Introduction

Death rates from liver disease are increasing in England. This is in contrast to most EU countries where liver disease death rates are falling. Between 2001 and 2012 the number of people who died with an underlying cause of liver disease in England rose from 7,841 to 10,948. This represents a 40% increase in liver deaths during this period and is in contrast to other major causes of disease which have been declining (figure 1). Liver disease is largely preventable. Whilst approximately 5% of liver disease is attributable to autoimmune disorders (diseases characterised by abnormal functioning of the immune system), most liver disease is due to three main risk factors: alcohol, obesity and viral hepatitis.

Figure 1 - Percentage change in mortality rates, England 1995 - 2012

Key messages for East Sussex

In East Sussex, between 2010 and 2012, the average number of years of life lost* in people aged under 75 from liver disease is 27 per 10,000 persons. This compares to 36 for breast cancer, 15 for stroke and 14 for road traffic accidents.

In East Sussex the rate of premature mortality from liver disease between 2010 and 2012, is similar to the England average for males and significantly lower than the England average for females.

Between 2001-03 and 2010-12, the average number of people per year who died with an underlying cause of liver disease in East Sussex, increased from 94 to 107.

The rate of alcohol specific hospital admissions in 2012/13 in East Sussex is significantly lower than the England average for males and significantly lower than the England average for females.

* YLL is an estimate of the average years a person would have lived if they had not died prematurely. It is therefore a measure of premature mortality. As a method it is an alternative to death rates that gives more weight to deaths amongst younger people.
Key Facts

Alcohol is the most common cause of liver disease in England. Alcoholic liver disease accounts for over a third of liver disease deaths. The more someone drinks above the lower-risk guideline, the higher their risk of developing liver disease. The UK is one of the few European countries where alcohol consumption has risen in the last 50 years.

• Between 2010 and 2012, in those under 75 years, an average of 24 men and 9 women died each year in East Sussex from alcoholic liver disease. In 2012/13, there were 127 hospital admissions in East Sussex (92 male and 35 female) where alcoholic liver disease was the primary diagnosis.

• There were 1,542 alcohol specific hospital admissions in East Sussex in 2012/13 (1,042 male and 500 female). The rate of alcohol specific hospital admissions in East Sussex is significantly lower than the England average for males, and significantly lower than the England average for females.

• There are currently 2,014 premises licensed to serve alcohol in East Sussex. This equates to one licensed premises for every 212 adults. There are 74 premises with 24 hour alcohol licenses.

Prevention

The most effective way for an individual to prevent alcohol related liver disease is to drink within the lower-risk guideline. There is strong evidence that opportunistic early identification of people whose health is being damaged by alcohol and brief advice is effective in reducing alcohol consumption and related problems, particularly when delivered in Primary Care and Emergency Departments.

There is good evidence that population level interventions which limit availability and affordability of alcohol through licensing restrictions, minimum pricing and taxation that is proportionate to the volume of alcohol are effective in reducing alcohol consumption.

Questions you should ask locally

1. Has alcohol and its links with liver disease been included in your Joint Strategic Needs Assessment (JSNA)?
2. Do you have a local multi-agency alcohol strategy which considers public health and community safety?
3. Are the links between availability of alcohol and alcohol related harm explicitly considered in local licensing policy, and when reviewing new licensing applications?
4. Are local health and social care staff trained to routinely provide early identification of problem drinking and provide brief alcohol advice?
5. Do local alcohol services have sufficient capacity to meet current and future alcohol treatment needs?

Resources

• Health First: An evidence-based alcohol strategy for the UK. http://www.stir.ac.uk/media/schools/management/documents/Alcoholstrategy-updated.pdf
• Local Alcohol Profiles for England http://www.lape.org.uk/
• Longer Lives: http://longerlives.phe.org.uk/
• National Confidential Enquiry into Patient Outcome and Death: Alcohol Related Liver Disease: Measuring the Units: http://www.ncepod.org.uk/2013arlrd.htm
• The Alcohol Learning Centre http://www.alcohollearningcentre.org.uk/
Key Facts

Obesity is an important risk factor for liver disease because of its link to non-alcoholic fatty liver disease (NAFLD), which is the term used to describe accumulation of fat within the liver that is not caused by alcohol. It is usually seen in people who are overweight or obese.

