On the 1st April 2013, the Health and Social Care Act 2012 introduced the establishment of a new public health system in which Southend-on-Sea Borough Council became responsible for the local public health function, with a statutory duty to improve the health of the population.

Annual public health reports have played an important part in public health practice ever since the early days of the Medical Officer for Health, when public health was originally based in local authorities. They remain an important vehicle for informing local people about the health of their community, as well as providing the necessary information for decision makers in local authorities and local health services on health gaps and priorities that need to be addressed.

I am delighted to present my first Annual Public Health Report as the Director of Public Health for Southend-on-Sea Borough Council. In this year’s report I have focused on the impact of lifestyle behaviours which are the immediate precursors of disease and sometimes referred to as the ‘proximate’ causes of health inequalities.

The report is divided into five chapters. Chapter 1 provides an overview of the health of the population of Southend-on-Sea and the major causes of death. Chapters 2 to 5 look at lifestyle factors: smoking, physical activity and their impact on levels of obesity, alcohol and sexual health.

I hope that this report benefits a wide readership and contributes to a better understanding of how we may improve the health of the people of Southend-on-Sea.

Dr Andrea Atherton
Director of Public Health
Southend-on-Sea Borough Council

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Summary of Recommendations

Smoking

- Increase awareness of dangers of second hand smoke and encourage parents to protect their families by making homes and cars smoke free
- Ensure clear referral pathways are in place for women who are trying to conceive, those women who are pregnant women and their partners, to help them access effective support to stop smoking
- Ensure all providers commissioned to deliver services to the public on behalf of Southend-on-Sea Borough Council have in place appropriate policies to protect workers and visitors from the effects of tobacco smoke
- Develop clear protocols and pathways for local health visiting and school nursing services to support the identification and referral of parents who smoke to Stop Smoking Services
- Ensure staff with a front facing role in local public sector organisations (benefits, housing, social care, parks, highways, leisure) receive training in brief advice so they are able to signpost smokers to appropriate support (Making Every Contact Count)

Obesity, Physical Activity and Healthy Eating

- Develop a Southend obesity strategy
- Develop new approaches to improve breastfeeding initiation and continuation rates
- Increase emphasis on healthy eating and active play in Early Years
- Work with Southend CCG, social care and maternity services to commission adult weight management services including support for obese pregnant women
- Increase uptake of NHS Health Checks and referral to appropriate risk-management services, particularly in those communities at greatest risk
- Develop a local public health responsibility deal and network to share best practice and promote healthy eating, increased physical activity and reduced alcohol consumption, all of which can promote a healthy weight
- Continue to deliver population-wide programmes to encourage active play for young children and active lifestyles for older children and adults

Alcohol

- A multi-agency group should be formed to refresh the Southend-on-Sea Alcohol Harm Reduction Strategy and identify partnership actions to tackle alcohol related harm
- Sexual health services should provide information that highlights the link between alcohol consumption and poor sexual health outcomes and signpost sources of useful advice on drinking sensibly. They should provide clear information about self-referral options as additional support for people wishing to reduce their alcohol intake
- Clinicians providing sexual health services should be trained in asking about drinking habits through use of a recognised screening tool and implementing a single brief intervention
• Deliver an alcohol awareness campaign when the new sensible drinking guidelines are published by the Chief Medical Officer for England
• Work with small and medium enterprises in Southend-on-Sea to sign up to alcohol pledges as part of the Southend-on-Sea Public Health Responsibility Deal

Sexual Health

• Develop a comprehensive sexual health strategy for Southend-on-Sea
• Review, redesign and commission an integrated sexual health service and pathway for Southend-on-Sea
• Develop a bespoke social marketing programme for Southend-on-Sea that normalises sexual health screening in the context of chlamydia in the most disadvantaged communities in the borough
• Implement alcohol brief interventions for all attendees at GUM and community sexual health settings
• Identify follow-up and engage with all young people admitted to hospital for an alcohol-attributable condition, signpost to appropriate agencies to enable screening for STIs and interventions to prevent unintended teenage pregnancy
1.0 Background

The belief that local authorities are better placed to facilitate population behaviour change and health improvement on an industrial scale, was the principle underpinning the transfer of the NHS public health function to local authorities on the 1st April 2013. The changed economic climate in the UK has led to a renewed focus on public services doing ‘more with less’. Helping individuals to address negative lifestyle factors can realise significant financial benefits for local health and social care economies. Recent research has identified the four key unhealthy behaviours with the most significant impact on health:

- physical inactivity
- smoking
- excessive alcohol consumption
- a poor diet (high fat, high sugar intake, low consumption of fruit and vegetables)

Tackling these unhealthy behaviours will reduce the number of people dying prematurely from non-communicable diseases (cancer, respiratory disease, stroke and heart disease). The World Health Organisation (WHO) believes nearly 50% of the burden of illness in developed countries is attributable to these four unhealthy behaviours.

In the period 2003 to 2008, the proportion of the English population engaging in three or four of the unhealthy behaviours, reduced from 33% to 25%. It is believed this reduction stems from interventions initiated following the publication of a number of national policies. The Wanless review of health care funding published in 2002 and the Government public health White Paper “Choosing Health: Making healthy choices easier”, published in 2004 are two examples of this.

The Wanless review proposed an ambitious strategy to engage the general public in action to tackle lifestyle factors known to negatively impact on health. There were three scenarios in the Wanless review, the most desirable of which was a ‘fully engaged scenario’. This envisaged the population being proactive in avoiding sickness. Those living with long-term chronic conditions would take more control over their condition through ‘self-care’ approaches, thus reducing reliance on and demand for, NHS and social care services. If the fully engaged scenario was achieved, Wanless believed the savings to the public purse could be in the region of £30 billion by 2022/2023.

Unfortunately recent evidence suggests the section of the population that would gain most from improving their lifestyles (lower socio-economic groups) are the least likely to adopt healthier behaviours. People with no formal qualifications are five times more likely to engage in all four unhealthy behaviours (physical inactivity, smoking, drinking to excess, poor diet) than those with higher education qualifications. People from lower socio-economic groups have shorter life expectancy and suffer worse health outcomes during their lives than the more
affluent. Tackling unhealthy behaviours in this segment of society is a priority in order to reduce health inequalities and narrow the gap in life expectancy across Southend-on-Sea.

2.0 Understanding Behaviour Change

Behaviour change is a complex issue. Helping people to adopt healthier habits requires more than simply informing a person that a particular behaviour is ‘bad’ for their health. The evidence suggests:

- the majority of people have multiple not single risks
- who these people are differs systematically
- people have very different combinations of risks

Helping people to change requires a thorough understanding of the interplay and relationship between multiple risk behaviours, as opposed to simply tackling one.

The current evidence demonstrates that a tailored approach, based on solid understanding of the needs of the individual or group works best. Understanding the factors that give rise to a particular behaviour and the social context in which it takes place, will be more effective in supporting behaviour change than a blanket ‘scatter gun’ approach. For example, people with low incomes, casual or lower grade workers, those who depend on the state for income, are twice as likely to smoke as professional staff.

Smoking is one of the biggest causes of health inequality between the higher and lower socio-economic groups. Those in the lowest socio-economic groups are half as likely to succeed if they attempt to give up smoking, than those in the most affluent. In order to support people to quit smoking, there is a need to understand the lives of people with low incomes, the challenges they face, their aspirations and needs, and in particular the perceived or real barriers to overcome to make the behaviour change. This also applies to other behavioural risk factors.

Several studies have found a direct link between the prevalence of multiple risk factors, people in younger age groups, men and those in lower socioeconomic classes.

3.0 What Works in Behaviour Change

There are a number of key elements to achieving effective behaviour change.

Key to success is the capacity and capability of local systems to support people to make those changes.

A national behaviour change framework has been developed that sets out competencies required for individuals working with, or commissioning services for the general public. Making Every Contact Count (MECC) sets out a strategy of people development and public engagement to address the complexity of behavioural risk factors. Research has found that people who do well at changing or addressing one behavioural risk factor are more likely to do well at changing others, if they are given appropriate support. MECC is a way of developing pathways and interfaces between organisations that come into contact with people
exhibiting risky behaviours and signposting them to receive assistance.

There is recognition that each of the four risky behaviours will require a bespoke solution to effect behaviour change. The development of a local Public Health Responsibility Deal with the business sector will lead to better health outcomes in those most likely to exhibit multiple risky behaviours. The Council is putting in place a strategic framework to coordinate action on health improvement across the Borough with the wider implementation of Making Every Contact Count (MECC). It is rolling out training for people working in the public, private and voluntary sectors, so they have the knowledge and skills to undertake ‘brief interventions’ and signpost people with risky behaviours to support they need.

The Council is working closely with partners and the health sector to ensure that commissioning contracts with providers reflect the preventive element and that treatment pathways are ‘joined up’. This is essential if savings are to be realised through effective behaviour change and Wanless ‘fully engaged’ scenario achieved.

15 Paiva AL, Prochaska JO, Yin HQ, et al (2012) Treated individuals who progress to action or maintenance for one behaviour are more likely to make similar progress on another behaviour: coaction results of a pooled data analysis of three trials’. Preventive Medicine, vol 54, no 5, pp 331–4.
CHAPTER 1
Demography

Key Points

- The disease prevalence and death rates in Southend-on-Sea from most conditions are similar to England and the East of England
- Significant risk factors for the range of conditions include smoking, alcohol consumption, obesity, lack of physical activity and a poor diet
- The population aged 65 and over is expected to rise by 14% by 2020 which will impact on service demands

1.0 The Area

Southend-on-Sea is 16.1 square miles in size and is the largest conurbation in the East of England. Located on the north side of the Thames Estuary approximately 40 miles east of central London, it is bordered to the north by Rochford and to the west by Castle Point.

The borough has 7 miles of award-winning beaches and coastal nature reserves; has over 80 parks and green spaces and 14 conservation areas and is home to the longest leisure pier in the world. Southend-on-Sea is served by an international destination airport, two railway lines linking to London, with 10 railway stations and many local bus routes.

Figure 1: Map of Southend-on-Sea
2.0 Population Distribution

Figure 2 shows the population distribution in Southend-on-Sea and generally reflects the density of housing in the more urban areas. The wards of Shoeburyness, St Luke’s and Milton have the highest number of people.

Figure 2: Population distribution for all persons based on mid-year population estimate 2010 for Southend-on-Sea

Source: ONS

3.0 Registered and Resident Population

The population of Southend on Sea is 174,838 (mid-2012 population estimates ONS). The difference between the estimated resident and GP registered population is approximately 8,500. This is important to recognise, as resources are allocated based on the resident population. Southend Clinical Commissioning Group is responsible for commissioning health services for the local population.

4.0 Population Structure

The age and sex distribution within the population has an impact on the level of need for health and social care services. Older people and the very young use more services e.g. schools, hospital, social care. The number of women of reproductive age also has an impact on the demand for contraceptive, sexual health and maternity services.
The incidence of ill health and disease increases with age. By 2021, the population of Southend-on-Sea is expected to rise by 6.6% to 186,399 (see Figure 3). Southend-on-Sea has an ageing population; population aged 65 and over is expected to rise by 14% by 2020\(^1\). This will have an impact on the levels and type of services required in future years.

Disadvantage (Deprivation)

Levels of disadvantage are measured by the Indices of Multiple Deprivation 2010 (IMD 2010). The indices combine a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area (lower super output area [LSOA]) in England.

The higher the IMD score, the more deprived the area.

The links between health and deprivation are well documented. After age, deprivation is arguably the largest predictor of health need. Need is greatest in areas of high deprivation; people living in these areas are not always able to access the services to meet their needs. It may take more effort and targeting to engage residents from these areas with relevant services. Southend-on-Sea has a higher proportion of people in the most deprived quintile (21.8%) than the national average (19.8%).

Figure 4 shows which areas in Southend-on-Sea have higher levels of disadvantage (darker areas on map) and so potentially higher levels of need. Main areas of disadvantage are within the wards of Kursaal, Milton and Victoria.
6.0 Life Expectancy and Health Inequalities

Life expectancy is a measure indicating the number of years that a person can expect to live.

Nationally, life expectancy has been improving year on year over the past decade. However, the health of the most disadvantaged has not improved as quickly as that of the better off, and in some cases, the gap in life expectancy between these groups has widened. Figure 5 shows life expectancy for all wards in Southend.

7.0 Disability Free Life Expectancy

As well as living longer, people need to have a good quality of life. The measure
that is used to determine the quality of life a person has is ‘disability free life expectancy’. Disability free life expectancy measures the years lived without a condition or illness that restricts a person’s ability to perform activities of daily independent living.

**Figure 6: Disability free life expectancy estimate at birth for males and females by Ward 1999-2003 (experimental statistics)**

The populations of Kursaal, Victoria and Milton wards have considerably lower disability free life expectancy than those of West Leigh, Thorpe and Leigh (Figure 6). This reinforces the link between deprivation and ill health, (as shown in Figure 4).

### 8.0 Ethnicity

Over the last ten years ethnic diversity in Southend-on-Sea has increased. In 2001 7.1% of the population was classified as being from an ethnic minority group (anything other than “White British”). The census of 2011 found the population of ethnic minority groups had increased to 12.9%. The largest increase was in the category “White Other” (1.8% increase) as demonstrated in figure 7. This most likely reflects the pattern of immigration from eastern Europe seen in other areas across the UK in recent years.
From a service commissioning perspective, it is important to understand the ethnic make-up of the local population. Some groups experience worse health outcomes from specific conditions than others. To tackle health inequalities, there is a need to ensure relevant services are accessible and provided in a culturally appropriate way.

9.0 Births

Nationally, changes to the pattern of maternal age at child-bearing may have contributed to falling numbers of births in the late 1990s, as more women delayed child-bearing until later. Increased child-bearing among women in their 30s and 40s are thought to have contributed to increased fertility rates since 2001.

Whilst the number of births has shown a downward trend in recent years, the general fertility rate (number of live births per females aged 15-44 years) gradually increased until 2009, when this trend was reversed. Figures 8 and 9 illustrate these trends.
Maternal health in pregnancy has significant bearing on the weight of the child at birth. Low birth weight babies (weighing less than 2500 grams) have poorer health outcomes. Factors associated with low birth weight include, but not exclusively, multiple pregnancy, maternal country of birth, poor maternal nutrition, lower socio-economic status, and maternal smoking and drinking. Low birth weights are also associated with premature delivery.

The rates of low birth weight in the Southend-on-Sea area are similar to those both with our ONS comparator group and nationally.
Infant mortality is the term used to describe a death between birth and exactly one year of age. Lower infant mortality rate is a good indicator of the health of the population and, in particular, maternal health. Figure 11 compares the infant mortality rate in Southend-on-Sea from 2008-10 with its ONS group.

**Figure 11: Infant mortality: crude rate, per 1,000 live births, ages <1 year, 2008-10**

10.0 **Deaths**

The main causes of death in both men and women are diseases of the circulatory system and cancers. Cancers occur in many forms and have different causes and outcomes, however, for the purpose of monitoring trends in mortality of our local
population, these have been grouped.

