Chapter 5: Health and Wellbeing Status

5.1 Life Expectancy and Mortality

Life Expectancy

Life expectancy is a common measure of population health in general which is often used as a summary measure when comparing different populations. It indicates how long a person can expect to live on average given prevailing mortality rates. It is based on death registration data which are consistently recorded in all areas and gives more weight to deaths at younger ages.

Life expectancy in Thurrock is 8.3 years lower for men and 4.3 years for women in the most deprived areas than in the least deprived (health profile, 2011). The chart below represents life expectancy at birth between 2007 and 2009 for residents in Thurrock. Females resident in Thurrock had a higher life expectancy than their male counterparts which remain consistent with its comparator group.

Figure 5.1: Life expectancy at Birth 2007 – 2009

Figure 5.1 above shows life expectancy at birth for both males (78 years) and females (83 years) in Thurrock comparing that to England and East of England which is associated with deprivation.
Life expectancy at birth varies by deprivation quintiles and is highest in the most affluent/least deprived quintiles. The above chart shows life expectancy at birth for males and females (2005 – 2009) which is higher in quintile one (1 – least deprived) than quintile five (5 - most deprived) in Thurrock with a significant difference in life expectancy at birth between the most deprived and least deprived. Males have a lower life expectancy than females which further reduces from the least deprived to the most deprived. Females on quintile four (4) have a higher life expectancy at birth than females in quintile three (3).

Variations in life expectancy are linked to deprivation which is associated with variations in morbidity and mortality from different conditions or diseases. Figure 5.3 below illustrates conditions which are associated with variations in deprivation between different (most deprived and least deprived, males and females) populations in Thurrock and the difference in life years gained by the least deprived in terms of each condition. What is striking is that the conditions that have the biggest impact on life years gained by the affluent e.g. Coronary Heart Disease, Lung Cancer and other cancers and COPD all have smoking as a key risk factor. This backs up national evidence that suggests that differences in smoking rates between rich and poor account for over half of all health inequalities.
Figure 5.3

Source: APHO
5.2 Mental Health

Mental health is a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community.

Mental well-being is influenced by many factors, including genetic inheritance, childhood experiences, life events, individual ability to cope and levels of social support, as well as factors like adequate housing, employment, financial security and access to appropriate health care. Gender has a significant impact on mental health and vulnerability to mental illness. Racism, homophobia and other forms of discrimination also affect mental health and can be an underlying cause of mental illness.

Mental ill health is extremely common: one in six adults will have a mental health problem at any one time, and for half of these people the problem will last longer than a year. This suggests that approximately 19,000 across Thurrock are experiencing mental illness. Furthermore, over half of all adults with mental illness will have begun to develop the illness by the time they were 14 years old.

5.2.1 Measuring Mental Health

Measuring mental health is complex. A wide variety of data sources are needed to illustrate all the relevant experiences of people and populations, each additional analysis adding to the richness of the picture.

There are a significant number of determinants of both mental illness and mental wellbeing. Mental illness and mental wellbeing are not opposite ends of the same spectrum. The absence of a psychiatric diagnosis does not imply the presence of well-being.

Some determinants of mental illness and mental health relate to the individual, such as their psychological skills and personal resources, whilst others relate to the wider social, political and economic circumstances of people’s lives. These determinants can be risk factors for poor mental health or mental illness, or can be protective factors, enabling people to cope with stress or adverse events. Many determinants of mental health and well-being are interrelated and so tend to cluster in individuals and populations. Some people experience many risk factors which have a cumulative effect on their short and long term mental health, and a wider impact on the mental health of their families, particularly their children. Early life experiences are particularly influential on longer term psychological well-being and future health behaviours.
There have been several attempts to create a clear and objective measure of mental health need that can help decision makers to determine priorities and to plan, commission and evaluate services. These often focus on rates of mental illness as these data are relatively accessible, despite problems with data quality and completeness.

Empirical evidence shows that variation in psychiatric admission is partially explained by a wide range of socio-economic factors, including generic deprivation measures, poverty and unemployment.

**5.2.1.1 Mental Illness Needs Index**

A more complex measure, the Mental Illness Needs Index (MINI) was created in the mid-1990s and updated in 2000 (MINI 2K). The index is derived from a number of socio-economic measures that best explain variation in psychiatric admissions. MINI 2K provides a standardised score against an England average of one, and is frequently used to refine comparisons of mental health experience between geographical areas.

Figure 5.4 below, shows the MINI 2K scores for the wards in Thurrock compared to the England and Thurrock scores. The mean score for Thurrock is 0.91 which is below the national average of 1.00. However, it is clear that there is a wide variation in the distribution of the mental illness needs within Thurrock, with the areas of deprivation having higher MINI 2K scores (see section 2.1).
5.1.1.2 Benefit Claimants due to mental illness

Incapacity Benefit can be claimed by working age adults unable to work because of illness. Incapacity Benefit claimants make up the largest group of economically inactive people of working age in Britain and almost 40% are on Incapacity Benefit because of mental illness. Figure 5.5 shows the crude rate per 1,000 population for Incapacity Benefit claimants by wards in Thurrock. The graph shows that the areas of higher deprivation have a higher claim rate when compared to the deprivation map below, Figure 5.5.
Figure 5.5: Incapacity Benefit Claimants rates per 1,000 population for Thurrock
Figure 5.6: Deprivation Map for Thurrock with Council Ward Boundaries

This map is snipped from the Health Profiles. ERPHO don't have the original GIS map. The Health Profile Team has the original maps and contact has been made to try to obtain this map in a format that will match the rest of the document.

5.2.2 Children and Young People

Children and young people who have a positive start in life have greater potential in education, employment and relationships. Important influences include children’s physical, social and emotional development, family circumstances, connectedness to school and access to resources and support services. Parenting is particularly important and promoting good attachment between babies and their parents is a key foundation for emotional wellbeing. There are currently no indicators or data sets that provided an overall picture of mental health needs for young people. National statistics state that 1 in 10 young people will experience a mental illness and that this illness will usually manifest before their 14th birthday.
Given that the youth population (0 -19 years old) in Thurrock is 36000, if the assumption is the predicted need will be 3600 per year. The following section focus on the provision of services within Thurrock for children and young people.

**5.2.2.1 Children and Adolescent Mental Health Services (CAMHS)**

The CAMHS services are divided into four Tiers and these are briefly described below:

1. **Tier 1** is the primary level of service provided within universal services and includes mental health promotion, general advice and identification of mental health problems early in their development. This service is provided by a wide range of professionals including GPs, Health Visitors and School Nurses, Social Workers, Teachers, Youth Justice Workers and Voluntary Agencies.
2. **Tier 2 services** is the next stage and involves assessment, care and treatment for children and young people and consultation such as family work, bereavement, parenting groups, etc. and advice to Tier 1 professionals.
3. **Tier 3** is a specialised service for more severe, complex or persistent mental health problems. The core functions of this Tier is assessment and treatment services.
4. **Tier 4** is the tertiary level services such as day unit, highly specialised outpatients teams and inpatient units.

*Early Offer of Help (Tier 1 and 2 services)*

An analysis was undertaken by Thurrock Council of a sample of referrals into the Common Assessment Framework (CAF) via Multi Agency Groups (MAGS) and the Initial Response Team (IRT). Although the sample size of 400 was relatively small, a number of key points were identified that can be used as a beginning for the Early Offer of Help service. Figure 5.7 shows the results of this analysis.
Four areas were identified as the major issues for children and young people presenting to services were Domestic Violence being witnessed at home; Family Break-up; Bereavement; and parental drugs and alcohol abuse. The main effects of issues were poor behaviour and violent behaviour at home and school, low self-esteem, poor school attendance and self-harm.