Although the great majority of people with NAFLD never experience any symptoms from the condition, a minority may progress to a more serious form of the disease known as non-alcoholic steatohepatitis, which may ultimately lead to fibrosis and, in a small number of cases, cirrhosis.

• The proportion of Year 6 children classified as overweight or obese in East Sussex in 2012/13 is 29%, which is significantly lower than the England average of 33%.

• In East Sussex, the proportion of adults classified as overweight or obese in 2012 is 65%, which is similar to the England average of 63%.

Prevention

The best way for an individual to prevent becoming overweight or obese is by eating healthily and exercising regularly.

The problem of obesity cannot be solved by individual behaviour change alone. Obesity is a complex problem that requires action at all levels, from individual to societal, and across all sectors, to create environments that promote and support physical activity and healthy eating.

Questions you should ask locally

1. Has obesity and its links with liver disease been included in your Joint Strategic Needs Assessment (JSNA)?
2. Are there plans and processes in place to assess (ideally by doing a health impact assessment) the affect of local planning policies and other local decisions on the ability of the community to be physically active and eat a healthy diet? For example is the proximity to schools, colleges, leisure centres and other places where children gather considered when reviewing applications for fast food outlets?
3. Are local health and social care staff trained and confident to make every contact count and raise the issue of weight management routinely?
4. Are there weight management services across the obesity care pathway in place locally with sufficient capacity to meet current and future need?
5. Are nutritional standards (including government buying standards) for food applied in local schools and colleges, hospitals and local employers?

Resources

• Obesity Knowledge and Intelligence Team: http://www.noo.org.uk/
• National Institute for Health and Care Excellence: Obesity: Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children; http://publications.nice.org.uk/obesity-cg43
• Longer Lives: http://longerlives.phe.org.uk/
• Healthy weight, healthy lives: A toolkit for developing local strategies http://www.fph.org.uk/healthy_weight_healthy_lives%3A_a_toolkit_for_developing_local_strategies
• Academy of Medical Royal Colleges Measuring Up: The Medical Profession's Prescription For The Nation's Obesity Crisis: http://www.aomrc.org.uk/doc_download/9673-measuring-up
Hepatitis B

Key Facts

Hepatitis B is a virus which is transmitted through contact with infected blood or other body fluids. Acute infection can lead to chronic disease and during the acute phase of infection the majority of people including children are asymptomatic; only a third of adults develop symptoms which may include cold-like symptoms, nausea, fever and jaundice. Most acute infections are acquired through adult risk behaviours such as injecting drug use and sexual contact. The risk of developing chronic hepatitis B infection depends on the age at which infection is acquired. Chronic infection occurs in up to 90% of children who acquire the infection under the age of 5 years and up to 10% of people infected as adults. Those who are chronically infected are at risk of developing chronic liver disease and liver cancer. In the UK, annually the majority (95%) of newly identified chronic hepatitis B infections are acquired overseas at birth or at a young age. The prevalence of chronic hepatitis B infection in the UK is estimated to be 0.3% (approximately 180,000 people).

In East Sussex, no data was submitted on the proportion of babies vaccinated who were born to mothers infected with hepatitis B in 2012/13. Without a completed course of vaccinations these infants are at risk of chronic infection and cirrhosis.

In East Sussex in 2012/13 the proportion of people, in their latest treatment journey at specialist drug services, being offered and completing a course of hepatitis B vaccine is 26%.