**Figure 12: Mortality from all causes (ICD10 A00-Y99), All Ages, 2008-10**

Southend-on-Sea has a higher level of ‘all cause’ mortality than the national average but one that is similar to the majority of its statistical neighbours (Figure 12).

### 10.1 Mortality from Cancers

Cancer is one of the leading causes of death in England. One person in three is likely to develop cancer at some time in their life, and one in four deaths is primarily caused by cancer.

Cancer is a general term for diseases where there is uncontrolled cell growth that is a result of a mutation in the genes of the cell. This uncontrolled growth leads to disruption of the function of normal cells and the invasion of neighbouring organs and sites distant from the original tissue in which the cancer developed. Cancer is not a single disease and different types of cancer can occur in any organ of the body.

We know that people from less affluent backgrounds are more likely to suffer and die from cancer than others, mainly owing to lifestyle factors such as smoking, poorer diet and lower levels of physical activity. A third of all cancer deaths are caused by smoking. Interventions to prevent cancer could include actions to stop smoking, reduce alcohol consumption and improve diets. Outcomes could also be improved by increasing early detection. Improving uptake by the target populations of screening opportunities, where a national screening programme is available would contribute to this.
Premature deaths (those which occur under the age of 75) are a more indicative measure of deaths that may be preventable through early intervention. They are more indicative of the relationship between disadvantage and ill health.

There has been a gradual decline in the number of premature deaths from cancers in Southend-on-Sea, as there has been nationally (Figures 13–15). As local rates relate to smaller numbers, they are more likely to show greater fluctuations.

Figures 16-20 look in greater detail at the more common cancers.
In common with the national trend there has been a more significant reduction in premature death rates from lung cancer in men than in women. It is likely that this relates to smoking prevalence, as there has been a greater decline in smoking prevalence for men than for women. Smoking tobacco is the single biggest risk factor for lung cancer.

The reduction in premature mortality rates for colorectal cancers in women has declined at a rate similar to the national average. The rate for men has been subject to greater levels of fluctuation. The main causes of colorectal cancer are obesity, poor diet, physical inactivity, smoking and alcohol consumption.
Premature death rates from breast cancer are declining at a similar rate to the national average. The main risk factors for breast cancer are age and family history.

10.2 Mortality from Circulatory (Cardiovascular) Disease

Cardiovascular disease (CVD) is the most common cause of death in the UK. The majority of CVD deaths are from coronary heart disease (46%) and stroke (23%)\(^2\). There is robust evidence that many of these deaths could be prevented through changes in lifestyle to reduce risk factors, and with earlier identification, diagnosis and treatment.

It is estimated that 80% of cases of CVD are preventable. The focus of primary prevention over the last two years has been on the delivery of the NHS Health Checks (or Vascular) Programme. This programme aims to systematically assess and manage the risk of CVD in all people aged 40-74 years. It is based on robust evidence of effectiveness and cost effectiveness to prevent stroke and coronary heart disease\(^3\).

Figure 21 shows reduction in mortality from all circulatory diseases for both men and women in Southend.
The most important modifiable risk factor for stroke is high blood pressure or hypertension. It is a serious condition known as the “silent killer” as it is asymptomatic and is often undiagnosed. The only way for people to find out they have the condition is to have regular blood pressure checks. Treatment of hypertension is effective in reducing risk of stroke. Other interventions to prevent heart disease and stroke could include actions to stop smoking, reduce alcohol consumption, increase levels of physical activity and improve diets.

11.0 Strategy to Improve Health

The Southend-on-Sea Health and Wellbeing Strategy is the main vehicle to jointly improve the health and wellbeing of the local community and reduce inequalities for all ages. The strategy identifies nine ambitions selected as the main areas to focus on for improving health. These are supported by detailed action plans. The “life course” approach of the strategy means that the actions to deliver the ambitions can be developed with partner agencies, with plans evolving and being refreshed on an annual basis to reflect this.

The nine ambitions encompass work that will deliver actions to support improvements in the areas of health and wellbeing where:

**Ambition 1**: ‘A positive start in life’ focuses on the health issues affecting children and young people, from conception to nineteen.

**Ambition 2**: ‘Promoting healthy lifestyles’ incorporates work streams that address lifestyle behaviours including smoking, diet, physical activity and drug and alcohol misuse; all of which are factors in the main causes of premature mortality outlined in Section 10. The prevalence of smoking in Southend-on-Sea is currently estimated as 22.4%\(^4\) and the prevalence of adult obesity is currently estimated at 24.8%\(^5\).
Ambition 3: ‘Improving mental wellbeing’ focuses on prevention of mental ill health and increasing personal resilience.

Ambition 4: ‘A safer population’ examines interventions to reduce both deliberate and unintentional harm. This includes elements of violent crime such as domestic abuse.

Ambition 5: ‘Living independently’ incorporates actions to reduce the need for people to move into long term care, improving provision of choice and control to allow for continued independent living.

Ambition 6: ‘Active and healthy ageing’ includes actions to ensure speedy diagnosis of dementia and a clear, supportive pathway for those diagnosed and their carers.

Ambition 7: ‘Protecting health’ includes action to ensure that the offer and uptake of immunisation is maximised to prevent communicable diseases such as measles, whooping cough and seasonal flu.

Ambition 8: ‘Housing’ encompasses actions to tackle cold, damp homes that may exacerbate lung disease.

Ambition 9: ‘Maximising opportunity’ details actions to improve employment prospects through adult education, reducing long term unemployment and tackling health inequalities.

1 www.poppi.org.uk
2 BHF 2010
3 DH 2008
4 LHO Tobacco Control Profiles 2012
5 National Obesity Observatory, modelled prevalence 2006-08
CHAPTER 2
Smoking

Key Points

- Smoking is the main preventable cause of ill health and premature death.
- Smoking is the single biggest cause in inequality in death rates between the least affluent and most affluent.
- 961 deaths in Southend-on-Sea were attributable to smoking in 2008-10.
- Around half of all regular smokers will eventually die from a smoking related-disease.
- Smoking prevalence in adults in Southend is estimated to be 22.4%, significantly higher than the England average of 20%.
- 1,279 Southend people successfully stopped smoking with support from local NHS services in 2012/13.

1.0 Background

It is over 50 years since the Royal College of Physicians first published their report linking smoking to illness and death. This report found 75% of the male population and 50% of the female population in Britain were smokers and the habit was widespread among school children, particularly boys. Since then, it has been national policy to reduce tobacco use due to its impact on health. A number of White Papers, including the 1998 “Smoking Kills”, set out objectives to reduce smoking prevalence and deaths from smoking-related disease.

The comparative data in Figure 1 illustrates the leading causes of preventable deaths and disease in England, highlighting the excessive role that smoking plays.

Smoking kills half of all people who smoke and is the single most significant cause of preventable ill health and premature death.
Figure 1: Number of deaths per year from leading causes of preventable deaths and disease in England

Source: ASH

The prevalence of smoking has fallen over the last 40 years but there has been a slower rate of decline since 2007\(^4\). Figure 2 highlights the reduction in the prevalence of smoking in adults between 1974-2010.

Figure 2: Percentage of the UK adult population smoking 1974 to 2010

Source: General Lifestyle Survey 2011

2.0 Epidemiology

Smoking is responsible for in excess of 81,000 deaths per year in England.
2.1 Smoking prevalence in adults

In 2011, 20% of the population aged 16 and over in England smoked; this compares to 45% in 1974. Although this is a significant improvement, there are groups within the population where smoking rates remain high. In Southend-on-Sea, smoking prevalence is currently estimated at 22.4%, significantly higher than the England average.

2.2 Smoking and age

Smoking prevalence is highest among people in their early 20s and gradually declines as people grow older. Figure 3 provides an overview of the prevalence of smoking in England by gender and age. Generally men have higher rates of smoking compared to women, except in the 20-24 age band, where nearly one in three young women smoke.

Figure 3: Prevalence of cigarette smoking in England among adults by age (2010)

Source: HSCIC Statistics on Smoking in England 2012

2.3 Smoking and marital status

There is evidence that marital status has an impact on smoking prevalence. The highest rates of smoking are within people who are divorced. Those who are widowed are least likely to be smokers, however, there is also likely to be an age bias as many of those who are widowed will be of an older age than those who are single (see Figure 4).
2.4 Socio-economic Class

The prevalence of smoking has been consistently higher within people classified as being in routine and manual groups, compared to those in managerial and professional groups (see Figure 5).

Figure 4: Prevalence of smoking by gender and marital status (2010)

Source: HSCIC Statistics on Smoking in England 2012

Figure 5: Cigarette Smoking in adults by socio-economic classification (2010)

Source: HSCIC Statistics on Smoking in England 2012

There is also a difference in the number of cigarettes smoked, with routine and manual workers more likely to be heavier smokers than those in other socio-
economic groups. Most recent data found 7% of people in routine and manual groups were heavy smokers compared to 3% of those in managerial and professional groups.

2.5 Smoking and young people

Around 65% of smokers started their habit as teenagers. Over a quarter of pupils (25%) in England had tried smoking at least once and 5% were regular smokers, smoking at least one cigarette a week. Figure 6 shows the proportion of those who smoke by age and sex.

Figure 6: Proportion of pupils in England who are regular smokers, by age and sex (2011)

The data highlighted in Figure 6 is not available at a local level. It is likely that the proportion and age profile of Southend pupils that smoke is similar to that found nationally.

Many of the children and young people who experiment with smoking will go on to smoke all their lives'. This is because nicotine in tobacco is highly addictive.

Someone who starts smoking at the age of 15 is three times more likely to die of cancer due to smoking than someone who starts in their mid-20s. This is because younger smokers are more susceptible to DNA damage from carcinogens in tobacco. Children who smoke also suffer from more respiratory symptoms including coughing and wheezing, and have poorer lung function than those that don’t smoke.

3.0 Outline of the problem

Tobacco, when smoked, releases over 4,000 chemicals, including ‘tar’ and carbon
monoxide which are toxic. Over 40 of the chemicals produced are harmful for a variety of reasons.

Carbon monoxide significantly reduces the availability of oxygen in the body and puts the circulatory system under pressure as a result. ‘Tar’ is the residue left in the lungs that causes cancer. Nicotine is highly addictive and produces unpleasant withdrawal symptoms. This is one of the reasons smokers find it hard to stop.

There are numerous other harmful chemicals contained within tobacco, including: mercury, arsenic, formaldehyde and cadmium. These chemicals, when inhaled, can also cause cancer.

The rate of smoking-related hospital admissions in Southend-on-Sea was significantly higher compared to the national level (1,541 per 100,000 population 2010/11).

3.1 Smoking in Pregnancy

Smoking in pregnancy causes harm to the health of the woman and unborn child. Smoking is known to cause complications in pregnancy. Women who smoke are significantly more likely to have an ectopic pregnancy, and 25% more likely to miscarry. Babies born to mothers who smoke, are 40% more likely to be stillborn or die in infancy. Risks to the infant as a result of maternal smoking include low birth weight and other defects. There is a direct link between the amount of harm caused to babies and the amount of tobacco smoked; the higher the number of cigarettes smoked per day, the higher the risk.

Smoking has also been identified as a causal factor in placental abnormalities which can result in premature birth.

3.2 Second-hand smoke

The health of children can also be harmed through exposure to ‘second hand’ tobacco smoke in the environment including the home and cars (passive smoking). Living in a household in which people smoke increases the risk to a child of developing respiratory infections, asthma, wheeze, middle ear disease and bacterial meningitis. It also significantly increases the risk of Sudden Infant Death Syndrome (cot death). This risk increases further if both parents smoke.

Children in households where a parent or sibling smoke are 90% more likely to become a smoker.

3.3 The Cost of Smoking

The estimated total cost to society of smoking is in the region of £13.74 billion
Table 1: The Estimated Cost of Cigarette Smoking to the UK

<table>
<thead>
<tr>
<th>Cost to</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS</td>
<td>£2.7 billion</td>
</tr>
<tr>
<td>UK Economy (smoking breaks/ absenteeism/loss of economic output due to death)</td>
<td>£10.2 billion</td>
</tr>
<tr>
<td>Street cleaning (discarded cigarette butts)</td>
<td>£342 million</td>
</tr>
<tr>
<td>Fires</td>
<td>£507 million</td>
</tr>
</tbody>
</table>

*Source: The Policy Exchange 2010*

The annual cost of smoking in Southend-on-Sea is estimated to be £7,072,347. This relates to:

- 33,285 GP consultations
- 9,333 practice nurse consultations
- 6,387 outpatient visits
- 1,607 hospital admissions
- 18,507 prescriptions

There are also wider costs to the public purse related to smoking:

- **Costs to fire services** – smoking is the most common cause of field fires and also a common cause of house fires

- **Costs from street litter** – in the UK cigarettes are also the principal source of street litter, accounting for 70% - 90% of all litter in urban areas and for over 40% of all street litter

- **Cost to businesses in Southend** – costs from lost productivity as a result of smoking-related sickness absence and ‘smoking breaks’ have been estimated at £2,315,608 per year

### 4.0 Initatives to Improve Health:

#### 4.1 National Initiatives

Behaviour change is a complex issue that needs to be tackled at multiple levels in order to make a significant impact. Many of the national initiatives work at the wider levels of this multi-layered approach, some of which involve the legislative system to influence the environment. Other national level interventions are based on campaigns that are most cost-effective if they operate on a very large scale, for example television social marketing campaigns.

There is a Government Strategy in place, “Healthy Lives Healthy People: A Tobacco Control Plan for England”, which details the approach to be taken to reduce tobacco prevalence and its related harm.

#### 4.1.1 Legislation

Legislation is aimed at protecting people from the effects of second hand smoke in the environment in which they live or work. The Tobacco Advertising and Promotion
Act 2002 has been brought in to protect children and reduce the number of children who start to smoke. The Health Act 2002 prohibits tobacco advertising, the promotion of tobacco products and their sale to anyone under the age of 18.

There is evidence to suggest that the display of tobacco products in shops can affect young people’s future intentions to smoke. The Health Act 2009 was introduced to prohibit the display of tobacco products at the point of sale by the end of 2013. It also banned sales from vending machines which added a further barrier to cigarette availability to young people.

4.1.2 Pricing and affordability

Dealing with affordability, generally through taxation, is another national level mechanism. There is evidence that increasing the price of cigarettes by 10% can result in a 4% fall in levels of consumption over time\textsuperscript{14}.

4.1.3 Illicit tobacco

The term “illicit tobacco” covers both smuggled and counterfeit tobacco. Tobacco of this nature is often the result of criminal activity, commonly poor quality and linked to large criminal networks. Nearly half of all hand-rolled tobacco is illicit. Poorer smokers are much more likely to smoke cheap illicit tobacco, as it will often sell for half the usual retail price. As a consequence they may be at risk of greater negative health outcomes from smoking poor quality tobacco. Young people are also more likely to smoke illicit tobacco as it is not subject to regulation and control. Recent evidence found that over half of smokers aged 14 to 17 in England have been offered illicit tobacco\textsuperscript{15}.