Commissioners should focus not only on ensuring specialist service provision is addressing the treatment of these issues but also that sufficient early help services are in place to support these needs before they become entrenched. Within the Early Offer of Help Programme these emotional wellbeing issues will be focussed on to some degree within all services with more tailored specific early help services addressing them directly prior to becoming a tier 3/4 need.

Domestic Violence services currently are focused primarily at adults. For example, Thurrock Women’s Aid provides drop in and outreach services to support women who experience domestic violence. An additional service to address the needs of children affected by domestic violence commenced in October 2011, focusing on understanding abuse, reducing self-blame, positive conflict resolution and managing appropriate and inappropriate expressions of emotion. However, funding for this service is not secure past the 12 month pilot.

Parents who misuse drugs and alcohol are treated in line with national programmes and currently this does not undertake work directly with the children to address the effects of parental substance misuse.
Further consideration needs to be given to whether the services being offered to the adults should include work with the children as part of a holistic service to the parents.

Further analysis is required to gain a clearer overall picture of available service within Thurrock, signposting abilities within schools and by Third Sector organisations, and to identify further the needs of children and young people in Thurrock.

**Targeted Mental Health in Schools (TAMHS)**

The Targeted Mental Health in Schools (TAMHS) was a pilot initiative from the Department of Education that operated in the Central Cluster of Schools, which includes Chafford Hundred Primary School, Chafford Hundred Business & Enterprise College (now Harris Academy), Deneholm Primary School, The Grays School Media Arts College, Little Thurrock Primary School, Quarry Hill Infant School, Quarry Hill Junior School, St Thomas Of Canterbury Catholic Primary, Stifford Clays Infant School, Stifford Clays Junior, Stifford Primary School, Thameside Infant, Thameside Junior, Treetops School, Tudor Court Primary, Warren Primary, William Edwards School & Sports College though not in the central cluster The Pupil Referral Unit and Beaconhill were included in the project.

The core components of the TaMHS project were counseling in schools affording swift and ease of access to services improved relationships between service provider and stakeholders, i.e. schools, emotional first aid training for school based staff - initial support given to a child or young person experiencing emotional distress, creating a healthy emotional environment with the child before any specific professional help is sought and obtained. The ‘Coolfire’ programme for child and young people to enhance concentration using mediation and relation techniques; and ‘Creating Calm’ for school based staff teams aimed at stress and classroom management to enable them to manage their own emotions when interacting with children and young people. The Central Cluster of Schools saw a reduction in the number of external referrals to external CaMHS services and Multi Agency Groups panels. School based staff gained in confidence and understanding when dealing with Mental Health issues. The programme funding ended in March 2011. Initial feedback has shown that the TAMHS model has a greater ‘reach’ to students than would normally not be eligible or access services and is more accessible to both students and staff, therefore it has generated a stronger take up than traditional Tier 2 services. However, it does not include psycho-therapy approaches and is designed to help student cope better in the school environment. Expansion of the service all Thurrock secondary schools would be recommended but would be dependent on funding and support from schools.

Figure 5.8 shows, for the 15 months between September 2009 and December 2010:

- the number of children who had an assessment for support/intervention from TAMHS,
- the number of children seen for a first TAMHS intervention following assessment
- the number of children seen for an on-going TAMHS individual support
the number of children attending TAMHS ‘healthy minds – healthy bodies’, ‘Coolfire’ and ‘Pyramid’ group sessions*

the number of children referred onto specialist CAMHS services

* Healthy Minds-Healthy Bodies enables an understanding of the connection between good mental health and good physical health. Coolfire enables development of skills to manage emotions to improve behaviour. Pyramid enables building self-esteem and resilience through nurture.

Figure 5.8

Number of children accessing Targeted Adolescent and Mental Health Services (Sept 2009-Dec 2010)

Source: Thurrock Council

Thurrock Targeted Therapy (Tier 2)
The Tier 2 provision in Thurrock is being refocused from general referrals from schools, GPs and agencies, to deliver to Looked After Children (LAC) and Children in High Need Groups (CiHNG) such as children and young people subject to a Child Protection Plan, attend Pupil Referral Unit (PRU) or have been placed for permanency.

These groups are the most vulnerable and disadvantaged members of society and are at increased risk of poor outcomes in terms of emotional wellbeing and mental health, education attainment, employment and criminality. Due to the loss of stability and routines, these children and young people have unmet health needs.
Case reviews show that 75% of LAC have mental health issues, some of them complex and severe. The prevalence of LAC with recognised mental disorders among 5 to 10 year olds compared to non-looked after children has been shown to be:

- Emotional disorders 11% compared to 3%
- Conduct disorders 36% compared to 5%
- Hyperkinetic disorders 11% compared to 2%
- Any childhood mental disorder 42% compared to 8%

Among 11 to 15 year olds, the comparison has been shown to be:

- Emotional disorders 12% compared to 6%
- Conduct disorders 40% compared to 6%
- Hyperkinetic disorders 7% compared to 1%
- Any childhood mental disorder 49% compared to 11%

The service will seek to focus on prevention, early intervention and the identification of needs of the target group of children and young people.

**CAMHS Tier 3 Services**

The overall aim of this service is to contribute to the improvement in the mental health of children and young people in Thurrock and the service is being commissioned by the Primary Care Trust for the South Cluster including Thurrock, Southend and Essex County Council areas. The service is for children and families where the child has mental health difficulties that fulfil criteria of severity, complexity and a recognised disorder within the National Service Framework Standard.

In 2010, Tier 3 services accepted 400 referrals from Thurrock, referring 252 children and young people to other agencies.

The service uses the Common Assessment Framework as a referral mechanism and assesses the referral. On acceptance of the referral a care plan is agreed with the child, young person, family/carer as appropriate which includes the key workers and agreed objectives. Interventions including in the care plan can include pharmacological interventions, family therapy, cognitive behaviour therapy or group therapy.

**CAMHS Tier 4 Services**

CAMHS Tier 4 services are commissioned on a regional basis. It comprises an adolescent in-patient unit with 9 beds and a crisis team who respond to adolescents with mental health difficulties presenting at Basildon Hospital Accident and Emergency Department.
They offer home based treatments to prevent the escalation of difficulties. In 2010, Thurrock had 29 crisis admissions to the in-patient unit and 23 non crisis referrals. Most of the referrals were aged between 15 and 16.

5.2.3 Mid Adult Years

Mental health can vary according to circumstances and can change across a lifetime. Depression and anxiety are the most common mental illnesses. For adults, risk factors including poverty, unemployment, poor education, poor housing, social isolation and discrimination.

The national prevalence of psychiatric disorders in people aged over 18 years is shown in Figure 5.9. This shows that common mental disorder has an overall prevalence of 16.2%, and is more common in females than in males. This would equal approximately 19,488 people in Thurrock are currently being affected by Common Mental Disorders.

**Figure 5.9:** Prevalence of psychiatric disorders in people aged over 18 years in England

<table>
<thead>
<tr>
<th>Psychiatric Disorder</th>
<th>% population</th>
<th>% male</th>
<th>% female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Mental Disorder</td>
<td>16.2</td>
<td>12.5</td>
<td>19.7</td>
</tr>
<tr>
<td>Antisocial Personality Disorder</td>
<td>0.3</td>
<td>0.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Borderline Personality Disorder</td>
<td>0.4</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Psychotic Disorder</td>
<td>0.4</td>
<td>0.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Source: APMS 2007; results of household survey, published by the Health and Social Care Information Centre in 2009*

Common mental disorders (CMD) are characterised by a variety of symptoms such as fatigue and sleep problems, forgetfulness and concentration difficulties, irritability, worry, panic, hopelessness, and obsessions and compulsions, which are present to such a degree that they cause problems with daily activities and distress.