Prevention

Hepatitis B is a vaccine preventable disease. Immunisation is recommended for high risk groups including children born to hepatitis B positive mothers, those who change sexual partners frequently and people who inject drugs. Other groups are detailed in 'Immunisation against Infectious Disease'. Actions that prevent hepatitis B infection also include:

- Follow-up of close household and sexual contacts of hepatitis B positive individuals, ensuring testing and vaccination
- Education and promoting increased awareness of the infection, offering testing to those at increased risk and promoting safer sex and condom use
- Harm reduction services for people who inject drugs e.g. needle and syringe programmes and opioid substitution therapy

Questions you should ask locally

1. Are local services available to ensure that babies born to hepatitis B positive mothers, are followed up to ensure they have been fully vaccinated and tested for infection in line with national policy?
2. Are local provisions in place to ensure close household and sexual contacts of cases of hepatitis B are followed up appropriately (that is tested and vaccinated)?
3. Are local services in place to ensure prisoners, people who attend genitourinary medicine clinics and people who inject drugs are immunised against hepatitis B in line with national recommendations?
4. Is there local provision to ensure that people and particular vulnerable groups at increased risk of hepatitis B infection, such as people with links to high prevalence countries, are offered testing according to NICE guidance?
5. Are other prevention strategies such as needle and syringe programmes and condom provision readily accessible to those at risk of hepatitis B?
6. Is there adequate specialist service provision to ensure diagnosed cases are managed appropriately?

Resources

- NICE public health guidance PH 43. Hepatitis B and C: ways to promote and offer testing to people at increased risk of infection.
  http://www.nice.org.uk/guidance/ph43
- Department of Health. Immunisation against Infectious Disease (The Green Book) 2013.
- NICE quality standards QS65. Quality standards for hepatitis B: http://www.nice.org.uk/guidance/qs65
Key Facts

Hepatitis C virus is mainly transmitted through contact with infected blood. Injecting drug use is the most important risk factor for infection within the UK. People born or brought up in a country with high prevalence of chronic hepatitis C are also at risk (especially those in Africa and Asia, including Egypt, China and Pakistan), as are those who received blood transfusions in the UK prior to the introduction of HCV testing in 1991. The prevalence of chronic Hepatitis C infection in England is estimated to be 0.4% of adults (approximately 160,000 people).

Hepatitis C is often asymptomatic, and symptoms may not appear until the liver is severely damaged. Around 20-30% of infected people clear their infection naturally within the first six months of infection. For the remainder, hepatitis C is a chronic infection which can lead to liver disease. Data from the Unlinked Anonymous Monitoring survey of people who inject psychoactive drugs suggest that levels of infection in this group are high at around 50% in England with around 1 in 7 sharing needles/syringes. Around one in 20 of those who inject image and performance enhancing drugs (such as anabolic steroids and melanotan) have also been infected with hepatitis C.

- In East Sussex in 2012/13, the proportion of people who inject drugs, who are in their latest treatment episode at specialist drug services, being offered and taking up a hepatitis C test is 92%.

- In 2012 it is estimated that 57% of those people who inject drugs in East Sussex have been infected with hepatitis C; with 0.25% of the population of East Sussex estimated to be injecting heroin and/or crack cocaine (2011/12).

Prevention

Education and awareness programmes are needed to prevent drug misuse. Treatment services and needle and syringe programmes for people who inject drugs are particularly important to minimise ongoing transmission of Hepatitis C. Actions to prevent Hepatitis C infection include:
- Interventions to reduce initiation of injecting drug use and to help people to stop injecting
- Harm reduction services for people who inject drugs e.g. needle and syringe programmes and substitution therapy
- Increasing awareness, testing and diagnosis of those at risk of infection
- Getting diagnosed individuals into treatment and care. NICE approved therapies exist for the treatment of hepatitis C that will clear the virus in the majority of cases.

Questions you should ask locally

1. Can you describe current service provision (and gaps) and is there a locally agreed multi-agency strategy to prevent and control hepatitis C infection?
2. Has the PHE commissioning template been used to estimate HCV prevalence and numbers eligible for treatment in your local area?
3. Is local provision in place to promote and offer testing to people at risk of hepatitis C infection, as recommended by NICE?
4. Are care pathways in place to ensure that diagnosed individuals can access NICE recommended treatments and care, particularly for those BME groups at increased risk of infection and those diagnosed in drug services and prisons?
5. Do the needle and syringe programmes in your local area provide an appropriate range of services with sufficient coverage, as recommended by NICE?
6. Has Chronic Hepatitic C and its links to liver disease been included in your Joint Strategic Needs Assessment (JSNA)