4.1.4 Social Marketing

Social marketing is a process used to co-ordinate activity to raise awareness and change people’s behaviour. Nationally co-ordinated social marketing campaigns to prevent the take-up and reduce the prevalence of smoking have been running in the UK for a number of years. Campaign methodologies vary and are launched to coincide with key times when behaviour change is likely, such as new year and mass quit campaigns such as ‘Stoptober’, National No Smoking Day or Change4Life. They may incorporate television and poster campaigns.

4.1.5 Tobacco packaging

There is evidence that standardising the packaging of tobacco products can reduce the appeal of tobacco products to children and young people. The packaging of cigarettes is one of the last means of promotion that exists as a marketing tool to make them appealing. This initiative is often referred to as ‘plain packaging’. This is a misleading term. The aim of standardised packaging is to exhibit standard images and language on tobacco products of the harm smoking causes. Standardised packaging has not been implemented in the UK at this time, but is believed to be a powerful tool to prevent children from experimenting with smoking and starting to smoke.
4.2 Examples of Local Initiatives

4.2.1 NHS Stop Smoking Services

NHS Stop Smoking Services offer smokers free, impartial, direct support and access to medication to help them quit. Over 3,200 Southend residents entered treatment in 2012/13. Of these, nearly 1,300 were successfully helped to stop smoking. Smokers are able to access support through their GP, Pharmacy, Hospital or local specialist clinic. Telephone and direct face to face advice and support is available on request, 8am to 5pm, five days a week. Out of hours text and telephone messaging services are available 24hrs per day.

4.2.2 Local Social Marketing Campaigns

Research into smoking behaviour within Southend-on-Sea has been undertaken. This work has helped to prioritise the commissioning of stop smoking activity across the Borough. Local social marketing campaigns focus on areas with the highest concentration of routine and manual workers. This is the population with the highest smoking prevalence. Work includes consumer consultation and engagement, going out into the community and speaking to people who smoke, establishing what support they need to quit, and putting this in place to help them.

Extensive marketing work is undertaken through GP surgeries, pharmacists and other health care professionals who have direct patient contact with smokers.

The local Stop Smoking Services have also worked closely with a range of local businesses and organisations. These include Southend United Football Club, HMRC, large local supermarkets and local retailers.

4.2.3 Healthy Schools

The Southend-on-Sea Healthy Schools programme is a holistic health and wellbeing programme for school age children and young people. It sets out clear policies and targets for health improvement within schools, and supports the Personal, Social & Health Education (PSHE) curriculum. Where PSHE in school is good, most children and young people understand and are able to respond to risk, e.g. risks associated with smoking and substance misuse. Schools engaged in the Southend-on-Sea Healthy Schools programme signpost children and young people to the school nursing service for health advice. School nurses support children, young people and their families and will refer them to stop smoking services when appropriate.

4.2.4 Training and Development

Helping people to stop smoking is a difficult endeavour. The local Stop Smoking Services supports the Making Every Contact Count initiative so that every person who smokes can gain access to appropriate support to help them quit. The Service trains health professionals, volunteers and others so they are able to engage with smokers and support them through a quit attempt.
4.2.5 Regulatory Services

Southend-on-Sea Borough Council’s regulatory services have a targeted enforcement programme to bring about a reduction in counterfeit and illegal smuggled tobacco productions. The Council’s Trading Standards team use local intelligence gained through investigation to tackle this serious problem. The Council also uses a targeted test purchase programme to identify retailers engaging in underage tobacco sales.

5.0 Recommendations

- Increase awareness of dangers of second hand smoke and encourage parents to protect their families by making homes and cars smoke free
- Ensure clear referral pathways are in place to identify women who are trying to conceive, those women who are pregnant and their partners, to help them to access effective support to stop smoking
- Ensure all providers commissioned to deliver services to the public on behalf of Southend-on-Sea Borough Council should have in place appropriate policies to protect workers and visitors from the effects of tobacco smoke
- Develop clear protocols and pathways for local health visiting and school nursing services to support the identification and referral of parents who smoke to Stop Smoking Services
- Ensure staff with a front facing role in local public sector organisations (benefits, housing, social care, parks, highways, leisure) receive training in brief advice so they are able to signpost smokers to appropriate support (Making Every Contact Count)

1 Royal College of Physicians, “Smoking and Health” 1962, Pitman Medical Publishing
5 London Health Observatory “Tobacco Control Profiles” 2012/13, Department of Health
10 Royal College of Physicians “Smoking and the Young” 1992, RCP Publications
11 British Medical Association “Breaking the cycle of children’s exposure to tobacco smoke” 2007, BMA
13 The NICE Tobacco Return on Investment Tool http://www.nice.org.uk/usingguidance/implementationtools/returnoninvestment/TobaccoROITool.jsp
14 F J Chaloupka, K M Cummings, CP Morley, JK Horan “Tax, price and cigarette smoking: Tob Control 2002;11:i62-i72
CHAPTER 3

Obesity, Physical activity and Healthy Eating

Key Points

- Obesity is a national and international public health issue
- Modelled estimates suggest that 24% of adults in Southend-on-Sea are obese
- Obesity in pregnancy increases the risk of complications for the mother and child during pregnancy and birth.
- 21.9% of Reception children and 36.9% of Year 6 in Southend-on-Sea are classified as overweight or obese
- Most adults are already overweight or obese so treatment interventions are equally important alongside prevention

1.1 Background

The UK Faculty of Public Health defines obesity as an:

"excess of body fat frequently resulting in significant impairment of health and longevity."

The circumstances leading to overweight and obesity are complex. At a basic level, weight gain is caused by an imbalance between energy in (consumption of food and drink) and energy out (energy used by metabolism and physical activity) so is strongly related to lifestyle (eating, drinking and physical activity levels).

The Foresight Report documented the complex interplay of social, psychological and environmental factors which affect what and how much people eat and how active they are, and which have contributed to the increase in obesity levels over the last 30 years.

The influences and determinants of obesity were captured in a system map produced by the Foresight authors (Figure 10). The report emphasised the need for a whole community approach to tackling obesity. It encouraged a focus on developing policy and infrastructure to support healthier lifestyle choices.

1.2 Measuring obesity

Body Mass Index (BMI) is a well-established method of estimating whether a person is overweight as it correlates reasonably well with level of body fat. It is useful for monitoring the prevalence of overweight and obesity in a population, and can also be an indicator of individual health status. It is calculated using a ratio of height and weight, calculated by dividing a person’s weight in kilograms, by the square of their height in metres (BMI =kg\(\text{m}^2\)).

Obesity in adults is defined as a BMI over 30; overweight is defined as a BMI
between 25 and 30. BMI classifications are set out in Table 1. Research has shown a relationship between raised BMI and increased risk of morbidity and mortality from a range of conditions including diabetes, heart disease, stroke and certain cancers.

### Table 1: BMI classification for adults

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;18.5</td>
</tr>
<tr>
<td>Healthy Weight</td>
<td>18.5 – 24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 – 29.9</td>
</tr>
<tr>
<td>Obese</td>
<td>30.0 – 39.9</td>
</tr>
<tr>
<td>Morbidly obese</td>
<td>&gt;40</td>
</tr>
</tbody>
</table>

*Source: NICE (2006)*

Table 2 below shows how BMI is associated with increased levels of risk.

### Table 2: Health risk associated with body mass index for adults

<table>
<thead>
<tr>
<th>BMI range – kg/m²</th>
<th>Health Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;30</td>
<td>High risk of developing heart disease, high blood pressure, stroke, diabetes</td>
</tr>
<tr>
<td>25.0 to 29.9</td>
<td>Moderate risk of developing heart disease, high blood pressure, stroke, diabetes</td>
</tr>
<tr>
<td>18.5 to 24.9</td>
<td>Low Risk (healthy range)</td>
</tr>
<tr>
<td>&lt;18.5</td>
<td>Risk of developing problems such as nutritional deficiency and osteoporosis</td>
</tr>
</tbody>
</table>

*Source: DH Care pathway for management of overweight and obesity*

People who develop central or abdominal obesity, i.e. increased fat around their middle, are at greater risk for some health conditions. It is believed this is because abdominal fat is metabolically active and excess fat in this area leads to an increase in cholesterol and blood glucose. As shown in Table 3, a healthy waist measurement is below 94 cm (37 in) for men and 80 cm (32 in) for women. The greatest health risk is with a waist measurement of greater than 102 cm (41 in) for men and 88 cm (35 in) for women. Risk increases with increasing waist circumference even at lower levels.

NICE guidance recommends using a combination of BMI and waist measurement to assess health risk in adults.

### Table 3: Waist measurement classification for adults

<table>
<thead>
<tr>
<th>Classification</th>
<th>Waist measurement (cm) Male</th>
<th>Waist measurement (cm) Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not overweight</td>
<td>&lt;94.0</td>
<td>&lt;80.0</td>
</tr>
<tr>
<td>Pre-obese</td>
<td>94.0 – 101.9</td>
<td>80.0 – 87.9</td>
</tr>
<tr>
<td>Obese</td>
<td>≥102.0</td>
<td>≥88.0</td>
</tr>
</tbody>
</table>

*Source: NICE (2006)*

In children and young people it is normal for there to be wide variation in BMI by age and gender as children grow. This prevents the use of fixed thresholds. Obesity trends in children are monitored by comparing the present BMI distribution with a reference distribution of childhood BMI from the 1990 UK Growth reference charts. These are used to establish weight status. For population monitoring, such as the
National Childhood Measurement Programme (NCMP) children over the 85th centile of the reference curve, are considered overweight, and those over the 95th centile are obese. The measurements used for children in a clinical setting are different; there are no evidence based thresholds for waist size in children.

2.0 Epidemiology

There has been a rapid rise in obesity levels worldwide, especially in developed countries. Modelling of future trends suggest this increase will continue unless there is concerted action to address the issue.

The World Health Organisation (WHO) has described the increase in obesity as an “epidemic”, and the increase in childhood obesity as a serious public health problem.

To date no major nation has reversed the trend.

2.1 Adult Obesity (people aged 16 years and over)

England has some of the highest levels of obesity in Europe; most people are overweight or obese. The Health Survey for England (HSE) is the main data source for obesity prevalence of adults in England. The latest published HSE data shows that in 2011 61.7% of adults (aged 16 and over) and 30.0 % of children (aged 2-10) were overweight or obese.

Modelled estimates suggest that 24% of adults in Southend-on-Sea are obese. This is not significantly different to the national average of 24.2%.

The rise in obesity prevalence appears to be slowing for both men and women (Figure 1); the gap between sexes appears to have narrowed over time. This observation is no reason for complacency.
Figure 1: Obesity prevalence of adults (16+) (male and female) 1993-2011

Source: Health Survey for England, 2011

Figure 2 shows there has been a similar increase in waist circumference.

Figure 2: Adult Waist Circumference

Source: Health Survey for England, 2011

Obesity is an important health inequalities issue. Obesity prevalence in England is associated with indicators of socioeconomic status, with higher levels of obesity found among more deprived groups (Figure 3). The association is stronger for women than for men. A similar pattern has been observed in many other developed countries.
Various factors increase the risk of obesity, including:

- Age
- Ethnicity (Black African, Caribbean, and South Asian)
- No qualifications

Additional data on weight status is collected and monitored in primary care. The Quality and Outcomes Framework (QOF) rewards GP practices for maintaining an “obesity register” of patients (aged 16 and over) with a BMI > 30 recorded in the previous 15 months.

This data is available at practice level as a number and not as prevalence.

Data on obesity and healthy eating is not systematically collected at a local level. Therefore modelled estimates from the General Lifestyle Survey are used.

Modelled estimates suggest that 28.7% of adults in Southend-on-Sea eat the recommended 5 portions of fruit and vegetables per day. This is the same as the England average.

2.2 Maternal obesity (obesity during pregnancy)

Maternal obesity increases health risks for both the mother and child during and after pregnancy. The 2010 Centre for Maternal and Child Enquiries report “Maternal Obesity in the UK” found that 5% of pregnant women in England had a BMI of 35 or more.

There is no routine collection and reporting of data for maternal obesity. Trend data from the HSE shown in Figure 4 shows there has been a marked increase in obesity levels in women of childbearing age (16-44 years) between 1993 and 2010.
2.3 Childhood Obesity

Data on childhood obesity has been collected as part of the HSE for a number of years. This allows us to look at trends in obesity over time. Figure 5 shows the national trend of prevalence of child obesity between 1995 and 2004. Since 2004 there is evidence of a “levelling off” in child obesity. Whilst this is encouraging, childhood obesity levels remain too high, are not reversing, and the focus on encouraging healthy weight needs to continue.

Source: NOO
The NCMP is now the main data source for levels of overweight and obesity in children. The NCMP is an annual programme that measures the height and weight of children in Reception (aged 4 – 5 years) and Year 6 (aged 10 –11 years) in England. This programme provides local data at high tier local authority level.

Figure 6 shows the percentages of children in Southend-on-Sea who are a healthy weight, overweight or obese over the last 4 years of measurement.

**Figure 6: Trend in Healthy Weight, Overweight and Obese prevalence, Reception & Year 6, Southend-on-Sea LA, 2008/09 – 2011/12**

Source: NOO

**Figure 7: Prevalence of overweight and obesity in England (2011-12)**

One in five children in Reception is overweight or obese (boys 23.5%, girls 21.6%)

One in three children in Year 6 is overweight or obese (boys 35.4%, girls 32.4%)

Southend-on-Sea has a similar percentage in Reception (21.9%) and a higher percentage in Year 6 (36.85%) classified as obese or overweight compared to the England average. These figures emphasise the importance of encouraging healthy
eating and exercise at the start of school life in order to reduce the risk of obesity in later years.

**Figure 8: Obesity prevalence by deprivation decile, National Child Measurement Programme 2011/12**

Child obesity prevalence is closely associated with socioeconomic status. Obesity prevalence in the most deprived 10% of the population is approximately twice that of the least deprived 10%. This is particularly important to note for Southend-on-Sea as the level of child poverty is worse than the England average with 23.3% of children aged under 16 years living in poverty compared to 21.1%.

### 3.0 Outline of the Problem

#### 3.1 The Impact on Health, Healthcare and the Wider Community

The issue of obesity is about health, not about appearance. The high level of obesity in the population is a major public health concern. It has a marked impact on health and wellbeing, increasing the risk of serious disease, as well as being a physical and mental health issue itself. Research estimates approximately 48,000 deaths per year in England are attributable to being overweight or obese.

Health problems associated with being overweight or obese are estimated to cost the NHS more than £5 billion every year. Modelled projections suggest this will increase to £6.4 billion by 2015, and £9.7 billion by 2050.