The following sections show how CMDs are distributed across the wards in Thurrock. A rate for CMDs has not been calculated as the population for wards in 2000 was not available. However, ward boundaries are designed such that there is a roughly equal population in each ward. Therefore a measure of prevalence can be inferred from these maps, although the absolute figures would not be precise.

The maps show a variance in the distribution of the different disorders within CMD. However, they do show a similar distribution to the levels of deprivation which are highlighted in Section 2.1 of the JSNA. This highlights the link between the factors that cause deprivation – housing, employment, income and living environment – all impact on the mental wellbeing of residents.
Neurotic Disorder

Estimated Cases of All Neurotic Disorders
NEPHO Psychiatric Morbidity Survey 2000

Phobia

Estimated Cases of All Phobias
NEPHO Psychiatric Morbidity Survey 2000
Depressive Episodes

Estimated Cases of Depressive Episode
NEPHO Psychiatric Morbidity Survey 2000

Mixed Anxiety Disorder

Estimated Cases of Mixed Anxiety Disorder
NEPHO Psychiatric Morbidity Survey 2000
Generalised Anxiety Disorder

Estimated Cases of Generalised Anxiety Disorder
NEPHO Psychiatric Morbidity Survey 2000

Obsessive Compulsive Disorder

Estimated Cases of Obsessive Compulsive Disorder
NEPHO Psychiatric Morbidity Survey 2000
Consultation workshops have been held with clinicians and service users to gain their perspective on mental health services.

The main themes that emerged from this consultation were concerned with where the services need to be placed and a need to move the focus from a few senior professionals to a multifaceted response providing for a wider set of service user needs and outcomes. Personalisation is the means by which Social Care provides its services and so the principles of choice and control should intertwine with health provision into an integrated service.

Current services need to work toward becoming more efficient through targeting those who need the right service at the right time and place. Care needs to be holistic and planned and provided in partnership between providers, service users and carers.
5.2.4 Older Years

Good mental health and well-being are as important for older people as for any other age group and, because of the link between positive mental health and good physical health, may have added benefits. Risk factors for older people include loneliness, social isolation, fear of crime, loss of independence, lack of transport, poverty and debt, anxiety over meeting winter fuel bills, which can be exacerbated in rural areas.

Dementia

Dementia is used to describe a gradual decline in cognitive skills, i.e. memory, reasoning, communication skills of the person and inability to carry out the simplest daily activities. Individuals may also develop behavioural and psychological symptoms such as depression and wandering, which can complicate care for the person.

Dementia is usually a long term, progressive condition and whilst it is not a necessary part of ageing, the incidence of dementia increases with age. Dementia is often associated with complex needs and, especially in later life, high levels of dependency and morbidity. Dementia can affect people as young as 30, although this is extremely rare. The term ‘young onset dementia’ refers to people diagnosed with dementia under the age of 65.

Alzheimer’s disease is the most common form of dementia. The proportions of those with different forms of dementia are broken down as follows:

- Alzheimer's Disease 62%
- Vascular Dementia 17%
- Mixed Dementia (AD & VaD) 10%
- Dementia with Lewy Bodies 4%
- Frontal Temporal Dementia 2%
- Parkinson's Dementia 2%
- Other Dementias 3%

Dementia is one of the common, severe and devastating disorders that we all face. There are approximately 700,000 people in the UK with dementia and in the next 30 years the figure will double to 1.4 million. The national cost to the UK economy is £17 billion every year which will treble to over £50 billion over the next 30 years. One in six people over the age of 80 will have dementia, while one in twenty people after the age of 65 will develop dementia. 60,000 deaths per year are directly attributable to dementia in the UK.

Figure 5.10 below models the population at risk of dementia over the next 20 years in Thurrock. It shows an increasing trend of all age groups, but the highest risk is for people aged 85 and over.
There is an established clinical and health economic case for early diagnosis and intervention services in dementia\(^5\) whereby investment in early diagnosis and support will reduce the need for costly crisis intervention and premature residential, nursing or inpatient care. There has been progress with memory assessment services providing early diagnosis, treatment and support, but there remain challenges in respect of ensuring a single point of entry for all referrals, and ensuring that services are available to all those who need them including people with young onset dementia and learning disabilities.

Although considerable investment was made on a regional basis through the Joint Improvement Partnership project, the uptake of cash payments of personal budgets is still lower for people with dementia and their carers so that more people with dementia are likely to receive managed services.

It is therefore imperative that the services which are provided to people with dementia and their carers are person centred and appropriate to support the individual's needs. This applies to all services either in the voluntary, independent, or statutory sector and whether they are delivered in the person's home, the community, a day centre, or residential care.
The priorities for action fall broadly under the two headings of early diagnosis and support and living well with dementia. These are:

- Ensuring clear pathways are available for all people including those with young onset dementia or learning disabilities to access timely assessment, diagnosis, treatment and support;
- Access to admission avoidance schemes, reablement and intermediate care;
- Enhanced liaison and in reach services to acute hospitals and nursing homes which includes strategies to reduce the use of anti-psychotic medication;
- An effective, trained and skilled workforce;
- Appropriate support to carers and recognition of carers as partners in the care of people with dementia;
- Access to palliative care and support to people with dementia at the end of life.

5.2.5 Summary

Mental Health is a complex area and the factors that influence the emotion and mental well-being have many factors. However, areas of deprivation tend to have higher levels of mental illness. The Mental Illness Needs Index (MINI) and the rate of benefit claimants for mental health tend to be higher in the more deprived areas – Ockendon, Tilbury and Belhus.

Children and Young People’s services are provided in four levels – Tier 1 is focused on early intervention and offers of support. Tier 2 services are being refocused to support Looked after Children and Children in High Needs groups as these young people have a higher prevalence of mental health needs.

The most prevalent psychiatric disorders in mid adult years are Common Mental Disorders such as neurotic disorder, phobias, panic, obsessive compulsive disorder, depression, and mixed and general anxiety disorders. The prevalence of these disorders within Thurrock also map to the areas of deprivation within the Borough.

The trend for Dementia shows that people suffering from this diagnosis will increase over the next 20 years, especially for those aged of 85 years. One in six people over the age of 80 will have dementia, while one in twenty people after the age of 65 will develop dementia. The priorities for services need to focus on early diagnosis and support to patients, with clear pathways and services being person centred and appropriate to patient need.
5.3  CVD, Cancers and Respiratory Disease

5.3.1 Cardiovascular disease (CVD)

Cardiovascular disease (CVD) is not only the single most common cause of death in the UK with approximately 30% of these deaths being classified as premature (i.e. occurred before the age of 75), but a significant cause of morbidity with over 3 million people living with CVD, having survived a stroke or CHD\(^6\) and impacting on their quality of life. CVD is a broad spectrum of disorders such as Coronary heart disease (CHD), Stroke and peripheral artery disease, which are frequently brought about by the development of atheroma and thrombosis (blockages in the arteries). The prevalence of CVD is known to increase with age and is linked to conditions such as heart failure, chronic kidney disease and dementia.

