

Protecting and improving the nation's health

## **Liver Disease Profiles - November 2017 Update**

### Main findings

- Premature mortality rates from liver disease across England continue to rise and have now reached 18.3 per 100,000 population. On average this represents approximately 8,500 deaths a year from liver disease.
- For every female death from premature liver disease mortality, there will be approximately 2 male deaths.
- More deprived areas experience higher rates of premature deaths from liver disease than the less deprived areas.
- There are roughly 4,000 premature deaths a year associated with alcohol related liver disease.
- Deaths from non-alcoholic fatty liver disease (NAFLD) accounted for 813 deaths in England between 2014-16
- The rate of premature mortality from hepatitis C or B related endstage liver disease / hepatocellular carcinoma has not significantly changed in the last couple of years.

## Summary

This update provides updated data on premature mortality and additional breakdown to the data by inequalities, further adding to the narrative of the profile data.

The data shows that premature mortality from liver disease is still increasing. It highlights the inequalities that exist between males and females and across different levels of deprivation.

#### What's new?

New mortality data for 2014-16 has been added to the liver health profiles. Additional functionality has also been added within the profiles to allow selection by deprivation and gender and a view of the data in a boxplot format.

The following indicators were updated:

- Under 75 mortality rate from liver disease
- Under 75 mortality rate from alcoholic liver disease
- Under 75 mortality rate from non-alcoholic fatty liver disease (NAFLD)
- Under 75 mortality rate from hepatitis B related end-stage liver disease/hepatocellular carcinoma
- Under 75 mortality rate from hepatitis C related end-stage liver disease/hepatocellular carcinoma

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#### Premature mortality rates from liver disease across England vastly different

Figure 1 shows that the trend in rate of premature deaths from liver disease, has although slowed down, is still increasing.

The rate of deaths from premature mortality for liver disease across districts range from 6.6 per 100,000 population in Chiltern local authority to 44.7 per 100,000 population in Blackpool local authority representing a 6.7 fold variation in rates.

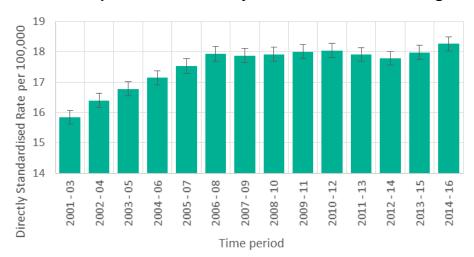


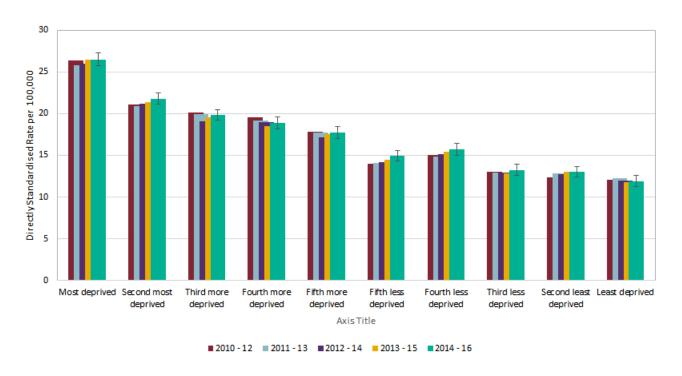
Figure 1. Trend in rate of premature mortality from liver disease in England

#### Deprivation is influential in the rate of premature mortality from liver disease.

Those living in the most deprived districts of England are twice as likely to die prematurely from liver disease as those in the least deprived districts. The rate for 2014-16 in the most deprived decile of districts was 26.5 per 100,000 population and 11.9 per 100,000 population in the least deprived decile of districts.

Over the past 5 years this inequality has remained unchanged. (Figure 2)

Figure 2. Under 75 mortality rate from liver disease, persons, District & UA deprivation deciles in England (IMD2015)



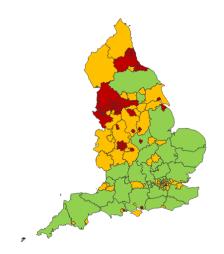
#### Premature mortality from alcohol related liver disease

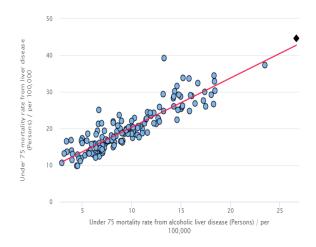
Rates of premature death from alcohol related liver disease across England were 8.8 per 100,000 population and ranged from 2.9 per 100,000 population in Barnet upper tier local authority (UTLA) to 26.7 per 100,000 population in Blackpool UTLA. This represents at 9.1 fold variation across the UTLAs. (Figure 3)

Areas with the highest premature mortality from liver disease also have the highest rates of premature mortality from alcohol related liver disease. (Figure 4)