The consequences of obesity are not limited to the impact on health services. There are considerable costs to local authorities. The long-term conditions associated with obesity impact on social care in terms of direct care costs, the provision of benefits, aids, and housing adaptations. There are further financial costs related to the effects of obesity on employment e.g. working days lost through sickness absence, increased benefits payments, and loss of earnings as a result of long-term health problems. In the broadest sense, it has serious impact on economic development.
3.1 Maternal Obesity

Maternal obesity increases the health risks to the mother during pregnancy, labour and birth, and the postnatal period. The *Saving Mothers’ Lives* review\(^{18}\) summarised the main risks of maternal obesity as:

- maternal death or severe morbidity
- cardiac (heart) disease
- spontaneous first trimester and recurrent miscarriage
- pre-eclampsia
- gestational diabetes
- thromboembolism
- post-caesarean wound infection
- infection from other causes
- postpartum haemorrhage
- low breastfeeding rates

Thromboembolism and cardiac disease were the main causes of maternal death.

Obese mothers have higher risk pregnancies which are more complex to manage. The increased risk of complications means it is more costly to care for obese mothers during pregnancy.

3.3 Obesity and Children and Young People

The World Health Organisation (WHO) regards childhood obesity as one of the most serious global public health challenges for the 21st century.

The NCMP data shows that nearly one in five children in England enters primary school overweight or obese; by the time they get to secondary school, it rises to one in three.

Evidence suggests that obesity has a ‘tracking’ or ‘conveyor belt’ effect through the life-course, with overweight babies and children becoming overweight teenagers, and overweight teenagers becoming overweight adults. Overweight teenagers have a 70% chance of becoming overweight or obese adults, and adolescence may be, along with early childhood, a ‘critical period’ for intervening to develop good health habits to achieve and maintain healthy weight.

The most obvious and important way in which obesity impacts on children and young people is their social and emotional wellbeing. From a relatively young age, overweight and obese children are stigmatised and are subjected to teasing and bullying. This affects their self-image and self-confidence and reduces their opportunities for social interaction and also for physical activity\(^{19}\).

There is evidence that obese school age children show physiological changes such as raised blood pressure and cholesterol and an altered response to insulin, compared to children of healthy weight\(^{20}\). Type 2 diabetes, which usually appears in adulthood, is starting to be seen among some overweight children.

The full physical consequences of obesity in childhood, e.g. high blood pressure,
poor lipid profile and metabolic syndrome, become manifest in adulthood.

3.4 Obesity and Adults

Cardiovascular disease (CVD) is one of the UK's biggest killers, causing more than 200,000 deaths per year. The UK has one of the highest rates of CVD in Europe.

CVD is a term used for a family of diseases (Type 2 diabetes, coronary heart disease, stroke, chronic kidney disease) which share a common set of risk factors. CVD was responsible for nearly 30% of all deaths in England 2011 – and is the largest cause of disability.

The reduction in smoking in the population, along with better diagnosis and treatment, has led to a reduction in mortality from CVD over recent years. In England between 2001 and 2010, all age mortality rates from all CVD decreased by 36%, with decreases of 43% for coronary heart disease and 37% for stroke\textsuperscript{21}.

Being overweight or obese significantly increases the risk of developing and dying from CVD. The condition most strongly linked to obesity is Type 2 diabetes. Higher levels of obesity have led to an increase in the prevalence of diabetes, with an expected further 15% increase by 2020 due to obesity.

Figure 9 shows modelled prevalence estimates (diagnosed and undiagnosed) for the number of people in Southend-on-Sea with diabetes. If current trends in population change and obesity persist the total prevalence of diabetes is expected to rise to 8.3% by 2020 and 9.2% by 2030\textsuperscript{22}. It also provides an estimate of the reduction in the number of people with diabetes possible if interventions are put in place to halt the rise in obesity. Preventing the rise in obesity prevalence will reduce coronary heart disease, stroke, and chronic kidney disease. Approximately a third of the projected rise in diabetes prevalence in England can be attributed to the increasing prevalence of obesity.
In addition to the increased risk of CVD, overweight and obesity increases the risk of liver disease and some cancers such as breast, prostate and colon. Researchers estimate that overweight and obesity cause around 17,000 cases of cancer each year in the UK\textsuperscript{23}. The exact mechanism for the increased risk is unknown, but may be related to higher levels of hormones such as oestrogen and insulin.

Being overweight is also associated with:

- musculoskeletal problems including osteoarthritis in the knees and hips
- raised cholesterol & hypertension
- gall stones
- sleep apnoea / breathing problems
- lower back and other joint pain

Being overweight or obese affects life expectancy. Studies suggest that in people who become obese by middle age, life expectancy is reduced by an average of 3 years. People with morbid obesity live, on average 8-10 years less than people who are healthy weight. This 8-10 years loss of life is equivalent to the effects of lifelong smoking\textsuperscript{24}.

The risk of vascular dementia and Alzheimer’s disease is increased in obese elderly people, as the related complications of hypertension and Type 2 diabetes compound increased susceptibility\textsuperscript{25}. Those with disabilities and long term conditions are at greater risk of obesity because of the limitations their condition puts on their lifestyle, particularly physical activity levels.

The relationship between obesity and mental health problems is complex and a number of causal factors have been suggested. These include the negative effects of stigma and low self-esteem, poor diet and low physical activity levels and the adverse effects of some medications\textsuperscript{26}. Research has suggested that obesity is an
independent risk factor for depression\textsuperscript{27,28}. People with mental health problems are more likely to gain excess weight.

There is a clear social gradient with obesity; the lower a person’s socioeconomic status, the more likely they are to be overweight or obese. Recent studies have suggested that this gradient becomes established in childhood\textsuperscript{29}.

There is also a marked link between parental and childhood obesity and evidence that this relates mainly to behavioural factors such as food and activity rather than genetic factors.

Physical activity not only contributes to healthy weight, but provides a number of substantial health benefits. Yet only about a fifth of the population (21\%) achieves the level of physical activity that is recommended by the Chief Medical Officer in the \textit{Start Active, Stay Active} report.\textsuperscript{30} For adults (19 years +) the minimum recommended levels of activity are 150 minutes (two and a half hours) each week of moderate intensity physical activity, in bouts of 10 minutes or more (for example, 30 minutes moderate activity on at least 5 days a week).

Regular physical activity reduces:

- all-cause and cardiovascular mortality
- the incidence of coronary heart disease and stroke
- long-term blood pressure
- anxiety and improves mental wellbeing\textsuperscript{31}

The Health Survey of England (2012)\textsuperscript{32} and the Active People Survey (2010) provide most of the country’s adult statistics for physical activity. In 2012, the best estimate from the HSE is that 61\% of adults (66\% of men and 56\% of women) met the Government’s recommendations for physical activity. This has remained stable since 2008 and to date there is no detectable Olympic legacy effect.

4.0 \textbf{Halting the Increase in Obesity}

There has been considerable discussion on why obesity levels have increased. The consensus is that the increase in prevalence has been too rapid for genetic changes to be the cause. On a simple level, the principal cause of obesity is an imbalance on an individual level between energy intake and energy expenditure. To some extent the rising levels can be explained by increasingly sedentary lifestyles and the change in the type and amount of food consumed:

- increased food portion sizes
- increased availability and consumption of processed foods, fast foods, snack food and alcohol
- reduction in the amount of daily physical activity such as household chores, walking and cycling
- fewer people with physically demanding jobs

The problem is also complex; a wide and increasing range of psychological, social, environmental, economic and cultural factors influence energy intake and energy expenditure.
The Foresight Report commissioned by the government in 2010 referred to the:

“complex web of societal and biological factors that have, in recent decades, exposed our inherent human vulnerability to weight gain”.

The full “Obesity System Map” with over 100 variables affecting energy intake and energy expenditure is shown in Appendix 1.

A simplified “thematic” diagram in Figure 10 below summarises the main themes affecting energy balance: biology, activity environment, physical activity, food environment, food consumption, societal influences and individual biology.

**Figure 10: System map of factors that determine energy intake and expenditure**

![System map of factors that determine energy intake and expenditure](image)

Source: Foresight systems map, 2007

The report indicated the need for a system-wide response to the issues, in particular policy and environmental change.

### 4.1 Halting the Increase in Obesity – Individual Behaviour

For individuals, there is good evidence that eating and drinking more healthily and regular physical activity can help maintain healthy weight. For those that are overweight or obese, reducing overall energy intake and increasing physical activity are vital to achieve weight loss.

In addition, there is a growing body of research which has found links with sedentary behaviour, poor sleep and stress.

Being sedentary (sitting or lying down and using little energy) is associated with higher risk of death from CVD and other conditions. This is regardless of the amount of leisure time physical activity a person does.
Good quality sleep is important for good health. It may also be a contributory factor to maintain healthy weight. Studies have found a link between short sleep duration and obesity. Stress may be a contributory factor in weight gain, although the relationship is not fully understood. It may be related to higher levels of the stress hormone cortisol.

4.2 Halting The Increase in Obesity - Policy and Environmental Change

There have been a number of national policy documents that evidence the importance of maintaining healthy weight, the role of healthy eating and regular physical activity.

These include Healthy Lives, Healthy People: A Call to Action on Obesity in England, the 2012 Olympics legacy plan, Start Active, Stay Active: A report on physical activity for health from the four home countries Chief Medical Officers, the Public Health Outcomes Framework, and the Public Health Responsibility Deal.

The Call to Action document published in 2011 announced new national ambitions for:
- a sustained downward trend in the level of excess weight in children by 2020
- a downward trend in the level of excess weight averaged across all adults by 2020
- a focus on those in:
  - lower socioeconomic groups
  - some ethnic minority groups
  - people with disabilities
  - people with mental health problems

Research evidence from the USA has identified higher rates of obesity in local communities with high concentrations of fast food outlets. The higher rate of obesity in these areas is believed to be because of easy access to cheap, highly palatable and energy-dense food with relatively poor nutritional value.

The National Obesity Observatory (NOO) has mapped fast food outlets and takeaways in England. This has demonstrated a strong association between the fast-food outlet to population ratio of a local authority and the prevalence of obesity. In Southend-on-Sea there are an estimated 199 fast food outlets. The crude rate is 120 per 100,000 population, higher than the England value of 77.9.

5.0 Halting The Increase in Obesity - National Initiatives

The UK government has recognised the problem of obesity and has started to implement a number of initiatives to address the problem. It proposes that partners at national and local level work collaboratively to:

- transform what is termed an “obesogenic” environment to one more supportive of healthy lifestyles
- provide more information and practical support to prevent weight gain
- develop services to help people with excess weight
• intervene at all stages of the life course from pre-conception through to old age

The Foresight report highlighted the need to invest resources to ‘shift the curve’ through sustained whole population preventative approaches, as well as treatment interventions targeted at those who need to lose weight. The report was clear that this is not an ‘either or’ for investment. Both are essential.

National initiatives to address obesity across a wide range of departments and policy areas include:

**National Obesity Observatory:** a central evidence base to support local areas plan strategy and commissioning.

**Front of pack labelling:** a new food labelling system to assist people to make choices. It shows nutritional information including how much fat, saturated fat, salt, sugar, and calories are in food products.

**Change4Life Campaign:** provides information and resources to individuals and families to support lifestyle change.

**Public Health Responsibility Deal:** an initiative for businesses to make a contribution to improving public health. The Responsibility Deal has four networks; alcohol, food, health at work and physical activity. Businesses are encouraged to sign up to actions to help people eat more healthily including:
- reducing ingredients (for example salt and fat) that can be harmful if people eat too much of them
- encouraging people to eat more fruit and vegetable to help reach their 5 A DAY
- putting calorie information on menus
- helping people to eat fewer calories (for example by changing the portion size or the recipe of a product)

**School and nursery food:** mandatory nutritional standards for school food are in place and the Children’s Food Trust has introduced voluntary guidelines for nursery food.

### 6.0 Halting the Increase in Obesity – Examples of Some Local Initiatives

A number of local initiatives are in place to combat obesity by:
- helping people make healthier choices
- encouraging healthy eating and regular physical activity and
- creating an environment that promotes healthy weight

As with national programmes there is focus on a both population wide prevention and targeted interventions.

### 6.1 Pregnancy, Infancy and Early Years

Encouraging breastfeeding and ensuring that children eat well in their early years increases the chances of a future healthy life. This also helps to reduce the risk of
serious diseases such as heart disease, diabetes, stroke and cancers in later life.

Southend-on-Sea has lower rates of breastfeeding at both initiation and 6-8 weeks than the national average. Initiation rates have shown a small increase over the last 3 years, but prevalence at 6-8 weeks has remained static at 37%.

Examples of some local initiatives include:

**Healthy Child Programme:** emphasises the importance of increased rates of breastfeeding initiation and continuation, as a contribution to maintaining weight in growing children.

**UNICEF Baby Friendly Initiative (BFI):** a global initiative to implement good practices that promote and support breastfeeding. Evidence shows that full BFI (Stage3) accreditation can add 10% to breastfeeding uptake rates.

Public Health has been working in partnership with local maternity services, health visiting services and Children’s Centres to achieve UNICEF BFI accreditation for the breastfeeding support delivered in Southend-on-Sea. The partnership has achieved Stage 1 accreditation, and is on target to submit for Stage 2 in March 2014.

**Peer Support:** an established local programme to assist new mothers who wish to breastfeed. Peer supporters are local women who have successfully breastfed one or more babies who then complete an accredited training programme.

**Support in Children’s Centres:** includes midwife sessions, breastfeeding support groups, peer supporters, and centre staff trained to support breastfeeding mothers.

**Mapping maternal obesity care pathway:** to review the care pathway for pregnant women and extend it to cover identification of women who are obese prior to or during the early stages of pregnancy and ensure appropriate lifestyle guidance and support to these women before, during and after their pregnancy.

**Portion plates:** the ‘Me Size’ plates used to assist parents to judge appropriate portion size. These are distributed to parents of children who are identified as overweight or obese following assessment by School Nurses.

**Eat Better Start Better – Healthy Eating in the Early Years Setting:** The Public Health and Early Years teams are working with the Children’s Food Trust to pilot a training and evaluation package to help Early Years settings promote healthy eating.

**Obese pregnant women:** working with NHS midwives to pilot a referral programme to help encourage obese pregnant women to moderate their weight gain during pregnancy and after giving birth.

**Breastfeeding Welcome Scheme:** to make it easier for mothers to identify businesses and public places which have an open attitude to breastfeeding and will be particularly supportive.

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6.2 **Children and Young People**
The National Child Measurement Programme (NCMP): measuring children in Reception and Year 6 to identify those at risk of being overweight or obese and provide support to children and parents.

Local Change4Life Partnership: local delivery of healthy eating, physical activity and social marketing with Active Southend-on-Sea.

Primary School Sport Funding: the government is providing additional funding during the academic years 2013-14 and 2014-5 to improve the provision of physical education and sport in primary schools. This funding will be allocated to primary heads and is ring-fenced.

Cook4Life: a local programme providing cookery courses (over four weeks) and healthy lunchbox sessions.

Healthy schools: helps schools promote good health by creating a healthy environment and embedding healthy lifestyles into the everyday work of the school. All schools in Southend-on-Sea are engaged with the Healthy Schools Programme.