CVD Health Care Costs

The combined cost of cardiovascular disease (CVD) to the NHS and the UK economy is £30 billion annually.\(^7\) The cost of CVD to the UK healthcare system in 2006 was £14.4 billion (around 48%), productivity losses accounts for £8 billion annually (26%) and the cost of informal care of people with CVD is also £8 billion annually (26%).\(^8\)

Figure 5.11 below shows a breakdown of the costs to the UK healthcare system
The health care costs shown above do significantly underestimate the total cost of CVD in the UK. The production losses due to mortality and morbidity associated with CVD in those of working age and the informal care of people with CVD contribute substantially to the overall financial burden.

### 5.3.2 Circulatory Diseases Mortality

Figure 5.12 shows mortality rates for circulatory diseases, including CHD and stroke, for males under the age of 75 years in Thurrock has generally remained higher than the East of England and Essex County Council. More recently mortality has fallen in line with regional rates from 2004 to 2009. There is a lot of variation year to year, making the analysis of trends over time difficult, although it can be noted that there has been a significant decline in overall mortality rates from 1993 to 2009. Mortality rates for women in Thurrock have remained consistently lower than for males. Rates for females in Thurrock have remained generally higher than observed both regionally and nationally. Rates show that similarly there is a lot of variation year to year, yet an overall decline in mortality rates, albeit a smaller and steadier decline than expressed in males.

**Figure 5.12**

Directly age-standardised mortality rates for circulatory diseases per 100,000 population for <75 year olds

Source: NCHOD
Although the data shows that deaths from circulatory diseases are on the decline there is still work to be done in Thurrock to bring rates in line with regional comparators. The evidence relating to good management of circulatory chronic diseases in terms of outcomes is well established and can reduce mortality rates and improve the quality of life for patients. Furthermore, a co-ordinated approach of lifestyle modification interventions aimed at supporting people to make healthier lifestyle choices i.e. achieve a healthy weight, become more physically active, and reduce risky drinking behavior is essential in tackling the ‘upstream’ risks contributing to future ill-health.

5.3.3 Respiratory Diseases

Respiratory Diseases were responsible for fourteen percent of all deaths in England from 2007 to 2009. This proportion increased to 20% when lung cancer deaths were included. The proportion of all deaths in England with a mention of respiratory disease on the death certificate, in the same time period, was 34% (39% when lung cancer was included). The proportion of deaths due to respiratory diseases is known to increase with age.9

Pneumonia and Acute Respiratory Infection, closely followed by Chronic obstructive pulmonary disease (COPD) is the biggest cause and ‘underlying’ cause of respiratory disease related deaths. COPD is also the second most common cause of emergency admissions to hospital. COPD is a term used for a number of conditions; including chronic bronchitis and emphysema primarily affecting people over the age of 45 and is linked to social deprivation. COPD leads to damaged airways, causing them to become narrower and making it harder for air to get in and out of the lungs. Management of respiratory conditions provide the biggest caseload for primary care and hospital admissions as 15% of COPD patients die within 3 months of being admitted to hospital with an acute exacerbation. Smoking is noted as the most common cause of respiratory disease with 86% of COPD deaths attributable to it. Respiratory disease, in particular COPD and pneumonia, has a big impact in terms of costs to the NHS and in terms of disability due to the condition.

5.3.3.1 Respiratory Disease Mortality

Figure 5.13 shows the age standardised mortality rates for respiratory diseases. Mortality rates for males in Thurrock are significantly higher than regional and national rates. Although there is natural variation year to year there has been an overall decline in male mortality rates. Female mortality rates are lower for respiratory diseases than observed in males but are higher than regional and national rates with no decline.
The mortality rates for Thurrock indicate a need to reduce mortality rates in line with regional comparators, addressing the gender inequality in mortality but also to affect change in mortality rates for women. Respiratory diseases are complex conditions that are hard to identify in their early onset but, early diagnosis and treatment are key not only improving the quality of life for the patient but in reducing treatment costs. A whole systems approach (patient pathway) including primary prevention (to focus on reducing smoking and improving immunisation rates), and access to health care both in terms of primary and secondary care is essential.

5.3.4 Cancer

Cancer is one of the biggest killers in this country and second only to circulatory disease as a cause of death. More than one in three people in England will develop cancer at some stage in their lives, and one in four of those who develop cancer will die of it. This means that, every year over 200,000 people are diagnosed with cancer and around 120,000 people die from the disease. Cancer is a term used for diseases in which abnormal cells divide without control and are able to invade other tissues. Cancer cells can spread to other parts of the body through the blood and lymph systems. Cancer is not just one disease but many. There are more than 100 different types of cancer. Most cancers are named for the organ or type of cell in which they start - for example, cancer that begins in the colon is called colon cancer.
5.3.4.1 Cancer Mortality

Figure 5.14 and 5.15 show the 20 most common causes of Cancer death in the UK in 2009 by gender and the types of Cancer mortality attributable to all cancers respectively. For the majority of the top 20 Cancers there are a higher number of deaths in males. Overall for males and females, lung cancer had the highest number of death rates and oral had the least. Of the top 20, cancer of the uterus had the least number of deaths for women only. * 8% of all female cancer deaths and 6% of all male cancer deaths are registered without specification of the primary site.

Figure 5.14

The 20 Most Common Causes of Cancer Death: 2009

Source: Cancer Research UK
5.3.4.2 All Cancer Mortality in Thurrock

Figure 5.16 shows the age standardised mortality rates for cancer for the under 75 year olds. Mortality rates for males in Thurrock are generally higher than the East of England and Essex rates and fluctuating below and above national rates. Although there is natural variation year to year there has been an overall decline in male mortality rates from 1993 to 2009. Female mortality rates are lower for cancer than observed in males but are higher than regional and national rates. This is against the observed trend for regional and national rates where female cancer rates are higher than that of males. Similar to male mortality rates, female rates have shown an overall decline.
5.3.4.3 Under age 75 Lung Cancer Mortality

Figure 5.17 shows the age standardised mortality rates for lung cancer in under 75 year olds. Mortality rates for males in Thurrock have generally remained higher than both the regional and England rates. There has been an overall decline in male mortality rates. Female mortality rates for lung cancer show natural variation year to year with no significant decline. Although female mortality rates for lung cancer are lower than that of males, there is an observed narrowing of the gap in mortality rates between the genders.
With almost 90% of lung cancers in men and 83% in women estimated to be caused by smoking, furthermore, the evidence of a lifelong male smoker having a cumulative risk of 15.9% for dying from lung cancer by age 75 and men who cease smoking at ages 60, 50, 40 and 30 years, cumulative risk of dying from lung cancer falling to 9.9%, 6.0%, 3.0% and 1.7% respectively, with similar statistics in females; therefore a key intervention for Thurrock would be smoking cessation targeted at the middle aged smoking population.

Lung cancer often develops slowly. Although it is thought that cells can first become abnormal at least five years before the cancer, it is often not diagnosed until it has spread outside the lung and is no longer curable. This can be due to patients being asymptomatic or their symptoms being similar to those associated with smoking or COPD. Work has been undertaken within Thurrock to educate both clinical staff and residents of the symptoms of lung cancer, e.g. unexplained persistent cough, in conjunction with the Cancer Network. Further training on diagnosis and management of lung cancer together with ensuring adequate access and capacity within chest X-ray services would address under diagnosis in the early stages of the disease, leading to appropriate management and an extended, better quality of life for patients.
5.3.4 Under 75 Breast Cancer Mortality

Figure 5.18 shows the age standardised mortality rates breast cancer in females under 75 years. As expected, there is a large amount of natural variation year to year due to the relatively small number of breast cancer related deaths. In line with regional and national trends, there has been an overall decline in breast cancer mortality from 1993 to 2009. There are likely to be several different causes for this including screening, increasing specialisation of care and the widespread adoption of tamoxifen treatment since 1992.

