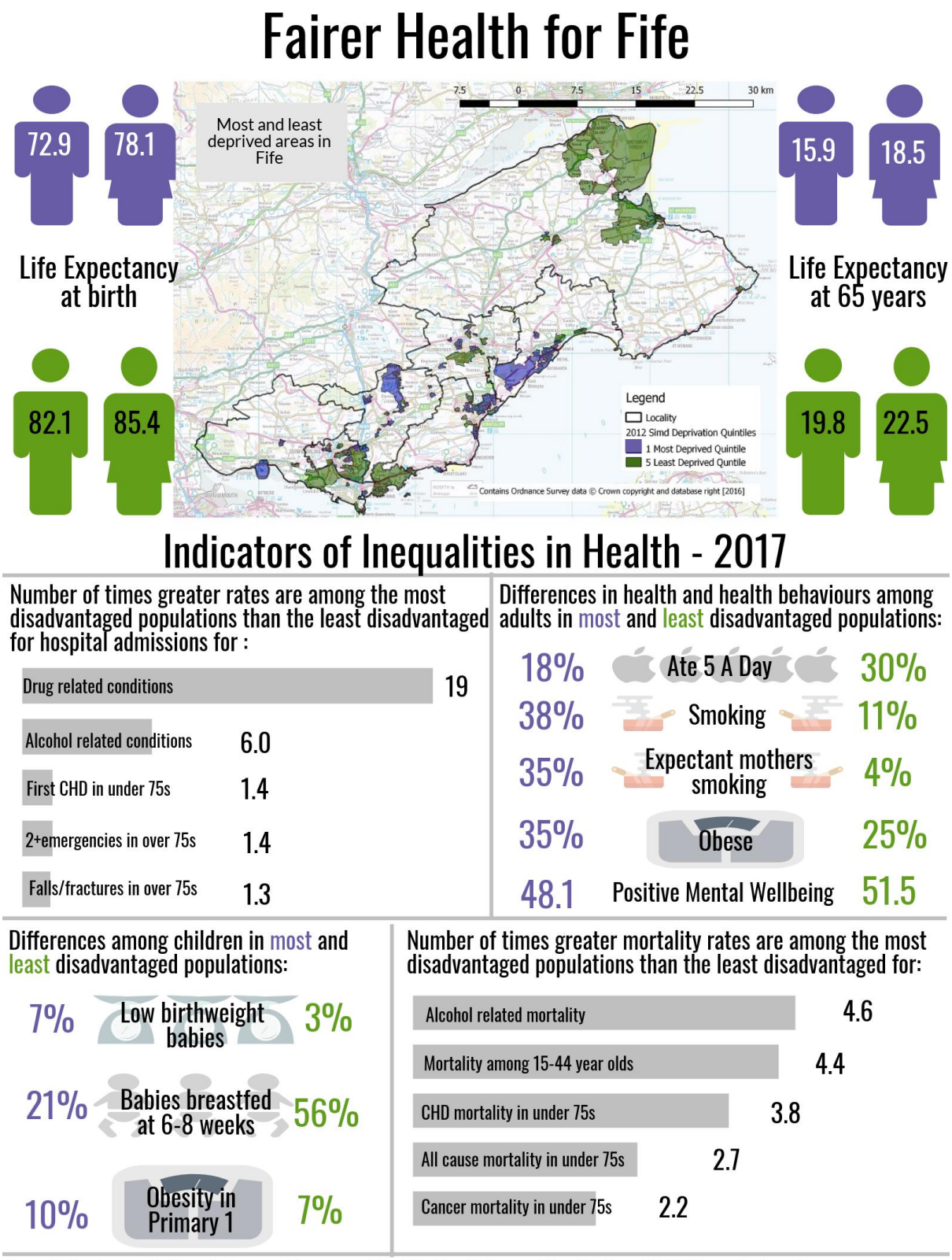
Tackling food insecurity

Research in Fife this year has found that at least 24,300 adults in Fife could be living in food insecure households.[33] The actual numbers may be higher, as approximately 45,400 people are income deprived in Fife. There is an inextricable link between household food insecurity and income-related issues including changes to the welfare system, rising living costs, increasing food and energy costs, low wages and job insecurity. Other factors include limited access to retailers selling affordable, nutritious food; access to transport; access to cooking, storage and preparation facilities; and appropriate skills and knowledge relating to nutrition and the preparation of meals. The research also reviewed measures in place to mitigate the effects of food insecurity. It highlighted the work of the eight foodbanks in Fife, the Fife Community Food Project and other initiatives in place such as community cafes and growing projects. These projects are growing in recognition with the Fife

Community Food Project recently being named recipients of the REHIS President's Award for 2017.[34]

During 2017 Fife has become one of 3 local authority areas to be involved in A Menu for Change which aims to develop a whole-system response to food insecurity. The work aims to shift away from emergency food aid and move towards a preventative and rights-based approach to increase the incomes of people facing crises and support them to access food in a dignified way.

Chart 4.2: Inequalities in Health in Fife



These indicators and others being used to support the Fife Health Inequalities Strategy 2015-20 can be found on: www.healthyfife.net. Most and least disadvantaged is used here to refer to Scottish Index of Multiple Deprivation 2012 most and least deprived Fife quintiles.

5) CONCLUSIONS

To conclude, Holyrood baby Kirsty has a bright future if we get it right for her parents so they are ready to start a family. Pre-conception health is an important area for action. This should include helping Caley to stop smoking before she gets pregnant as this will give Kirsty the best start in life and will save her money.

Once Kirsty is born, encouraging Caley to breastfeed will protect her from infections, help them bond and contribute to reducing health inequalities. Helping her father Ross to stop smoking will reduce Kirsty's chances of ill health and again save the family money.

In terms of staff health, we need to give those who work in health and social care as much help as possible to stop smoking, joining up policies and prepare the way for the new legislation on smoke-free premises which comes into effect in April 2018.

The Fife Partnership "Plan for Fife" provides fresh impetus to bridge the gap in inequalities and give Kirsty her best chance to live her life to its full potential.

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