School nursing: delivers the Healthy Child Programme for all school-aged children, both universal and targeted provision.

Healthy Eating: initiatives encouraging children and young people in Southend-on-Sea to make informed choices and develop good eating habits.

Free School Meals (FSM): the application process has been revised to make it quicker and easier for parents to check eligibility and to register. In Southend-on-Sea more than 1,200 children are entitled to FSM but are not having them.

School Sport Partnerships: co-ordinating and developing joint initiatives between primary, secondary and specialist schools to increase sporting opportunities for children. Modelled estimates suggest that 67.3% of children in Southend-on-Sea participate in at least 3 hours of sport a week which is better than the England average (40.9%). To address obesity, it is important to increase participation by sedentary children and those with excess weight, of particular concern is the “drop off” in participation by teenage girls.

HENRY and MEND – Healthy lifestyle programmes: offers behavioural change techniques to help parents improve their children’s overall diet and activity patterns; exercise and play for children who do not naturally like to exercise; and healthy eating guidance including appropriate portion size.

Active Travel: Southend-on-Sea Borough Council and Partners working together to encourage active travel by assisting schools to develop or update school travel plans. A school travel plan promotes and facilitates active healthy and sustainable travel to school as an alternative to using private cars.

6.3 Adults

NHS Health Checks: aimed at preventing heart disease, stroke, diabetes and kidney disease, and supports eligible people to reduce or manage risk such as obesity through individually tailored advice and treatment.
**Walking for Health:** walking is one of the simplest and most effective forms of exercise. Southend-on-Sea has a well-established walking for health programme offering a number of regular short walks for local people to help them become more active and stay more active. The walks are planned, risk-assessed and led by trained volunteer walk leaders.

**Exercise Referral Scheme:** an exercise referral scheme is delivered in leisure centres in Southend-on-Sea. GPs, practice nurses and hospital staff can refer people with medical conditions or CVD risk factors to the scheme. They are assessed and undertake a 10 week programme of safe, effective supervised physical activity.

**Cardiac Rehab Classes:** after a person has received hospital treatment and care for a heart attack or cardiac surgery, they are encouraged to continue exercising. There are specialist classes available in Southend for cardiac patients and their families. These offer patients the chance to exercise in a safe and friendly environment with specially qualified instructors.

Future initiatives include development of a community pulmonary rehabilitation programme to allow those patients who have lung problem to become more physically active. Those with a lung problem, particularly a long-term one, can find it difficult to move around or do normal daily activities without getting breathless.

### 6.4 Creating an environment that promotes healthy weight

Creating an environment that encourages play, physical activity and active travel is important for the promotion of healthy weight. A quarter of journeys made every day by car are less than 2 miles. Cycling and walking are alternatives that can bring real health benefits to adults and children, as well as helping reduce congestion and improving the environment. There is strong evidence to support the long term economic and health benefits of increasing active travel by developing and maintaining safe public space (£11 saved for every £1 invested)\(^{38}\), and of providing green space to promote mental and physical health\(^{39}\).

**Making Every Contact Count (MECC):** the transfer of Public Health from the NHS to local authority is an opportunity to develop new and sustained ways to spread health messages, for example, through leisure centres, parks, community centres and other public venues. Every staff contact with residents is an opportunity to encourage them to adopt healthy lives; it is important to make every contact count.

**Better Southend:** Southend-on-Sea Borough Council projects, including City Beach and Victoria Gateway have been awarded “best public realm” by the Royal Town Planning Institute and have improved cycling and walking conditions, public space and quality of life.

**Local Authority Transport Plans and Active Travel:** as part of the Local Sustainable Transport project, Cycle Southend provides a range of projects to increase the number of people choosing to cycle as a mode of transport and for leisure. There is a particular focus on increasing the number of children cycling to school. There are now 20 schools participating in the Sustrans “Bike it” project with structured programmes to increase cycling in the school community.
**Olympic Legacy:** As part of the Olympic legacy, there is a world-class swimming and diving facility for local children and families.

### 7.0 Recommendations

- Develop a Southend obesity strategy
- Develop new approaches to improve breastfeeding initiation and continuation rates
- Increase emphasis on healthy eating and active play in Early Years
- Work with Southend CCG, social care and maternity services to commission adult weight management services including support for obese pregnant women
- Increase uptake of NHS Health Checks and referral to appropriate risk-management services, particularly in those communities at greatest risk
- Develop a local public health responsibility deal and network to share best practice and promote healthy eating, increased physical activity and reduced alcohol consumption, all of which can promote a healthy weight
- Continue to deliver population-wide programmes to encourage active play for young children and active lifestyles for older children and adults

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3. NICE 2006 *Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children National Institute for Clinical Excellence 2006*
5. NICE 2006 *Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children National Institute for Clinical Excellence 2006*
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PHRC 2008 The changing social patterning of obesity: An analysis to inform policy and practice
development Public Health Research Consortium Short report 4


PHRC 2008 The changing social patterning of obesity: An analysis to inform policy and practice
development Public Health Research Consortium Short report 4

Start Active Stay Active

HSE 2012 : Is the adult population active enough?

HSE 2012 : Is the adult population active enough?

Lucassen EA, Cizza G. The Hypothalamic-Pituitary-Adrenal Axis, Obesity, and Chronic Stress Exposure: Sleep and the HPA Axis in Obesity Current obesity reports. 2012 Dec; 1(4)208-215


DH (2011) Healthy Lives, Healthy People: A Call to Action on Obesity in England


BTCV (2010) Cost effective health BTCV
CHAPTER 4

Alcohol

Key Points

- Men in Southend-on-Sea have a significantly higher rate of alcohol attributable hospital admissions compared to the England average
- Alcohol specific hospital admissions in the under 18s in Southend-on-Sea are significantly lower than the England average
- Alcohol-related harm is estimated to cost society around £21 billion annually

1.1 Background

The drinking of alcohol is deeply ingrained in our society and associated with socialising, relaxing and pleasure. Every week around 60% of adults in England drink alcohol, the majority without any problems. Alcohol misuse in the UK has become a serious public health problem. As well as the harm that alcohol misuse poses to the wellbeing of the drinker, it has significant impact on family, friends and the wider community through problems such as crime, antisocial behaviour and loss of productivity.

The alcohol content of a drink is measured in terms of ‘units’. In the UK, one unit is 8 grams or the equivalent of 10 ml of pure alcohol. Figure 1 shows the units found in standard drinks.

Figure 1: Alcohol Units in Standard Drinks

![Image of alcohol units](www.younghealth.co.uk)

Government recommended ‘sensible drinking’ guidelines have been developed after careful consideration of the effects of drinking at different levels.

The current Government guidelines recommend that:
- Adult women should not regularly drink more than 2 to 3 units of alcohol a day
- Adult men should not regularly drink more than 3 to 4 units of alcohol a day
- Pregnant women or women trying to conceive should avoid drinking alcohol. If they do choose to drink, to minimise the risk to the baby, they should not drink more than 1-2 units of alcohol once or twice a week and should not get drunk
- After an episode of heavy drinking, it is advisable to refrain from drinking for 48 hours
In 2009, the Chief Medical Officer (CMO) for England introduced a new guideline; that no children under the age of 15 years should consume alcohol. This followed evidence that indicated that drinking before this age increased the risk of alcohol dependency in later life and also affected cognitive development.

Definitions of problematic alcohol consumption using the Government guidelines are described in Table 1.

Table 1: Definitions of Problematic Alcohol Consumption

<table>
<thead>
<tr>
<th>Low to moderate drinking</th>
<th>Drinking up to previous weekly guidelines (0-14/21 units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous drinking</td>
<td>Drinking above recognised sensible levels, but not yet experiencing harm (measured by consumption of between 22 and 50 units per week for males and between 15 and 35 units per week for females)</td>
</tr>
<tr>
<td>Harmful drinking</td>
<td>Drinking above recognised sensible levels and experiencing harm, such as an alcohol-related accident, acute alcohol poisoning, hypertension, cirrhosis (measured by consumption of over 50 units per week for males and over 35 units per week for females)</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>Drinking above recognised sensible levels and experiencing harm and symptoms of dependence</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>Drinking twice the daily recognised sensible levels in any one day (8 or more units a day for men and 6 or more units a day for women)</td>
</tr>
</tbody>
</table>

2.0 Epidemiology

Since 1950, alcohol consumption in the UK has risen from 3.9 litres pure alcohol per person per year to an average of 11.4 litres per person in 2005. Although consumption in the UK has declined since 2005, averaging 10.2 litres per person (aged 15 and over) in 2010, the exposure of the population to alcohol-related harm remains at a historically high level. The UK is among the heaviest alcohol consuming countries in Europe.

2.1 Adults

The 2011 Health Survey for England found that 87% of men and 81% of women had drunk alcohol at least occasionally in the last year; 18% of men and 10% of women had drunk alcohol on five or more days in the last week. The frequency of drinking increased with age and this was greater for men than for women. The survey found five or more days in the last week:

- the highest prevalence for men was for those aged 75 and over (29%)
- the highest prevalence for women was for those aged 65 to 74 years (19%).

Household income influences the prevalence and frequency of drinking. On five or more days in the last week:
• from the highest income quintile, 24% of men and 17% of women had drunk
• from the lowest income quintile, 12% of men and 6% of women had drunk

However, the maximum amount drunk in the last week was at similar levels across income groups⁷.

There is a similar pattern in relation to area-level deprivation; 21% of men and 14% of women in the least deprived areas drank on five or more days, compared with 12% of men and 4% of women in the most deprived.

Among those adults who drank in the last week, over half exceeded recommended daily guidelines on at least one day. Such binge drinking causes significant harm including:

• Unintentional injuries (e.g., car crashes, falls, burns, drowning)
• Intentional injuries (e.g., firearm injuries, sexual assault, domestic violence)
• Alcohol poisoning
• Sexually transmitted diseases
• Unintended pregnancy
• Children born with Foetal Alcohol Spectrum Disorders
• High blood pressure, stroke, and other cardiovascular diseases
• Liver disease
• Neurological damage
• Sexual dysfunction, and
• Poor control of diabetes

There has been a slight downward trend in binge drinking levels in England over the last four years; from highs of 25% and 16%, the percentage of both men and women who binge drink has fallen, to 19% and 12%, respectively.

The average number of units consumed on the heaviest drinking day in the last week decreased with age, with the decline being greater for women than men. Whilst the survey found that older people drank more frequently, the average number of units drunk on their heaviest drinking day in the last week was 3.6 units for men and 2.2 units for women aged 75 and over.

Alcohol dependence and harmful alcohol use are recognised as mental health disorders by the World Health Organization. 6% of men and 4% of women drink more than levels regarded as harmful, 50 units a week and 35 units a week respectively. In England 4% of adults are alcohol dependent (6% men; 2% women), making it difficult for them to reduce their drinking or abstain despite increasingly serious harm⁸.

Almost one in five people in Southend-on-Sea aged over 16 years (19%) are drinking at hazardous levels. Whilst this is similar to the national level it is of serious concern. A total of 7.2% of the population in Southend-on-Sea over 16 years are drinking at harmful levels⁹.

2.2 Young People

In recent years, there have been significant changes in the way young people drink and how much they drink. Overall, the proportion of young people who do not drink is increasing. However among those who do drink, there seems to have been an
increase in alcohol consumption.

The most recent national annual survey\textsuperscript{10} looking at alcohol use by secondary school pupils (mostly aged 11 to 15), found that 45\% of pupils said they had drunk alcohol at least once. This continues the downward trend since 2003 when 61\% of pupils had drunk alcohol; in 2009, this proportion was 51\%. Boys and girls were equally likely to have drunk alcohol. The proportion that had done so increased with age, from 10\% of 11 years olds to 77\% of 15 year olds.

A total of 13\% of pupils reported they had drunk alcohol in the last week, similar proportions for boys and girls. This continues a decline from 26\% in 2001, and is significantly lower than in 2009, when 18\% of pupils reported drinking in the last week. Pupils aged 11 to 15 who drank in the last week drank a mean amount of 12.9 units and a median amount of 8.5 units, indicating significant variation.

About half (54\%) of pupils who had drunk alcohol in the last four weeks said they had been drunk at least once during that time: although 59\% said they had deliberately tried to get drunk, 41\% said that they had not.

3.0 Outline of the Problem

3.1 Alcohol and Health

Although many in society consume alcohol, it is immensely harmful. Alcohol has been shown to be causally related to over 60 different medical conditions and in the majority of cases there is a dose-response relation to the volume of alcohol consumption, with risk of disease increasing with higher volume\textsuperscript{11}.

3.2 Acute Health Effects

Excessive alcohol use has immediate effects that increase the risk of many harmful health conditions. These immediate effects are most often the result of binge drinking and include the following\textsuperscript{12}:

- acute toxic effects of alcohol poisoning: a medical emergency that results from high blood alcohol levels that suppress the central nervous system and can cause loss of consciousness, low blood pressure and body temperature, coma, respiratory depression, or death.
- impaired judgement leading to unintentional injuries and accidents, including traffic injuries, falls, drowning and burns
- violence
- risky sexual behaviour
- self-harm and suicide: it is estimated that alcohol is implicated in up to 65\% of suicides in the UK

3.3 Chronic Health Effects

Over time, excessive alcohol use can lead to the development of chronic diseases, Neurological impairments and social problems. Chronic health problems include:

- neurological problems: dementia, stroke and neuropathy
• Cardiovascular problems: myocardial infarction, cardiomyopathy, atrial fibrillation and hypertension
• Psychiatric problems: depression, anxiety, and suicide
• Cancer: mouth, throat, oesophagus, liver, colon, and breast. In general, the risk of cancer increases with increasing amounts of alcohol
• Liver diseases, including alcoholic hepatitis and cirrhosis
• Among persons with hepatitis C virus, worsening of liver function and interference with medications used to treat this condition
• Other gastrointestinal problems, including pancreatitis and gastritis

3.4 Alcohol-Related Deaths

Alcohol kills thousands of men and women in the UK every year: the deaths of 5,792 men and 2,956 women in 2011 were related to alcohol\(^\text{13}\). In one generation, the number of alcohol-related deaths in the UK has doubled from 4,023 in 1992 to 8,748 in 2011. Although the death rate has stabilised in recent years, thousands more people die today from alcohol-related causes than in the early 1990s.

Around two thirds of the deaths directly related to alcohol are from liver disease. Figures 2 and 3 compare the mortality rates from chronic liver disease for men and women (all ages, 2008-2010) in Southend-on-Sea with those local authorities considered to be 'statistical neighbours'. The mortality rate from chronic liver disease for both men and women is higher than the England average, with the mortality rate for men being almost double that of women in Southend-on-Sea.

Figure 2: Mortality rates from chronic liver disease, males, all ages, directly standardised rate per 100,000 population (2008 -2010)
There are many more deaths that can be attributed to alcohol. In 2005, an estimated 15,000 people in England and Wales died from alcohol attributable causes\(^1\). This included 27% of men and 15% of women, aged 16-24 years\(^1\).