Although the rate of breast cancer has declined Thurrock should continue to promote the uptake of the National breast screening programme.

5.3.5 Summary

Circulatory Disease

- Mortality rates for circulatory diseases, including CHD and stroke, for males under the age of 75 years in Thurrock has generally remained higher than the East of England and Essex County Council but has more recently mortality has fallen in line with regional rates from 2004 to 2009. Rates for females in Thurrock have remained generally higher than that observed both regionally and nationally.

- Mortality rates due to circulatory diseases for women in Thurrock have remained consistently lower than for males.
There has been a decline in overall mortality rates from circulatory diseases in females and males. Females have had a smaller and steadier decline than expressed in males.

Respiratory Disease

- Respiratory Diseases were responsible for 20% of all deaths in England from 2007 to 2009 and the proportion of all deaths in England with a mention of respiratory disease on the death certificate, in the same time period, was 39% (including lung cancer).

- Pneumonia, Acute Respiratory Infection and Chronic obstructive pulmonary disease (COPD) are the biggest causes and ‘underlying’ cause of respiratory disease related deaths. COPD is also the second most common cause of emergency admissions to hospital.

- Mortality rates due to respiratory diseases for males in Thurrock are significantly higher than regional and national rates but show an overall decline in recent years.

- Female mortality rates are lower for respiratory diseases than observed in males but are higher than regional and national rates with no decline.

- There is a need Thurrock to reduce mortality rates for respiratory diseases in line with regional comparators, addressing the gender inequality in mortality but also a focus on affecting change in mortality rates for women.

Cancer

- Mortality rates for cancer in the under 75 year olds show males in Thurrock are generally higher than the East of England and Essex rates and fluctuate below and above national rates with an overall decline from 1993 to 2009.

- Female mortality rates are lower for cancer in Thurrock than observed in males but are higher than regional and national rates. This is against the observed trend for regional and national rates where female cancer rates are higher than that of males. However both have shown an overall decline.

- Mortality rates for lung cancer in under 75 year old males in Thurrock have generally remained higher than both the regional and England rates, yet overall have declined. Female mortality rates show no significant decline.

- Although female mortality rates for lung cancer are lower than that of males, there is an observed narrowing of the gap in mortality rates between the genders.
• A key intervention for lung cancer in Thurrock would be smoking cessation targeted at the middle aged smoking population.

• Further training on diagnosis and management of lung cancer together with ensuring adequate access and capacity within chest X-ray services would address under diagnosis in the early stages of the disease, leading to appropriate management and an extended, better quality of life for patients.

5.4 Sexual Health

Sexual Health is an important part of physical and mental health which is a key part of our identity as human beings. It affects both physical and psychological wellbeing and is often central to some of our most important relationships. Sexual health in its most holistic sense encompasses elements such as equitable relationships and sexual fulfilment, together with access to information and services and avoidance of unintended pregnancy, illness and disease.

However the consequences of poor sexual health can be serious. Unintended pregnancies and sexually transmitted infections can have a long lasting impact on people’s lives.

Good sexual health in not distributed equally across populations. Sexual health inequalities are faced by specific population groups, with the highest burden of sexual ill health being borne by gay men, teenagers, young adults and some minority ethnic groups.11

HIV infection still only primarily affects gay men/men who have sex with men and specific BME communities.12 There is also a clear relationship between sexual ill health, poverty and social exclusion.13
5.4.1 Sexual Health within Thurrock.

5.4.1.1 Under 18 conception rates

Figure 5.19: Under 18 conception rates for Thurrock, the East of England and England from 1998 to 2009

The data in figure 5.19 shows that Thurrock’s Under 18 conception rates have decreased from 1998 to 2009. Thurrock’s under 18 conception rates remain significantly above the East of England average but are now just averaging below the England average.

Figure 5.20. Under 18 conception rates from 2007 to 2009
The data in figure 5.20 shows Under 18 conception rates per 1000 from 2007-2009. The graph indicates that Thurrock’s Under 18 conception rates are at 39 per 1000 of the population which is in line with the England average (40 per 1000) but significantly higher than the East of England average (32 per 1000).

**Figure 5.21**: Change in under 18 conceptions resulting in maternity-abortion 1998-00 to 2007-09

![Graph showing decrease in abortions and maternities 1998-00 to 2007-09](image)

The data in figure 5.21 demonstrates the number of abortions and maternities have decreased from 1998-00 to 2007-09 in 15-17 year old females within the Thurrock locality. Maternities within this population have significantly decreased from 32 (per 1000 females aged 15-17) in 1998-00 to 18 in 2007-09 respectively. Abortions have decreased but at a smaller rate compared with maternities decreasing from 23 (per 1000 females aged 15-17) in 1998-00 to 21 in 2007-09.

**Figure 5.22**: Quarterly under 18 conception data for from 1998 to Quarter 1, 2010

![Bar chart showing quarterly under-18 conception data](image)
Figure 5.22 demonstrates Thurrock’s Under 18 conception rates decreasing from 1998 to the first quarter of 2010. The ‘Rolling average’ shows that Thurrock’s Under 18 conception rates have decreased significantly from above 60 in 1998 to below 40 in 2010 indicating a smaller percentage of under 18s within the Thurrock locality are conceiving.

Figure 5.23 shows the number of teenage (under 18) pregnancies per MSOA. Teenage pregnancy rates in Thurrock continue to link to areas of multiple deprivation, but trends also exist where multiple deprivation is less of a causal factor and where deprivation of education, skills and training is a single causal factor. Patterns also exist between data for substance misuse and those for teenage pregnancies, suggesting strong links between the two.

Thurrock has a high priority to further reduce its <18 conception rate hence the recent appointment of a Teenage Pregnancy and Substance Misuse Coordinator for the borough. Recent activity of the post holder has seen a variety of reactive and preventative planning, including:

- mapping of live date sets for teenage pregnancy and substance misuse
- reviewing the PSHE provision across the secondary schools
- facilitating the establishment of a primary and secondary phase PSHE subject network to ensure better future subject collaboration between schools using meaningful local data sets
• establishing professional links with neighbouring boroughs (Havering and Southend) for smarter future working relations and cross boarder initiatives
• joint working with health on common targets and initiatives
• developing links with Children’s Centres to review provision for young people
• reviewing the teenage parents’ drop-in to encourage increased ante and post natal access that should create a reduction in successive conceptions and greater take up of LARC and Care to Learn.

5.4.2 Sexually transmitted disease rates for 2010

Figure 2.24 Rates of sexually transmitted diseases per 100000 population for Thurrock
In figure 2.25 the rates across Thurrock per 100 000 for several STIs (Sexually transmitted infections) is demonstrated for 2010. Whilst there are some areas where rates remain low (Syphilis and Chlamydia age group 15-24) others are high (Herpes and Warts) with the remainder (Chlamydia 25+, Gonorrhoea and acute STIs) performed averagely when all rates are compared to their CIPFA comparators.

Where Thurrock’s STI rates are high compared to its CIPFA comparators, further investigation needs to occur to learn lessons in best practice, ascertain public and health professionals’ attitudes and to develop a strategy to decrease the rates of these STIs.
5.4.2.1 Sexual Health trends in Thurrock

Figure 2.26: Prevalence of HIV diagnosis among 15 to 59 year old from 2002 to 2009 rate for NHS South West Essex

In figure 2.26 the HIV diagnosis rate trend for NHS South West Essex from 2002 to 2009 demonstrate the increasing diagnosis of HIV in the population. NHS South West Essex from 2006 has reported a higher rate of diagnosis than the East of England. Data for this diagnosis is unavailable at a locality level such as Thurrock.