Figure 3. Under 75 mortality rate per 100,000 population from alcohol related liver disease, persons, 2014-16

Figure 4. Under 75 mortality rate per 100,000 population from liver disease and alcohol related liver disease, persons, 2014-16





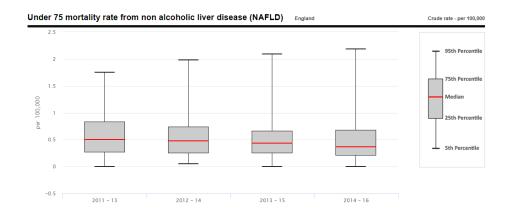
### Premature mortality from non-alcoholic fatty liver disease (NAFLD)

Across England, the rate of premature mortality where NAFLD is the underlying cause of death has been slowly reducing and is now 0.54 per 100,000 population.

The box plot however shows that there is an increase year on year in the rate seen in the area with the 95<sup>th</sup> percent highest rank position. (Figure 5)

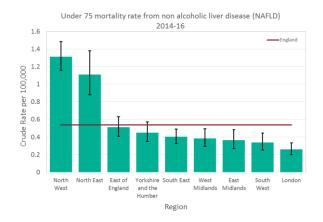
Blackburn and Darwin UTLA have the highest crude rate of premature mortality from NAFLD at 5.1 per 100,000 population.

Figure 5. Under 75 mortality rate per 100,000 population from non-alcoholic fatty liver disease (NAFLD), persons, 2014-16, variation across England



Rates for NAFLD are significantly higher in the northern regions than the England average. (Figure 6)

Figure 6. Under 75 mortality rate per 100,000 population from non-alcoholic fatty liver disease (NAFLD), persons, 2014-16, by Region

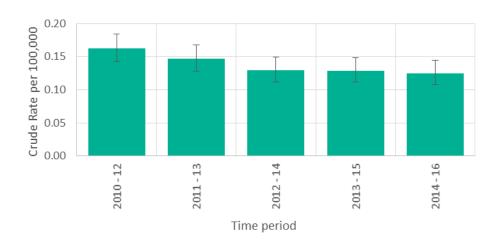


# Premature mortality from hepatitis B related end-stage liver disease / hepatocellular carcinoma

The rate of premature mortality from hepatitis B related end-stage liver disease / hepatocellular carcinoma in England is 0.13 per 100,000 population and it has been this rate since 2012-14. (Figure 7)

The UTLA values ranged from 0 to 0.9 per 100,000 population, the highest rate of which was in Southwark.

Figure 7. Premature mortality from hepatitis B related end-stage liver disease / hepatocellular carcinoma, England

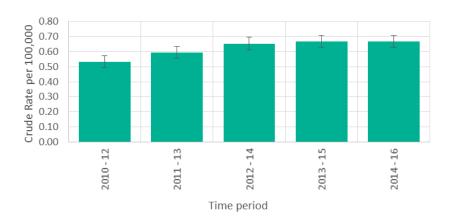


# Premature mortality from hepatitis C related end-stage liver disease / hepatocellular carcinoma

Currently the picture for England shows a rate of 0.67 per 100,000 population and this has been going up year on year. (Figure 8)

Kensington and Chelsea UTLA experience the highest rates in the country, with a rate of 2.3 per 100,000 population. Some areas report 0 rates.

Figure 8. Premature mortality from hepatitis C related end-stage liver disease / hepatocellular carcinoma, England



### Background

Liver disease is almost entirely preventable with the major risk factors: alcohol, obesity and Hepatitis B and C accounting for up to 90% of cases.

- The liver disease profiles provide an invaluable resource relating to one of the main causes of premature mortality nationally; a disease whose mortality rates are increasing in England, while decreasing in most EU countries. The local authority profiles will support the development of Joint Strategic Needs Assessments and work of Health and Wellbeing Boards presenting local key statistics and highlighting questions to ask locally about current action to prevent liver disease.
- The website contains data for Upper Tier Local Authorities, former Government Office regions, England and where available Lower Tier Local Authorities.
- The profiles, aimed at primarily LAPH were developed following recommendations in March 2014 from the All-Party Parliamentary Hepatology

Group (APPHG) Inquiry into Improving Outcomes in Liver Disease. Recommendations the LA profiles aim to address were:

- PHE should address the worrying lack of data on all aspects of liver disease by developing a dataset to allow performance management of liver disease across CCGs, local authorities and Health and Wellbeing Boards.
- Health and Wellbeing Boards should monitor early detection, treatment and mortality rates from liver disease. Assessing progress on tackling liver disease should be made a mandatory part of the joint strategic planning process for CCGs and local authorities.
- The data has been extracted using the ONS annual mortality and population statistics. Further details about the profile methodology are available within the definitions section of the online version of the profile.

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