Alcohol is also strongly linked to health inequalities, with people from deprived groups suffering far greater harm from alcohol than those from higher socioeconomic groups. Deaths are far more common in lower socioeconomic groups, with nearly four times as many alcohol-related deaths among men in routine occupations than among men in higher managerial and professional roles (among women, the ratio is nearly 5:1).

### 3.5 Alcohol-Related Hospital Admissions

Beyond the mortality statistics, there are many more people whose physical and mental health is damaged by drinking. In 2011/12 there were an estimated 1.2 million hospital admissions in England related to alcohol consumption, more than twice the number in 2002/03. Alcohol-related hospital admissions have continued to rise year-on-year for the last ten years.

The majority of alcohol-related hospital admissions (75%) are due to chronic conditions such as cardiovascular disease, liver disease and cancer. However 16% are for mental and behavioural disorders resulting from alcohol use and 8% are for acute illnesses including injuries\(^1\).

#### 3.5.1 Alcohol-Specific Hospital Admissions

Alcohol-specific hospital admissions refer to admissions that are wholly caused by alcohol use, such as alcoholic liver disease, alcoholic cardiomyopathy and ethanol
poisoning. Figures 4 and 5 show alcohol-specific hospital admissions for men in Southend-on-Sea, compared with statistical neighbour local authorities and the England average.

**Figure 4: Alcohol specific hospital admissions, males, all ages directly standardised rate per 100,000 population (2010/11)**

![Bar chart showing alcohol-specific hospital admissions for men in Southend-on-Sea, compared to England and statistical neighbour local authorities.](chart)

Figure 4 shows that there are fewer alcohol-specific hospital admissions for men of all ages in Southend-on-Sea compared to the England average and statistical neighbour local authorities.

Figure 5 similarly highlights that alcohol-specific hospital admissions for women of all ages are lower compared to the England average and the majority of statistical neighbour local authorities. The rate of alcohol-specific hospital admissions for women is just over half that of men in Southend-on-Sea.

Alcohol-specific hospital admissions for young people under the age of 18 years are significantly lower than the England average (37.74 per 100,000 population versus 55.79 per 100,000 population, respectively).
3.5.2 Alcohol-Attributable Hospital Admissions

Alcohol-attributable hospital admissions refer to those conditions that are wholly or partially attributable to alcohol, and includes conditions such as hypertension, cardiac arrhythmias, falls, epilepsy and breast cancer.

Figure 6: Alcohol-attributable hospital admissions, males, all ages directly standardised rate per 100,000 population (2010/11)
Figures 6 and 7 show that the rate of alcohol-attributable hospital admissions is higher for men and women in Southend-on-Sea compared with the England average. They also highlight that men in Southend-on-Sea have almost double the rate of alcohol-attributable hospital admissions compared to women (1609.88 per 100,000 population compared to 904.49 per 100,000 population).

**Figure 7: Alcohol-attributable hospital admissions, females, all ages directly standardised rate per 100,000 population (2010/11)**

Figure 8 identifies that the rate of alcohol-attributable hospital admissions for men in Southend-on-Sea has increased steadily over the five year period 2005-2010, and has remained higher than the England average over this time.

Similarly, Figure 9 highlights a similar increasing trend of alcohol-attributable hospital admissions for women in Southend-on-Sea, with higher rates than the England average, but more closely aligned to rates in comparator groups of local authorities.
3.6 Alcohol and Sexual Health

There is a strong relationship between alcohol and poor sexual health outcomes. Excessive alcohol consumption is associated with unplanned pregnancies, sexually transmitted infections and sexual assault\textsuperscript{15}.
Drinking alcohol decreases inhibition, increases confidence, and has a detrimental effect on judgement that can influence decision making around sex and condom or contraception use.

Early regular alcohol consumption is associated with an early onset of sexual activity. Boys and girls are more than three and four times as likely, respectively to report having sex under the age of 16 if they also report early onset of regular alcohol consumption. There is also a strong correlation between having sex early and other risk taking behaviours such as substance use and smoking.

Early alcohol use has also been proposed as a marker of future sexual risk, including higher rates of unplanned sex, low condom use, multiple sexual partners, sexually transmitted infections and unintended pregnancy.

Men and women who drink hazardously are also significantly more likely to report multiple sexual partners, and the number of partners appears to increase with the amount of alcohol consumed.

Alcohol is a major factor in sexual assaults. The 2011/12 Violent Crime and Sexual Offences statistics for England & Wales found that 41% of female victims believed their assailant to be under the influence of alcohol during a serious sexual assault, and a third of the victims themselves had also been under the influence of alcohol. In Southend-on-Sea in 2011/12, the rate of alcohol-related sexual offences was 0.19 per 1000 persons compared to 0.13 per 1000 persons in England.

3.7 Alcohol and Pregnancy

If a woman drinks during pregnancy, the alcohol passes through the placenta to the foetus. As the foetal liver has only about 10% of the ability of the adult liver to detoxify alcohol and the amniotic fluid acts as a reservoir, the foetus can be exposed to greater amounts of alcohol for longer periods of time.

Binge drinking during pregnancy is associated with miscarriage, stillbirth, premature birth and low birth weight. Heavy drinking during pregnancy can also lead to a range of disabilities known as foetal alcohol spectrum disorder, of which foetal alcohol syndrome is the most severe.

Foetal alcohol syndrome is characterised by a pattern of anomalies including:

- Central nervous system neurodevelopmental abnormalities: abnormally small head at birth, structural brain abnormalities and hearing loss
- Learning difficulties, problems with emotional development and behaviour, memory and attention deficits, hyperactivity, difficulty in organising and planning, and problems with language
- Abnormal facial features, including small and narrow eyes, a smooth area between the nose and lips and a thin upper lip
- Additional problems including psychiatric problems, a disrupted education, trouble with the law, alcohol and drug problems.

There is clear evidence that heavy drinking adversely impacts on the developing foetus. However, it is still unclear whether there is any safe level of maternal alcohol
consumption. This has led to variation in the guidelines in the UK on alcohol consumption during pregnancy.

The UK Department of Health (2006) advises against pregnant women, or women trying to conceive, drinking alcohol. If expectant mothers choose to drink “they should not drink more than 1 to 2 units of alcohol once or twice a week and should not get drunk”\(^\text{19}\).

In 2008, the National Institute for Health and Clinical Excellence (NICE) published a separate set of guidelines. These advise that women shouldn't drink at all in the first three months of pregnancy, because there may be an increased risk of harm to the unborn baby and/or miscarriage, and if women choose to drink alcohol thereafter they should drink no more than one to two units once or twice a week\(^\text{20}\).

The Department of Health alcohol guidelines are currently being reviewed by the Chief Medical Officer for England.

3.8 Other Alcohol Related Harm

Alcohol is too often viewed as a problem for individuals rather than for society. This is not the case. The broader social effects of alcohol consumption are complex and wide-ranging.

As well as causing harm to health, alcohol misuse is also strongly linked to antisocial behaviour, public disorder and violence, including domestic abuse and sexual assault.

Alcohol consumption and, in particular, binge-drinking increases the risk of being a victim of violence; usually through decreased physical capacity and compromised decision-making. It also increases the likelihood of perpetrating violence through reduced inhibition and increased aggression.

Alcohol consumption, especially at harmful and hazardous levels, is a major contributor to the occurrence of intimate partner violence, which may be physical, psychological or sexual harm to those in the relationship\(^\text{21}\).

In the UK, it has been estimated that 89% of victims of on-going domestic or sexual abuse are female. Domestic abuse accounted for 39% of all violent incidents in England & Wales, 2011/12. Victims may also use alcohol as a coping mechanism and, in some cases, this may be used by violent partners as an excuse for continued abuse\(^\text{22}\).

Alcohol misuse can also significantly impact on family life. Marriages where there are alcohol problems are twice as likely to end in divorce.

Parental alcohol misuse is also correlated with child abuse and significantly impacts on a child’s environment in many social, psychological and economic ways.

Single parent households, low income and parental unemployment are all significant risk factors for heavy alcohol use by children and young people\(^\text{23}\).
3.9 Drink Driving

Drink driving in the UK is defined as the act of driving a motor vehicle while under the effects of alcohol. It is a criminal offence to drive with blood levels of alcohol in excess of the legal limit of 0.8 milligrams of ethanol per ml of blood, as set in the Road Safety Act 1967.

The adverse short and long-term effects of alcohol misuse on judgement, coordination and reactions are a common cause of road traffic collisions involving intoxicated drivers and other intoxicated road users.

In the last 30 years road casualties caused by drink driving have fallen dramatically. However, in 2011 there were still:

- 9,990 reported casualties (5% of all road casualties) when someone was driving whilst over the legal alcohol limit
- 280 deaths due to drink driving accidents, accounting for 15% of all road fatalities. This is an increase of 30 fatalities (12%) compared to 2010
- 8,430 slight casualties, an increase of 220 (3%) compared to 2010

Women drivers are much less likely to be involved in a drink drive accident than men. In 2010, only a quarter of the total casualties in drink drive accidents were women.

Initiatives to reduce drink driving related casualties include breath testing with strong enforcement of the law and the promotion of strong anti drink-drive messages targeted primarily at young men in their late twenties, who are over-represented in accidents.

In Southend-on-Sea, there were 5 recorded deaths between 2008 and 2010 from land transport accidents attributable to alcohol.

3.10 The costs of Alcohol to Society

The cost of alcohol misuse in the UK is substantial and can be divided into four broad categories:

- Healthcare service costs – including costs to primary care services and hospital services (A&E, medical and surgical inpatient services, paediatric services, psychiatric services, and outpatient departments) of alcohol-related morbidity and mortality
- Cost of alcohol-related crime, disorder and anti-social behaviour – including costs to the criminal justice system, costs to services (e.g. social work services), costs of drink-driving, and the human cost of alcohol-related harm (e.g. domestic abuse, assault)
- Loss of productivity and profitability in the workplace – including costs to the economy from alcohol-related deaths and alcohol-related lost working days
• **Impact on family and social networks** – including human and emotional costs such as breakdown of marital and family relationships, poverty, loss of employment, domestic and child abuse, homelessness and other drug use.

Alcohol misuse is now estimated to cost the NHS £2.7 billion a year, almost twice the equivalent figure in 2001. But the cost of alcohol to society as a whole is even greater, estimated to stand at £21 billion, and by some estimates is as high as £55 billion.

4.0 **Actions To Tackle Alcohol-Related Harm**

4.1 **National Initiatives**

The most effective alcohol policies are those that combine measures addressed at the whole population, in particular increasing price and decreasing availability, as well as targeting groups who are vulnerable or disadvantaged, where the risk of harm may be greatest.

A reduction in alcohol consumption at population level is needed, together with focused programmes aimed at specific risk groups such as young binge-drinkers and older harmful drinkers. UK Government strategies to reduce alcohol-related harm need to be applied much more robustly, backed up with legislation and regulation where voluntary codes are failing.

The Government’s Alcohol Strategy published in 2012 focuses strongly on the problem of binge drinking, and the harms it causes to people’s health and to society.

The strategy includes commitments to:

• introduce a minimum unit price for alcohol
• consult on a ban on the sale of multi-buy alcohol discounting
• introduce stronger powers for local areas to control the density of licensed premises including making the impact on health a consideration for this
• pilot innovative sobriety schemes to challenge alcohol-related offending

The strategy includes six outcomes that the Government wants to see:

• A change in behaviour so that people think it is not acceptable to drink in ways that could cause harm to themselves or others
• A reduction in alcohol-fuelled violent crime
• A reduction in adults drinking above the NHS guidelines
• A reduction in “binge drinking”
• A reduction in alcohol-related deaths and
• A sustained reduction in 11-15 year olds drinking alcohol and the amounts consumed

4.1.1 **The Price of Alcohol**

Increasing the price of alcohol through taxation reduces the average amount consumed per person. There is clear evidence that reductions in alcohol
consumption achieved through price increases translate into reductions in alcohol-related harms\textsuperscript{26}.

Over the last thirty years, the affordability of alcohol in the UK has increased despite rises in alcohol taxes. In the UK, between 1980 and 2010, alcohol prices increased faster than the rate of inflation but the affordability of alcohol also increased by 48% because of the increase in households’ disposable income. Over the same period, despite the rise in real alcohol prices, alcohol consumption per head of population increased by 8.5\%\textsuperscript{27}.

The effect of taxes has not been to reduce harm, but to contain the increase in harm caused by rising incomes and greater consumer purchasing power. A more robust approach to the taxation of alcohol would link tax increases, not to retail prices, but to the affordability of alcohol. The affordability of alcohol is profoundly affected by the actions of retailers. On their own, tax rises are unlikely to stem the tide of very cheap alcohol.

In Britain, the widespread use of discounting and price promotions in the retail sector has been a key driver of the rise in the affordability of alcohol, a rise that has been strongly correlated with increased consumption and alcohol-related harm. Alcohol sales are a key focus of price competition between supermarkets, and increases in alcohol taxes are not always passed on to consumers. Some products, such as high strength ciders, are consistently available at very low prices.

Of all the alcohol sold, very cheap alcohol products play the biggest part in driving alcohol-related harm. On average, harmful drinkers buy 15 times more alcohol than moderate drinkers, yet pay 40\% less per unit\textsuperscript{28}. This problem can be tackled effectively by setting a minimum price for all alcohol products based on their alcohol content.

Minimum pricing directly links price to alcohol content, by setting a price below which alcohol cannot be sold. The effect of such a policy is to selectively raise the price of the cheapest alcohol products while leaving the price of most drinks, including those served in restaurants and bars, unchanged. Minimum unit pricing will primarily target harmful and hazardous drinkers, with comparatively little impact on the spending of moderate drinkers.

The exact level and timing for minimum unit pricing has yet to be decided in England. In Scotland, minimum unit pricing has been agreed and set at 50 pence per unit.

Modelling of the impact of the introduction of a minimum unit price of 50p in England is expected to result in a 6.7\% reduction in average alcohol consumption per drinker, leading to the following benefits after ten years\textsuperscript{29}:

- 3,100 lives saved every year
- 41,000 fewer chronic illnesses and 14,000 fewer acute illnesses per year
- 98,000 fewer hospital admissions per year
- 43,000 fewer crimes per year including 11,000 fewer violent crimes
- 442,000 fewer days of absence from work per year

Similarly, modelling\textsuperscript{24} shows that increasing restrictions in off-trade discounting (i.e. through multibuys) does have increasing effects in a similar way to minimum pricing.
Restrictions to 40%, 30%, 20% and 10% discounting give estimated consumption changes of -0.1%, -0.3%, -1.6%, -2.8% respectively. A 2.8% reduction in consumption is similar to the change estimated for a 40p minimum price.