Resources

- NICE public health guidance PH 43. Hepatitis B and C: ways to promote and offer testing to people at increased risk of infection. http://www.nice.org.uk/guidance/ph43
## Liver disease indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Local no per year</th>
<th>Local Value</th>
<th>Local Value</th>
<th>Eng Avg</th>
<th>Eng Worst</th>
<th>England Range</th>
<th>Eng Best</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deprivation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. - % in most deprived quintile</td>
<td>69,117</td>
<td>13.0</td>
<td>20.4</td>
<td>83.8</td>
<td>0.3</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2. - Persons who inject drugs</td>
<td>825</td>
<td>2.6</td>
<td>2.5</td>
<td>8.7</td>
<td>0.3</td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td><strong>All liver disease</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. - Hospital admissions (males)</td>
<td>256</td>
<td>95.5</td>
<td>142.8</td>
<td>337.4</td>
<td>47.5</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>4. - Hospital admissions (females)</td>
<td>185</td>
<td>63.5</td>
<td>85.1</td>
<td>228.5</td>
<td>30.4</td>
<td></td>
<td>30.4</td>
</tr>
<tr>
<td>5. - Premature mortality (males)</td>
<td>51.3</td>
<td>21.2</td>
<td>23.7</td>
<td>58.4</td>
<td>13.0</td>
<td></td>
<td>13.0</td>
</tr>
<tr>
<td>6. - Premature mortality (females)</td>
<td>22.4</td>
<td>8.8</td>
<td>12.6</td>
<td>25.0</td>
<td>6.9</td>
<td></td>
<td>6.9</td>
</tr>
<tr>
<td><strong>Alcohol</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. - Alcohol specific hospital admissions (males)</td>
<td>1,042</td>
<td>411.4</td>
<td>506.9</td>
<td>1,477</td>
<td>178.1</td>
<td></td>
<td>178.1</td>
</tr>
<tr>
<td>8. - Alcohol specific hospital admissions (females)</td>
<td>500</td>
<td>187.4</td>
<td>232.3</td>
<td>682.6</td>
<td>86.8</td>
<td></td>
<td>86.8</td>
</tr>
<tr>
<td>9. - Hospital admissions (males)</td>
<td>92</td>
<td>33.9</td>
<td>44.3</td>
<td>158.5</td>
<td>7.0</td>
<td></td>
<td>7.0</td>
</tr>
<tr>
<td>10. - Hospital admissions (females)</td>
<td>35</td>
<td>13.2</td>
<td>19.8</td>
<td>81.9</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>11. - Premature mortality (males)</td>
<td>24.7</td>
<td>10.2</td>
<td>12.0</td>
<td>38.2</td>
<td>1.9</td>
<td></td>
<td>1.9</td>
</tr>
<tr>
<td>12. - Premature mortality (females)</td>
<td>9.7</td>
<td>3.8</td>
<td>5.9</td>
<td>15.2</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Hepatitis B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. - Vaccination coverage - Hep B (2 Yrs)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>9.1</td>
<td>100</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>14. - Drug users - Hep B Vaccination</td>
<td>25</td>
<td>26.0</td>
<td>17.9</td>
<td>0</td>
<td>70.4</td>
<td></td>
<td>70.4</td>
</tr>
<tr>
<td>15. - Hospital admissions (persons)</td>
<td>*</td>
<td>n/a</td>
<td>1.0</td>
<td>5.1</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>16. - Premature mortality (persons)</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
<td>1.0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Hepatitis C</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. - Drug users - With Hep C test</td>
<td>768</td>
<td>92.9</td>
<td>70.3</td>
<td>27.5</td>
<td>97.3</td>
<td></td>
<td>97.3</td>
</tr>
<tr>
<td><strong>Obesity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. - Persons starting HCV treatment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>19. - Hospital admissions (persons)</td>
<td>24</td>
<td>4.5</td>
<td>3.5</td>
<td>13.6</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>20. - Premature mortality (persons)</td>
<td>2.7</td>
<td>0.6</td>
<td>0.5</td>
<td>2.8</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>21. - Excess weight - Adults</td>
<td>886</td>
<td>65.0</td>
<td>63.8</td>
<td>74.4</td>
<td>45.9</td>
<td></td>
<td>45.9</td>
</tr>
<tr>
<td>22. - Excess weight - 10-11 year olds</td>
<td>1,275</td>
<td>29.9</td>
<td>33.3</td>
<td>44.2</td>
<td>24.1</td>
<td></td>
<td>24.1</td>
</tr>
<tr>
<td>23. - Hospital admissions (persons)</td>
<td>15</td>
<td>2.8</td>
<td>2.9</td>
<td>12.7</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>24. - Premature mortality (persons)</td>
<td>2.0</td>
<td>0.4</td>
<td>0.7</td>
<td>6.7</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**Indicator unit of measure**
- **Indicator - Percentage (%)**
- **Indicator - Crude Rate per (1,000 or 100,000)**
- **Indicator - Directly age standardised rate per 100,000**