5.4.3 Sexual Health Summary

Thurrock generally performs well when compared to its CIPFA comparators on indicators that are used to measure sexual health. Whilst this is positive and acknowledgment should be made for the work done around this area, the health of Thurrock requires dedication and work to ensure the continuing health improvement for its population.

Trends for Under 18s demonstrate the continuing drop in conception rates, with Thurrock now performing below the England rate, and work should continue to bring Thurrock in line with the East of England.

Trends for fifteen to seventeen year old abortion rates demonstrate a gradual decline and maternity trends shows a sharp decline from 1998 to 2009. Work in this area needs to continue to maintain these current declining rates.

Sexually transmitted infections should be monitored closely, and uptake of screening should remain a priority to ensure that all potential cases can be diagnosed and treated.
HIV diagnosis trends continue to rise, with NHS South West Essex rates increasing beyond the East of England rate. The late diagnosis of HIV can lead to further implications for patients so increasing the screening uptake for the population should remain a focus area. Whilst an increase of screening uptake could potentially increase diagnosis rates, this would at least ensure earlier diagnosis and treatment.

Sexual health in Thurrock shows some trends performing well in their decline, and others that require attention in their increase. Sexual health will continue to require constant monitoring, analysis and a targeted response to prevailing outcomes to ensure the health improvement for the population of Thurrock.

5.5 Obesity

The need to tackle the problem of obesity relates to the undisputed evidence that obesity is a risk factor for a range of health problems. The four most common medical problems linked to obesity are coronary heart disease, hypertension, type 2 diabetes and osteoarthritis. The incidence of all these conditions increases with increasing body weight (Jung, 1997, NHS Centre for Reviews and Dissemination, 1997). Being overweight or obese also has a negative effect on mental health, sleep apnoea and respiratory problems. There is a serious impact of obesity on physical and mental health and wider economic and social costs. The prevalence of obesity has risen dramatically in the last 20 years and it is now estimated to cost more to the economy than smoking.

Body Mass Index (BMI) is a calculated measure from a person’s height and weight used to highlight if the person may have excess body fat. A BMI of 30 or more is classified as obese and a commonly used measure of obesity. A BMI of 30+ indicates that the person’s health could be at risk.

5.5.1 Adult Obesity

Figure 2.27 shows the estimated prevalence of obese adults aged 16+ by local authority areas compared with geographical neighbours, the national and East of England average.
Figure 2.27 shows Thurrock to have a higher percentage of obese adults than its geographical neighbours of Basildon, Havering and Brentwood and to be significantly worse for the % of obese adults that the national average of 24.1% and the east of England average of 23.58%.

Figure 2.28 shows estimated prevalence of Obese adults aged 16+ compared with CIPFA neighbours.
Thurrock’s prevalence of obese adults is significantly higher than the national and East of England average and is near the top of the range of CIPFA comparator local authorities which is a comparison group measured by the similarity between the authorities based upon a wide range of socio-economic indicators this shows that there are a larger percentage of obese adults in Thurrock than other similar areas.

Figure 2.29 shows the percentage of adults people with obesity in Thurrock: Modelled estimates based on East of England Lifestyle survey 2008

The darker blue areas show the MSOAs with the highest levels of obesity as shown in Tilbury and largely the East and South East of the area of Thurrock to be at around one third of adults reporting a BMI of 30+. The paler grey areas such as North Stifford and Orsett in the North of Thurrock as well as Grays to have the lower levels of adults who are obese reported at close to a quarter.
Figure 2.30 shows a ‘funnel plot’ of the observed/expected ratio of obese patients on GP practice obesity registers in Thurrock.

There are 16,731 people on the Obesity registers of practices within Thurrock in March 2011, giving a prevalence of 13.3%. This prevalence is greater than the England and EOE prevalence. The size of the practice registers is lower than expected with the observed / expected ratio of 60%. This ratio is still higher than the National and EOE ratio.

The graph shows practices in Thurrock by their expected register size and how far their actual registers are to expected (i.e ratio of 1). The overall Thurrock ratio is also shown. 28 out of the 36 practices in Thurrock are more than 3 standard deviations from the expected register size.
5.5.2 Childhood Obesity

Childhood obesity is a complex public health issue that is a growing threat to children’s health. If the number of obese children continues to rise, today’s children and future generations could have shorter life expectancies than their parents. Tackling childhood obesity requires changes in the behaviour of individual children, their parents and of society in general and reflects recent trends across most developing countries to greater fat and sugar consumption and reduced physical activity. There is also evidence to suggest that babies who are breastfed are less likely to be obese in adulthood.

Since 2005, PCTs have been required to collect height and weight data for BMI on all primary school children in reception year (ages 4/5) and year 6 (ages 10/11). The latest data from the National Child Measurement Programme (NCMP) was released by the Information Centre (IC) in December 2010. This data release reports on the results of the measurement of children in primary school reception year and year 6 during the 2009/10 academic year.

5.5.2.1 Childhood Obesity Prevalence

Figure 2.31 shows the NCMP percentage of obese children in Thurrock by MSOA for reception and year 6 children.
As figure 2.31 and 2.32 show, the darker blue areas have the highest percentage of obese children as measure by the NCMP. The graph of reception children (age 4-5) shows a higher concentration of obesity in the West half of Thurrock to the East which is mirrored in the year 6 children (age 10-11) and increased greatly from a maximum of 18% to 27%.

5.5.2.2 Childhood Obesity and Deprivation

Figure 2.33 shows the correlation between % of obesity and deprivation by MSOA level in Thurrock 2009-10
The blue squares represent MSOA areas. IMD (index of multiple deprivation) is an important measure of how local areas compare with others on a comprehensive range of deprivation indicators.

Figure 2.33 above shows a positive correlation between deprivation and the % of children in the reception year (age 4-5) who are classified as obese using UK national BMI centiles. Carrying out the Pearson product-moment correlation coefficient on the data is a measure of the correlation (linear dependence) of two variables where the r value = 1 it denotes a perfect correlation and where r = 0 it denotes no correlation. The r value for the data above is 0.723 which is a strong correlation and statistically significant at the 0.05 level of probability. This means that there is a direct correlation between the percentage of obese children and the level of deprivation showing that in MSOA areas that have a higher IMD score of deprivation the percentage of obesity increases.
Figure 2.34 shows a positive correlation between deprivation and the % of children classified as obese in year 6 (age 10-11). R= 0.641 which is also significant at the 0.05 level of probability although less strongly so than for the reception aged children.  
This is important data for commissioning health services as it indicates a health inequality and shows that services to tackle childhood obesity need to be focused towards areas of higher deprivation within Thurrock.

**5.5.2.3 Childhood Obesity Trends**

Figure 2.35 shows trend in Obesity Prevalence in Year R children (age 4-5) compared with the red line showing the same prevalence across the East of England.
As figure 2.35 above shows, the prevalence has gone up and down between the four school years measured mirroring the East of England prevalence.

Figure 2.36 shows trend in Obesity prevalence in Year 6 children (age 10-11)
The trend in Obesity prevalence in Year 6 children increased between the school year 2006-7 and 2007-8 but has then decreased each year since although the prevalence is almost double that of reception aged children at just over 20%.

Figure 2.37 shows prevalence of Healthy weight children measured through the NCMP in 2009-10.

Figure 2.37

This data of healthy weight children has only started being collected in 2009-10 so trend data was not available. The above graph shows that there are less Health Weight children in Year 6 than year R highlighting that there is a big change in prevalence during the Primary School years. In year R just under three quarters of children are a healthy weight whereas in year 6, five to six years later only just under 2 thirds of children are a health weight. This is important for commissioners to target services at these age groups to address the ages where children’s weight increases.