4.1.2 Public Health Responsibility Deal

The Government launched the Public Health Responsibility Deal in 2011, in recognition of the contribution of businesses for improving public health and helping to tackle health inequalities through their influence over food, physical activity, alcohol, and health in the workplace. Businesses committing to the Responsibility Deal sign up to five core commitments, and a number of collective and individual pledges appropriate to their business. The core commitment for alcohol is:

“We will foster a culture of responsible drinking, which will help people to drink within guidelines”

The pledges cover the following commitments:

- Alcohol labelling
- Awareness of alcohol units in the on-trade
- Awareness of alcohol units, calories and other information in the off-trade
- Tackling under-age sales
- Support for Drinkaware
- Advertising and marketing alcohol
- Community actions to tackle harms
- Alcohol unit reduction

4.1.3 Licensing and Regulation

The Licensing Act 2003 establishes a single integrated scheme for licensing premises which are used for the sale or supply of alcohol, to provide regulated entertainment, or to provide late night refreshment. Permission to carry on some or all of these licensable activities will now be contained in a single premises license.

Responsibility for issuing licenses now rests with local authorities, who are required to have a Licensing Committee. From April 2012, local health bodies also became ‘responsible authorities’ under the Licensing Act 2003, and are now notified of any application for a license to supply alcohol. From 1st April 2013 the public health function transferred to upper-tier local authorities. This move now provides the opportunity for using health data to help identify any areas where alcohol-related harm is more likely to occur and help to inform the debate on the issuing or renewal of licenses to supply alcohol in an area.

The regulation section of the Licensing Act 2003 strengthens the rules on selling alcohol to under 18s. Trading Standards Services have a duty to enforce the controls on alcohol sales and a fine of up to £5000 can be imposed on premises found to be selling alcohol to young people under 18 years of age.

4.2 Alcohol Misuse Interventions

Early identification and treatment of an individual’s alcohol problems can help to
reduce the host of health and social problems that arise with more serious alcohol misuse. Although people with alcohol problems can present to a number of different services, their problems are often not picked up. This is due to a number of reasons, such as a lack of recognition by staff that this is part of their role, or the lack of skills to do so.

Screening is a method of identifying alcohol use at a level sufficiently high to cause concern and may be undertaken using either a specific tool such as the Alcohol Use Disorders Identification Test (AUDIT) or take the form of relevant questions asked during the course of any consultation, e.g. at a GP surgery.

Those individuals identified as hazardous or harmful drinkers may benefit from brief interventions. Brief interventions are characterized by their low intensity and short duration. They are designed to increase motivation to change drinking behaviour, as well as provide simple advice, health education, skill building, and practical suggestions.

Brief interventions can range from 5 minutes of simple advice on how to reduce hazardous drinking to several sessions of brief counselling to address more complicated conditions. Brief interventions are highly effective as well as cost-effective.

Brief alcohol interventions have recently been introduced as part of the NHS Health Check for people aged 40-74 years of age.

4.3 Local Initiatives

There is a wide range of initiatives in Southend-on-Sea to raise the awareness of sensible drinking and deal with aspects of alcohol-related harm. The majority are delivered with a broad range of agencies.

4.3.1 Night Time Economy

Over the last few years town centres have become increasingly focused on the night time economy, with an associated growth in licensed premises.

Southend-on-Sea has a vibrant night time economy and there has traditionally been a close working relationship between the police, Southend-on-Sea Council, and representatives from bars and nightclubs within the town.

4.3.1 Purple Flag Award

The Purple Flag award is a national initiative by the Association of Town Centre Management in close partnership with the Home Office and other sponsors. The core principles of the award include the requirement to demonstrate action and commitment to the wellbeing of their visitors, offer a vibrant choice of leisure and entertainment for different age groups, and that excessive drinking is tackled consistently and robustly by business, the police and local authorities working together.

Southend-on-Sea has recently been awarded the Purple Flag in recognition of its excellent night time economy for the second year running.
4.3.1 SOS Bus

Since 2006, the YMCA SOS bus has provided a safe haven in Southend-on-Sea town centre for vulnerable people of all ages on Friday and Saturday nights. The converted double decker bus is staffed by a range of trained and experienced volunteers, including youth and voluntary workers, alcohol and drug advisors, and first aiders. The bus provides basic first aid, counselling, and literature on alcohol and drug education. It is a safe environment for people under the influence of alcohol or drugs.

In 2012, the SOS bus helped over 1,300 people, of which over 500 received emergency first aid. The volunteers have recently received the Queen’s Award for Voluntary Service.

Examples of other initiatives to reduce alcohol-fuelled disorder in Southend-on-Sea town centre include CCTV, controlled drinking areas and fixed penalty notices.

4.3.2 Alcohol Liaison Nurse

Southend-on-Sea Borough Council is currently commissioning Southend-on-Sea Hospital to provide an alcohol liaison nurse service. This service will include the medical management of patients with alcohol problems in the hospital; liaison with community alcohol and other specialist services; education and support for other healthcare workers in the hospital and delivery of brief interventions within the hospital with a focus on key groups.

4.3.3 Brief Interventions

Brief interventions training is included as part of the training the ‘Making Every Contact Count’ initiative. The Council’s Public Health team is working closely with Southend Adult Community College on a ‘train the trainer’ scheme for Making Every Contact Count, which will help to increase the number of frontline staff trained to give lifestyle advice and undertake screening and brief interventions with people at risk from their levels of drinking.

4.3.4 Young People and Under-Age Drinking

The Drug and Alcohol Commissioning Team (DACT) continue to offer and deliver programmes of basic drug and alcohol awareness training to partner agencies. This includes consideration of substance misuse among young people themselves and also the impact of parents’ and others’ substance misuse on young people. 108 people attended the DACT-led training during 2012/13, with further sessions confirmed across the coming year.

4.3.5 Drink Driving and Road Safety

The Southend-on-Sea Borough Council Road Safety Team actively promotes the drink driving message.

‘Drink Drive’ campaigns run at key points within the year. The winter campaign forms
part of the ‘Winter Driving’ initiative. There has also been a ‘Drink Drive’ campaign throughout the summer of 2013 in association with Essex Fire and Rescue Services. This has incorporated a roadshow in Southend High Street, displays placed in public houses and the Civic Centre and specific awareness raising with key staff groups within Southend-on-Sea Borough Council.

5.0 Recommendations

- A multi-agency group should be formed to refresh the Southend-on-Sea Alcohol Harm Reduction Strategy and identify partnership actions to tackle alcohol related harm
- Sexual health services should provide information that highlights the link between alcohol consumption and poor sexual health outcomes and signpost sources of useful advice on drinking sensibly. They should provide clear information about self-referral options as additional support for people wishing to reduce their alcohol intake
- Clinicians providing sexual health services should be trained in asking about drinking habits through use of a recognised screening tool and implementing a single brief intervention
- Deliver an alcohol awareness campaign when the new sensible drinking guidelines are published by the Chief Medical Officer for England
- Work with small and medium enterprises in Southend-on-Sea to sign up to alcohol pledges as part of the Southend-on-Sea Public Health Responsibility Deal.

3 DH(2009) Guidance on the consumption of alcohol by children and young people. A report by the Chief Medical Officer
7 Ng-Fat, L and Fuller, E (2011) Health Survey for England2011 Volume 1 Chapter 7: Drinking Patterns HSCIC
8 NICE(2011) CG115 Alcohol use disorders: diagnosis , assessment and management of harmful drinking and alcohol dependence
9 PHE (2012) Local Alcohol Profiles for England

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CHAPTER 5

Sexual Health

Key Points

- The most commonly diagnosed Sexually Transmitted Infection in England and Southend was Chlamydia
- England has higher rates of teenage pregnancy than other Western European countries
- The teenage pregnancy rate in Southend has reduced by 27% over the last ten years

1.0 Background

Sexual health has a significant impact on an individual’s physical health and mental wellbeing and is central to some of the most important and lasting relationships in our lives. It is essential that we can easily access appropriate information and services in order to maintain good sexual health.

The World Health Organisation (WHO) definition highlights that sexual health:

- is about well-being, not merely the absence of disease
- involves respect, safety and freedom from discrimination and violence
- is relevant throughout the individual’s lifespan, not only to those in the reproductive years, but also to both the young and the elderly
- is expressed through diverse sexualities and forms of sexual expression and influenced by gender norms, roles and expectations

There is a strong link between social deprivation and poor sexual health, which is seen in the higher rates of unintended teenage conceptions and sexually transmitted infections that are prevalent in areas of high socio-economic deprivation. This pattern becomes cyclical since poor sexual health increases the risk of reduced social, economic and health prospects.

All local authorities in England, including Southend-on-Sea, face significant challenges to improve the sexual health of their population. Nationally and locally, there has been in increase in the number of new cases of sexually transmitted infections (STI) diagnosed between 2009 and 2012. A number of factors have contributed to this increase including better data quality, more testing for diseases such as gonorrhoea in high risk groups and new technology. In addition, chlamydia data was only reported for people aged 15 – 24 years old until 2012, and now includes those aged over 24 who have been tested in the community setting.

Changes to data collection and surveillance methodology for other sexually transmitted infections, also introduced in 2012, make it impossible to directly compare with STI and chlamydia data collected in previous years. The overall evidence does, however, appear to support the fact there has been an increase in the number of new cases of STI in this period.
The trend charts compare Southend-on-Sea with other local authorities within the Anglia and Essex Public Health England Centre Region (AEPHER), as STIs are communicable diseases, and control measures or preventative interventions need to take account of the local context. It is therefore important to take account of the ‘interface’ between the sexually active population in Southend-on-Sea and its geographical/regional neighbours.

2.0 Epidemiology

Sexual health, like physical and mental health, can be defined in positive terms, but it is measured by things that are seen as negatives, i.e. rates of unintended teenage conceptions and sexually transmitted infections.

3.0 Sexually Transmitted Infections

3.1 The National Context

In 2012, the total number of new cases of STIs, including chlamydia, diagnosed in England through Genitourinary Medicine clinics (GUM) and community based settings, increased by 5%. Of these new cases, the most common STIs were chlamydia (46%), genital warts (16%), genital herpes (7%), and gonorrhoea (6%). The limitation of comparing previous year’s data with 2012 due to changes in surveillance methods has already been discussed.

3.2 The Local Picture

In Southend-on-Sea, there were 1145 newly diagnosed cases of STIs in 2012. Chlamydia was the most common STI (45%), followed by genital warts (25%) and genital herpes (10%).

3.2.1 Chlamydia

Chlamydia is the most common bacterial sexually transmitted infection with one in ten of 15-24 year olds believed to be infected. If untreated, Chlamydia can lead to serious complications in women, such as pelvic inflammatory disease and infertility.

In recognition of the impact chlamydia has on the sexual health of the population, the National Chlamydia Screening Programme (NCSP) was established in 2003. In 2012, a total of 1.7 million young people aged 15 to 24 were tested, of which 136,961 tested positive, equivalent to a diagnosis rate of 1,979 per 100,000 population. In order to reduce the prevalence of chlamydia in the population, the evidence suggests the diagnosis rate needs to be 2,300 per 100,000 population.

In Southend-on-Sea, 4,958 chlamydia tests were undertaken in 2012, with a local diagnosis rate of 1,791 per 100,000 population. A total of 510 Southend-on-Sea residents tested positive for chlamydia in 2012; 71% of these were aged 15 to 24 years.

Southend-on-Sea had the fourth highest rate of positive diagnosis for chlamydia of all upper tier local authorities in the AEPHER. The high positive rate in Southend-on-Sea could indicate a higher prevalence of chlamydia or differences in local testing coverage compared to other areas. This latter point is reinforced by national
data that suggests considerable geographic variation in rates of chlamydia diagnoses across England.

Figure 1 provides an overview of the rate of diagnosis of chlamydia in Southend-on-Sea compared to England and other local authorities within the AEPHER. Nationally, approximately 35% of women and 16% of men aged 15 to 24 were tested for chlamydia in 2012 which compares closely to local figures (36% of women and 13% of men aged 15 to 24).

**Figure 1: Rate of acute STI diagnoses: Chlamydia per 100,000 population, 2009-2012**

Source: Public Health England HIV and Sexually Transmitted Infections Department 2013

### 3.2.2 Genital Warts

Southend-on-Sea had the second highest rate of diagnosis (150.9 per 100,000 population) of genital warts in the AEPHER in 2012, which was significantly higher than the England and regional rate. Figure 2 provides an overview of the rates of infection for genital warts between 2009 and 2012.
3.2.3 Gonorrhoea

Gonorrhoea is the second most common bacterial sexually transmitted infection in the UK, which, if untreated, can cause pelvic inflammatory disease, ectopic pregnancy and infertility in women, and can cause fertility problems in men. There were over 25,000 new cases of gonorrhoea diagnosed in England in 2012. This is a significant increase compared to 2011, a year that had seen a rise of 25% new cases from 2010. The disease mainly affects young heterosexuals and men who have sex with men (MSM). In this latter group, gonorrhoea was the most commonly diagnosed STI in 2012. This increase is most likely due to new gonorrhoea testing guidance introduced in 2011. New test protocols are able to establish gonorrhoea infection in specific bodily sites in MSM that previous tests had not been able to do.

Figure 3 provides an overview of the scale of the problem from 2009 to 2012. In Southend-on-Sea in 2012, the rate of infection for gonorrhoea was 24.9 cases per 100,000 population, the third highest in the AEPHER.
3.2.4 Syphilis

Syphilis is caused by a bacterium-like organism. Untreated, syphilis may lead to serious health problems, affecting the heart, respiratory tract or central nervous system. Nationally, there is concern about the increased rate of positive diagnosis of syphilis. In 2012, the rate of infection in England was 5.4 persons per 100,000 population, compared to 7.4 persons per 100,000 population in Southend-on-Sea.

The Southend-on-Sea rate is the highest in the AEPHER. Infection with syphilis is commonly related to infection with other STIs such as HIV. People co-infected with HIV and STIs are more likely to transmit HIV during sex. 21% of MSM diagnosed with HIV infection were simultaneously diagnosed with an acute STI, compared to 4% heterosexual men and 3% women.

3.2.5 Human Immunodeficiency Virus (HIV)

3.2.5i HIV - The National Context

HIV is a virus that attacks the body’s immune system, weakening its ability to fight infection and disease. The UK has one of the highest rates of HIV infection in Europe with a disproportionate number of diagnoses of HIV amongst MSM and black African men and women, compared to the general population.

In 2011 an estimated 96,000 people were living with HIV in the UK, giving an HIV prevalence of 1.5 persons per 1,000 population.

New HIV diagnoses among MSM have been increasing since 2007, with 3,010 reports in 2011 in the UK, representing an all-time high. It is believed the reason for the higher diagnosed prevalence of HIV in black African women is the greater opportunity to test these women for HIV when they use antenatal services.
Whilst there is currently no cure, advances in drug therapy now mean those living with HIV infection are able to live long and productive lives. Each new case of HIV infection is estimated to represent between £280k and £360k in lifetime treatment costs. In 2011, 47% of HIV diagnoses in the UK were made at a late stage of infection. Late diagnosis is the most important predictor of morbidity and mortality among people infected with HIV. People diagnosed late have a tenfold increased risk of dying within a year of diagnosis. Early testing and diagnosis of HIV can also reduce treatment costs from £23k per annum for people diagnosed late, down to £12k per annum\(^4\).