* Hospital admission figure suppressed to avoid potential disclosure (between 1 and 5 events)

n/a - Data not available for this Local Authority/England

1. Deprivation - Percentage of people in this area living in the 20% most deprived areas in England. IMD2010, population estimates 2012.
2. Persons who inject drugs (PWID) - estimated number of persons who inject (heroin and/or crack cocaine) aged 15 – 64, per 1,000 population, 2011/12.
3. Hospital admissions for liver disease - males, females - directly age-standardised rate per 100,000 population, 2010/12.
4. Premature mortality from liver disease – males, females - directly age-standardised rate in less than 75 year olds, per 100,000 population, 2010/12.
5. Alcohol specific hospital admissions - admitted to hospital due to alcohol specific conditions - males, females - directly age-standardised rate per 100,000 population, 2012/13.
6. Hospital admissions for alcoholic liver disease - males, females - directly age standardised rate in less than 75 year olds per 100,000 population, 2010/12.
7. Premature mortality from alcoholic liver disease - males, females - directly age standardised rate in less than 75 year olds per 100,000 population, 2012/13.
8. Premature mortality from alcoholic fatty liver disease - males, females - directly age standardised rate in less than 75 year olds per 100,000 population, 2012/13.
9. Premature mortality from hepatocellular carcinoma - males, females - directly age standardised rate in less than 75 year olds per 100,000 population, 2012/13.
10. Hospital admissions for HCV treatment - males, females - directly age standardised rate per 100,000 population, 2012/13.
11. Premature mortality from hepatitis B related end-stage liver disease/hepatocellular carcinoma - persons less than 75 years, crude rate per 100,000 population, 2010/12.
12. Premature mortality from hepatitis B related end-stage liver disease/hepatocellular carcinoma - persons less than 75 years, crude rate per 100,000 population, 2010/12.
13. Percentage of people in this area living in the 20% most deprived areas in England, IMD2010, population estimates 2012.
14. Persons in their latest treatment journey at specialist drug services, who have completed a course of hepatitis B vaccinations - the proportion of persons beginning a journey in structured drug treatment who were offered and had accepted a course of hepatitis B vaccinations who completed the course, 2012/13.
15. Hospital admissions for hepatitis B related end-stage liver disease or hepatocellular carcinoma - persons - crude rate per 100,000 population, 2012/13.
16. Number of individuals commencing HCV treatment (Placeholder - No data is currently available for this indicator).
17. Hospital admissions for hepatitis C related end-stage liver disease/hepatocellular carcinoma - persons - crude rate per 100,000 population, 2012/13.
18. Premature mortality from hepatitis C related end-stage liver disease/hepatocellular carcinoma - persons - crude rate in less than 75 year olds per 100,000 population, 2010/12.
19. The proportion of adults who are considered of excess weight or obese - % of adults, modelled estimate using Health Survey for England, 2012.
20. Hospital admissions for non-alcoholic fatty liver disease - persons - crude rate per 100,000 population, 2012/13.
21. The proportion of adults who are considered of excess weight or obese - % of adults, modelled estimate using Health Survey for England, 2012.

For further information, accompanying documentation and to download the data in this profile, please visit: [http://fingertips.phe.org.uk/profile/liver-disease](http://fingertips.phe.org.uk/profile/liver-disease)

© Crown copyright, 2014. You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence](http://www.nationalarchives.gov.uk/doc/open-government-licence)