This trend data is important as it highlights that the % of obesity has increased over the 4 years the NCMP programme has been in existence even though it has gone up and down during this time. Childhood obesity is a complex issue that requires services to work together across Health and local authority in a coordinated way to address the high levels of obese children. The issues surrounding why children are obese, the treatments and interventions all need to be examined in order to reverse this dangerous trend.
5.5.2.4 Prevalence of underweight, healthy weight, overweight and obese children in Thurrock as compared with the regional and national prevalence as well as geographical neighbours: Basildon and Havering.

Source: The Health and Social Care Information Centre/lifestyle statistics / Department of Health Obesity Team, NCMP dataset www.ic.nhs.uk/ncmp

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Clearly the largest % of children are a health weight across Thurrock, its geographical neighbours and mirroring the national and regional trends. In Year R Thurrock has a similar proportion of overweight children to the regional and national averages although a slightly higher proportion of obese children. The proportions look very similar across these comparators.

In Year 6 Thurrock’s proportions look most similar to the London Borough of Havering in terms of proportions of healthy, overweight and obese children and follow the same pattern as the Year R children. A striking comparison between the Year R and Year 6 graphs is that the percentage of children classified as obese has increased dramatically from 10 to 20% between the reception year (the first year at school) and the last year at school (year 6). This also further highlights the need for Health and schools to work together in a coordinated approach to address this issue.

5.5.2.5 Prevalence of underweight, healthy weight, over weight and obese children in Thurrock as compared with the regional and national prevalence as well as CIPFA comparators.

![Bar chart showing weight categories for Reception Children 2009-10 in different areas.]

Source: The Health and Social Care Information Centre/ lifestyle statistics / Department of Health Obesity Team, NCMP dataset www.ic.nhs.uk/ncmp
These graphs show similar patterns to the comparison with geographical neighbours of Thurrock and the trends between Reception and Year 6 are mirrored. These graphs are sorted in terms of highest prevalence of obese children showing those areas furthest to the right to have the higher prevalence obesity. Therefore in comparison with the CIPFA areas Thurrock has the highest prevalence of obesity in Year R children, by Year 6 Thurrock is in the top quarter of the CIPFA areas in terms of obese children. This highlights a need to tackle obesity in Reception age children and preschool children in the levels of obesity are already very high by the time children start school.

5.5.3 Summary and Recommendations - Obesity

- Obesity is a risk factor for a range of health problems, the four most common linked conditions are: Coronary Heart Disease, Hypertension, Type 2 diabetes and Osteoarthritis.

- The prevalence of Obesity has risen dramatically in the last 20 years and is now estimated to cost more to the economy than smoking.

- Thurrock has a higher prevalence of obese adults (16+) than geographical neighbours and a significantly greater percentage of obesity among adults than the regional and national averages.
• Thurrock’s prevalence of obese adults is near the top of the CIPFA comparator local authorities although is only statistically significantly higher than approximately one third of these comparator areas.

• Obesity prevalence across Thurrock is linked to deprivation with the greatest prevalence in Tilbury and the East of Thurrock (29-30%) with the more affluent areas of Orsett, North Stifford and Bulphan showing the lower percentages (24-26%) of the adult population as obese.

• Commissioners need to tackle this important health inequality and target services and interventions to those more deprived areas where obesity prevalence is greatest. Services need to be developed and work together to address diet and physical activity in a coordinated way.

• Childhood obesity is a complex Public Health issue that is a growing threat to children’s health. Tackling childhood obesity requires changes in behaviour of individual children, their parents and society in general. It is a growing problem in developing countries and reflects a trend to greater sugar and fat consumption in conjunction with reduced physical activity.

• In Thurrock in the school year 2009-10 11.5% of children in reception (age 4-5) measured as obese and in year 6 (aged 10-11) just over 20% measured obese.

• Data from the National Childhood Measurement Programme NCMP (adopted in 2005 by all PCTs) shows a strong correlation between deprivation and childhood obesity in children aged 4-5 and 10-11, this is stronger in the younger age range although the percentage of obesity in children is higher in the 10-11 year olds.

• Compared with geographical neighbours Thurrock’s proportion of healthy, overweight and obese children looks similar. As compared with CIPFA areas Thurrock has the highest prevalence of obesity in reception children and in year 6 children is within the quarter with the greatest prevalence. This highlights the need to tackle childhood obesity in preschool and reception age children as the levels of obesity are already comparatively high.

• The prevalence of childhood obesity in Thurrock has fluctuated in the last four school years which has mirrored that of the regional average although it has been statistically significantly greater since 2007-8 school year in reception children and since 2006-7 in Year 6 children. This trend data shows over the last 4 years childhood obesity has overall increased during this time.
• There are less healthy weight children in year 6 than reception year in Thurrock schools, the percentage of healthy weight children decreased from just under three quarters in reception to just under two thirds in year 6. Commissioners need to target services to address the ages where the percentage of healthy weight children decreases during the Primary school years and examine treatments and interventions for children. A coordinated approach is needed across Health and local authority to address the high levels of obese children to work towards reversing this dangerous trend.

5.6 Infectious Diseases

Communicable disease surveillance tells us which infections are the most important causes of illness, disability and death, so that decision can be made on what the priorities are for control and prevention activities. It also highlights which parts of the population are most affected (e.g. children or the elderly, males or females, people living in particular areas of the country) which provides information on how prevention and intervention can be focused.

An important purpose of communicable disease surveillance is also to detect the occurrence of outbreaks or epidemics so that immediate action can be taken to identify and control the source (e.g. outbreaks of food poisoning) or so that the health service is prepared to deal with increased numbers of patients (e.g. in a flu epidemic). By monitoring how the number of cases of an infection change over time, control and prevention activities, such as vaccination programmes can be assessed for effectiveness in reducing the frequency of disease and its consequences\(^\text{14}\).

5.6.1 Respiratory Diseases

Tuberculosis (TB) is an infectious disease that is caused by a bacteria called Mycobacterium tuberculosis (‘M. tuberculosis’ or ‘M.Tb’). It is spread through the air, when the bacterium in droplets are coughed or sneezed out by someone with infectious tuberculosis. In over 80% of people the immune system kills the bacteria and they are removed from the body. However, in a small number of cases the TB bacteria are not killed and lie dormant (latent TB). Up to 15% of adults with latent TB will go on to develop active TB at some point in their lives and the risk in children may be much higher\(^\text{15}\).

TB is a complex disease. The drugs required to treat TB are relatively straightforward antibiotics, but treatment of the disease is complicated by social factors. Social deprivation and marginalisation have a major impact on both the transmission of the disease and the effectiveness of treatment. As with so many other illnesses, those who are socially marginalised are those who are most vulnerable to the disease and yet face most difficulties in accessing and benefiting from appropriate health care.
The rate of new cases of tuberculosis in Thurrock is 8.0 new cases per 100,000 population, and this is below both East of England regional (8.4 cases per 100,000 population) and England (16.0 cases per 100,000 population) rates. Thurrock has a low rate in comparison with our statistical and geographical neighbours. The trend in cases of tuberculosis has shown an overall increase in England and East of England. The trend for TB cases in Thurrock has also shown an increase, but has a wider variance in the trend. This is probably due to the small number of cases being reported locally.