Figure 4 provides an overview of the national trend of HIV infection from 2005 to 2010.

**Figure 4: UK breakdown of New HIV and AIDS diagnoses, people living with diagnosed HIV, and deaths: United Kingdom, 2001-2010**

<table>
<thead>
<tr>
<th>Year</th>
<th>New HIV and AIDS Diagnoses</th>
<th>People Living with Diagnosed HIV</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7000</td>
<td>8000</td>
<td>1000</td>
</tr>
<tr>
<td>2006</td>
<td>7500</td>
<td>8500</td>
<td>1200</td>
</tr>
<tr>
<td>2007</td>
<td>8000</td>
<td>9000</td>
<td>1400</td>
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<td>9500</td>
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</tr>
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<td>9000</td>
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<td>1800</td>
</tr>
<tr>
<td>2010</td>
<td>9500</td>
<td>10500</td>
<td>2000</td>
</tr>
</tbody>
</table>

*Source: HIV in the United Kingdom: 2011 Overview (HIV and AIDS Reporting System)*

### 3.2.5ii HIV – The Local Picture

In 2011, there were 281 people diagnosed as living with HIV infection in Southend-on-Sea. Southend-on-Sea is considered to be a high prevalence area with 2.76 cases per 1,000 population aged 15-59\(^4\). High prevalence areas are defined as localities where the diagnosed prevalence of HIV is 2 or more cases per 1000 population aged 15-59.

There were more people diagnosed late with HIV in Southend-on-Sea in 2011 than nationally (58% and 47%, respectively). This increases the risk of transmission of the disease to new partners.

Local action is being taken to tackle this issue. In 2012, there were 3,186 new GUM attendances for Southend-on-Sea residents eligible for an HIV test. Of these, 93% were offered an HIV test with an 80% uptake. The data in Table 1 highlights that Southend-on-Sea has one of the highest levels of uptake of HIV testing in those being offered a test in the AEPHER.
Unintended Teenage Pregnancy

Unintended teenage pregnancy is a serious social problem with rates of teenage pregnancy being far higher among deprived communities, so the negative consequences are disproportionately concentrated among those that are already disadvantaged. The evidence suggests that teenage parenthood often results in poor health, under-achievement and low earnings for the mother and child\(^2\).

In the period 2001 to 2011 there was a significant reduction in the rate of teenage pregnancies in England (28%). The rate of pregnancies in those aged 15-17 years fell from 42.5 per 1000 population to 30.7 per 1000 population.

The unintended teenage pregnancy rate in Southend-on-Sea is higher than the national average, but it has been reduced by 27% in the ten years to 2011 (47.4 to 34.8 per 1000 population) and the trajectory is downward. Figure 5 provides a breakdown of the 10 year trend.

Figure 5 Under 18 conceptions (females aged 15 to 17) 2001-2011

![Graph showing under 18 conceptions](Image)

Source: Office For National Statistics 2013
5.0 Outline of the Problem

5.1 Public Health Challenges of Poor Sexual Health

Poor sexual health can have serious consequences on the health of individuals and contributes to a significant burden on the health of the population.

The recent increases in the number of people newly diagnosed with STIs, the growth in HIV cases and the re-emergence of some infections such as syphilis are of concern.

Some of this increase is thought to be driven by changing trends in sexual practices and behaviour within the UK population. The evidence suggests more people of all ages are having more sexual partners. This places more people at risk of infection or re-infection (if they have been treated and do not take appropriate steps such as the use of barrier protection when they engage with new partners).

The average age at first sexual intercourse has also declined in recent years. Young people generally have higher numbers of sexual partners than older people, and are more likely to be under the influence of drink or drugs the first time they have sex.

5.2 Alcohol, Sexual Health and Unintended Teenage Pregnancy

The national and local trend in teenage conceptions is down since the inception of the National Teenage Pregnancy Strategy in 1998; however, the UK still has the highest rate of teenage pregnancy in Western Europe. Unintended teenage pregnancy can have far reaching consequences for the mother and the child. Teenage mothers are more likely to suffer postnatal depression and less likely to complete their education. Their children are less likely to be breastfed and consequently more at risk of illnesses preventable through breast feeding; more likely to live in poverty, and more likely to become teenage parents themselves.

There is strong evidence to suggest alcohol consumption plays a significant role in increasing the risk of STIs and unintended teenage conceptions in young people. Research has found an association between increased rates of teenage pregnancy in females and STIs in males and females aged 15-19, following only one alcohol-attributable hospital admission.

Given young people are more likely to drink hazardous amounts and have multiple sexual partners, tackling the issues associated with hazardous alcohol consumption in this population should help to reduce the high rate of STIs in people of this age.

Every person attending a GUM appointment or sexual health service in the community should be opportunistically screened for alcohol use. Closer follow up by support services of young people, particularly young women admitted to hospital for an alcohol-attributable condition, may also help reduce the likelihood of unintended teenage pregnancy.

5.3 Sexual Health and the ‘At Risk’ Groups

The burden of sexual ill health falls disproportionately on women, MSM, young
adults, and black and minority ethnic groups. There is a strong correlation between a high incidence and prevalence of STIs and poor sexual health outcomes and areas of high disadvantage.

It is important that those segments of the population who are at greater risk of STIs are not stigmatised. If they consider that they are being marginalised or associated negatively with HIV or STIs in general, they are less likely to come forward for screening or testing. Action is required to engage sensitively with these groups to facilitate access to prevention, screening and treatment programmes.

A similar relationship between deprivation and a positive diagnosis of chlamydia in males and females aged 15 to 19 has been demonstrated. A positive diagnosis of chlamydia in this population was also found to be associated with an alcohol-attributable hospital admission.

The impact of chlamydia on the health of the population has resulted in a national target being established to screen and treat those infected. The Public Health Outcomes Framework (PHOF) recommends:

"The achievement of a chlamydia diagnosis rate among 15 to 24 year olds of at least 2,300 per 100,000 population"

Southend-on-Sea achieved a diagnosis rate of 1791 per 100,000 population in 2012, which was the second highest in the AEPHER.

Nationally, the number of diagnoses of STIs reported in MSM has continued to rise between 2010 and 2012. Of particular concern are gonorrhoea diagnoses which have increased by 37% in the past year (7,851 to 10,754 diagnoses). This could be a result of new data collection methodology and diagnostic testing introduced in 2011.

There appears to have been an increase in the rates of other STIs in this population including HIV, suggesting risky behaviour and unsafe sexual practices. The high levels of gonorrhoea transmission in MSM are of particular concern, given that the disease is becoming resistant to drugs normally used to treat the infection.

5.4 The Financial Benefits of Improving Sexual Health

The evidence suggests that for every £1 spent on contraceptive services, there is a return of £11 to the local health and social care economy. As discussed in section 3.2.5i there are considerable financial benefits to be gained through preventing infection with HIV. Investment in preventative programmes that facilitate early diagnosis of HIV will enable these people to access therapy earlier, thus reducing the likelihood of onward transmission.

In Southend-on-Sea, there are a number of initiatives being delivered to improve sexual health and reduce teenage pregnancy, including:

**Kingsley-Ward Instant Check:** The Kingsley-Ward Instant Check Service offers a quick and easy route to screening for sexually transmitted infections in a Community Contraceptive and Sexual Health Service. The service provides advice and screening for HIV, syphilis, chlamydia and gonorrhoea. Testing is offered on a
drop-in no appointment necessary basis, with no examination, just a simple blood test and self-swab or urine sample.

**Education-based health services:** Education-based health services offer a dedicated drop-in service in a number of secondary schools. The services provided include a broad range of health promotion activities covering sexual health, Chlamydia screening, smoking interventions, weight management as well as substance misuse.

**Chlamydia screening programme:** The ruClear? screening programme in Southend-on-Sea offers Chlamydia screening to young people under 25. Screening is available for young men and women and can be accessed at a number of places including educational establishments, general practice, sexual health services, and youth services. Testing kits, including postal kits, can also be requested through a dedicated website (www.ruclear.nhs.uk) and text message service and ‘freetest.me’, an online free chlamydia testing service for local residents aged up to 25. The ruClear? Chlamydia screening programme is a high-profile campaign with high visibility advertising and events and professional training.

**Teenage pregnancy:** The reduction in teenage pregnancy in Southend-on-Sea has been achieved by adopting an integrated and collaborative approach to partnership working including working, with the Family Nurse Partnership programme, embedding a teenage pregnancy care pathway; training professionals on sexual health matters; supporting young parents and parents to be, and establishing a comprehensive Teenage Pregnancy Strategy.

**HIV prevention:** An HIV needs assessment has helped to inform the service specification for a new HIV Prevention Service and Sexual Health Promotion Service, to prevent STI transmission and encourage people (particularly MSM and other hard to reach groups) to access screening so they can be diagnosed and treated.

**HIV services:** Local HIV services provided by Southend University Hospital NHS Foundation Trust continue to provide clinical patient support and on-going case management of HIV positive patients. The service also provides professional educational support to a number of services, including hospital departments and general practice. General HIV and AIDS awareness sessions are also provided within local schools and colleges.

**Genito-urinary medicine (GUM) clinic quick check:** The GUM Clinic Quick Check provides a quick and easy route to screening for sexually transmitted infections. The service provides advice and screening for HIV, syphilis, chlamydia and gonorrhoea. Testing is offered through an appointment or a walk-in basis. There is no examination, just a simple blood test and self-swab or urine sample.

### 6.0 Recommendations

- Develop a comprehensive sexual health strategy for Southend-on-Sea
- Review, redesign and commission an integrated sexual health service and pathway for Southend-on-Sea
• Develop a bespoke social marketing programme for Southend-on-Sea that normalises sexual health screening in the context of chlamydia in the most disadvantaged communities in the borough

• Implement alcohol brief interventions for all attendees at GUM and community sexual health settings

• Identify follow-up and engage with all young people admitted to hospital for an alcohol-attributable condition; signpost to appropriate agencies to enable screening for STIs and interventions to prevent unintended teenage pregnancy


GLOSSARY

Alcoholic cardiomyopathy: A disease in which the chronic long-term abuse of alcohol leads to heart failure.

AEPHER: Anglia and Essex Public Health England Centre Region

ASH: Action on Smoking and Health

AUDIT: Alcohol Use Disorders Identification Test

BFI: Baby Friendly Initiative

BMI: Body Mass Index. BMI is calculated by dividing an individual’s weight in kilograms by the square of their height in metres (kg/m²)

BMJ: British Medical Journal

Care Pathway: An agreed sequence of practices, procedures and treatments, that should be used with people, with a particular condition, in an appropriate time frame.

CCG: Clinical Commissioning Group

CVD: Cardiovascular disease - a term used for a family of diseases that can affect the heart and circulatory system (e.g. coronary heart disease, stroke, heart failure, chronic kidney disease)

DH: Department of Health

DSR: Direct standardised rate – this enables data sets to be compared more accurately between populations with a different age/sex profile

FSM: Free school meals: meal provided to a child or young person during a school break, paid for by Government

GHS: General Household Survey: an inter-departmental, multi-purpose, continuous survey carried out by the Office for National Statistics collecting information on a range of topics from people living in private households in Great Britain

GLS: General Lifestyle Survey: an inter-departmental, multi-purpose continuous, survey carried out by the Office for National Statistics collecting information on a range of lifestyle topics from people living in private households in Great Britain
GP
General Practitioner (doctor)

GUM
Genitourinary Medicine

Health Inequalities
Differences in people’s health between geographical areas and between different groups of people

Heart Failure
Heart failure is a serious condition caused by the heart failing to pump enough blood around the body at the right pressure

HENRY
Health Exercise and Nutrition for the Really Young: family based healthy lifestyle programme for parents and children

HMRC
HM Revenue & Customs

HIV
Human Immunodeficiency Virus

HPA
Health Protection Agency

HSCIC
Health & Social Care Information Centre: collects, analyses and publishes national data and statistical information for commissioners, analysts and clinicians

HSE
Health Survey for England: annual survey designed to measure health and health-related behaviours in adults and children

Incidence
Incidence is the number of newly-diagnosed cases of a disease or conditions in a population at risk

Intervention
Action to help someone improve their health action e.g. be more physically active or to eat a more healthy diet

IMD 2010
Indices of Multiple Deprivation: a number of indicators chosen to cover a range of economic, social and housing issues into a single deprivation score for individual neighbourhoods

LA
Local Authority

LAPE
Local Alcohol Profiles for England: 25 different indicators of harms associated with alcohol use for every local authority in England

LHO
London Health Observatory

LSOA
Lower Super Output Area: output areas are very small geographic areas, containing approximately 125 households (300 residents); LSOAs are aggregations of output areas, containing a minimum of 1,000 residents (average 1500)

MECC
Making Every Contact Count: using every opportunity to talk to individuals about improving their health and well-being
MEND: Mind, Exercise, Nutrition ... Do it!: family-based healthy lifestyle programme for parents and children

Morbidity rate: Morbidity is another term for illness. The rate is the number of people with a particular illness, injury or condition within an existing population in a particular period of time. A person can have several co-morbidities simultaneously.

Mortality rate: Mortality is another term for death. The rate is the number of deaths that occur in a population within a particular period of time. The rate is often given as a certain number per 100,000 people.

MSM: Men who have Sex with Men

NAO: National Audit Office

NCMP: National Childhood Measurement Programme

NCSP: National Chlamydia Screening Programme

NHS: National Health Service

NICE: National Institute for Health and Care Excellence

NOO: National Obesity Observatory

Obesogenic: Causing obesity

ONS: Office for National Statistics

PHE: Public Health England

PSHE: Personal, Social and Health Education

PHOF: Public Health Outcomes Framework

POPPPI: Projecting Older People Population Information

Primary Care: Healthcare delivered outside hospitals

QOF: Quality Outcomes Framework

Prevalence: The number of cases of a disease or condition existing in a population

Risk factor: Aspect of a person's lifestyle, environment or pre-existing health condition that may increase their risk of developing a specific disease or condition

SBC: Southend-on-Sea Borough Council
Secondary care Care provided in hospitals

Standardized mortality rate The death rates in a population adjusted to take account of population differences in age structure, in order to make the data comparable between areas

STI Sexually transmitted infection

SUHFT Southend University Hospital NHS Foundation Trust

Thromboembolism Formation of a clot within a blood vessel

UNICEF United Nations Children’s Fund

Wanless The Wanless Review – a major review to examine healthcare funding needs in the NHS, led by Sir Derek Wanless. Published by the Treasury in April 2002. Securing our Future Health: Taking a Long Term View was commissioned by Gordon Brown, the then Chancellor of the Exchequer, to help close unacceptable gaps in performance both within the UK and between the UK and other developed countries and set out NHS funding for the next 20 year

Weighted/Unweighted Corrected at analysis stage by a process known as ‘weighting’

WHO World Health Organisation