Number of newly diagnosed cases of tuberculosis per 100,000 population 2007-2009:

![Number of New cases of TB per 1000,000 population compared to statistical neighbours](image_url)

Source: Health Protection Agency
Number of new cases of TB per 100,000 population compared to geographical neighbours

Source: Health Protection Agency

Number of Cases of Tuberculosis per 100,000 population from 2000-2009:

Source: Health Protection Agency

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Although the incidence of TB is low in Thurrock, it is important that the identification and treatment of case continues. All organisations, whether public sector or third sector, have a vital role to play in identifying new cases and helping patients to access and complete their treatment. Focus is especially needed on early detection and access to treatment in the high risk groups.

### 5.6.2 Food poisoning and infectious diseases

There have been no known outbreaks of food poisoning within Thurrock in the last two years. From time to time Thurrock residents have been affected by outbreaks from events held outside the Borough, but there have not been any outbreaks from Thurrock businesses or events.

Suspected and/or confirmed cases of food poisoning, whether individual cases or outbreaks, must be notified to Local Authorities by General Practitioners. Prior to April 2011, GPs were given a small payment for each notification. This has now been removed. Thurrock Council Public Protection team notes that this has coincided with a dramatic reduction in the number of notifications received. This may be due to a reduction in the number of faecal samples taken to identify the causative organisms for a patient’s symptoms. This is of concern, as we investigate all cases and although we cannot always identify the source, we are then in a position to see early links with potential businesses/types of food and investigate before there is the potential for other customers to be affected.

From 1st April 2010 to 31st March 2011 Thurrock Council's Public Protection Team were notified of 183 suspected or confirmed cases of food poisoning, of which 101 had been diagnosed as campylobacter. A comparison has been made below with the number of food poisonings reported between 1st April and 31st September for 2010 and 2011.

Nationally Campylobacter is the most common cause of food poisoning. It is commonly found in raw meat and poultry, although can be found on a wide range of foods due to cross-contamination within the kitchen. There is currently a great deal of research and work being carried out to reduce the levels in raw poultry in the U.K. Figure 2.38 shows details of notifications of food poisoning in Thurrock over the past three years.

<table>
<thead>
<tr>
<th>ORGANISM</th>
<th>1.4.09 – 31.3.10</th>
<th>1.4.10 – 31.9.10</th>
<th>1.4.11 – 31.9.11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of suspected or confirmed cases of food poisoning notified to Environmental Health</td>
<td>183</td>
<td>111</td>
<td>52</td>
</tr>
<tr>
<td>Number of cases of campylobacter notified</td>
<td>101</td>
<td>52</td>
<td>41</td>
</tr>
<tr>
<td>Cases of salmonella notified</td>
<td>31</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Cases of e-coli 0157</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Liaison will be carried between Thurrock and the Health Protection Agency to try to establish the reasons for the decline in notifications.

Customers contact Environmental Health directly when they believe that a particular food sold in Thurrock may have been the cause of their illness. We respond by asking for a faecal sample to identify the causative organism and can then look at incubation periods and possible sources. We will inspect relevant businesses or advise our colleagues in other LAs, if the source may be there. We also carry out food sampling for microbiological analysis. Customers tend to believe that the last food that they ate was the source, but this is often not the case. Campylobacter, for example, has a typical incubation period of between 3 and 7 days (and can be longer).

The rate of notification to the Health Protection Agency of cases of food poisoning in 2010 in Thurrock was 89.8 cases per 100,000 population and this remains below the national target of 102.4 cases per 100,000 population. Thurrock has a higher level of food poisoning notifications than the geographical neighbours and just above the mid-point of the performance against its statistical neighbours.

The high level of cases may be linked to the below target level of premises that are broadly compliant with food hygiene standards. Thurrock has a rating of C, with the percentage of premises compliant with food hygiene in 2010 at 78.6% compared to the target of 84.1%.

Number of notifications of food poisonings per 100,000 population 2010:

Source: Health Protection Agency
Although Thurrock’s food poisoning rate of 89.8 cases per 100,000 population is below the National target of 102.4 cases per 100,000 population, it is the highest in comparison to the geographical neighbours and in the top half of the graph of statistical neighbours. This may be partly due to the low rating on food hygiene, with Thurrock achieving a C rating with only 78.6% of establishments compliant with food hygiene regulations. Further work is required with the inspection and enforcement of food hygiene regulations with establishments in Thurrock.

5.6.3 Summary – Communicable Diseases

Tuberculosis (TB)

- The rate of new cases of TB in Thurrock is below both East of England regional and England. Thurrock has a low rate in comparison with our statistical and geographical neighbours.

- There has been an overall increase in cases of TB in Thurrock as is the case for England and East of England.

- Although the incidence of TB is low in Thurrock, it is important that the identification and treatment of case continues. All organisations, whether public sector or third sector, have a vital role to play in identifying new cases and helping patients to access and complete their treatment. Focus is especially needed on early detection and access to treatment in the high risk groups.
Food Poisoning

- The notification to the Health Protection Agency of cases of food poisoning in 2010 in Thurrock remained below the national target.

- Although Thurrock’s food poisoning rate is below the National target, it is the highest in comparison to the geographical neighbours and in the top half of the graph of statistical neighbours.

- The high level of cases may be linked to the below target level of premises that are broadly compliant with food hygiene standards. Further work is required with the inspection and enforcement of food hygiene regulations with establishments in Thurrock.

- Thurrock has a low rate of new cases of malignant melanoma for both all ages and under 75 year olds. This is below the national target for both indicators and is the lowest among the statistical and geographic neighbours in both indicators. It is also ranked in the lowest quintile nationally.

- At present the density of sunbeds per overall and high risk populations in Thurrock is this is below the national average. Therefore, at present, this is not an area of concern for Thurrock and a watching brief is all that is required.

5.7 Dental Health

Dental health has an impact on overall health and wellbeing. The risk factors for oral health are related to lifestyle factors common to chronic disease such as cardiovascular disease and diabetes. Diets high in sugar and acidic beverages, such as juice and carbonated drinks, have a negative impact on oral health. Good nutrition is also vital in the development of the teeth and gums.

Access to dental treatment focused on prevention and primary care is important to reduce the levels of decayed, extracted or filled teeth in 12 year olds. This focus needs to look not only at care of teeth, but also at the nutritional aspects required for better oral and overall health.

The chart below is the most recent data on the state of dental health of 12 year old children in the Thurrock. The children sampled were attending mainstream schools. The measurement is the mean number of teeth which were either obviously actively decayed or had been filled or extracted because of decay in the children sampled. The charts show that Thurrock, with a mean number of 0.82 decayed teeth per child, is above both the England (0.74 teeth per child) and East of England region (0.57 teeth per child) averages.
Figure 2.39: Children’s Tooth Decay (aged 12) – the Mean Number of Teeth per child sampled which were either decayed, filled or extracted due to decay.

Mean number of teeth decayed, filled or extracted compared to geographical neighbours.

- Basildon CD
- Brentwood CD
- Thurrock UA
- East of England

The chart shows the mean number of teeth decayed, filled or extracted due to decay compared to geographical neighbours.
5.7.1 Summary – Dental Health

- Dental health has an impact on overall health and wellbeing with its risk factors being related to lifestyle factors common to chronic diseases such as cardiovascular disease and diabetes.

- Diets high in sugar and acidic beverages, such as juice and carbonated drinks, have a negative impact on oral health.

- Thurrock is above both the England and East of England region averages for teeth which were either obviously actively decayed or had been filled or extracted because of decay in 12 year old children attending mainstream schools.

- Good nutrition is also vital in the development of the teeth and gums providing better oral and overall health. Therefore treatment focused on prevention in primary care is important to reduce the levels of tooth decay alongside sufficient access to dental services.
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