

Liver Disease

Introduction

Liver disease is caused by a wide range of issues, both congenital diseases, such as hereditary metabolic and autoimmune conditions, and lifestyle choices. Lifestyle choices such as obesity and alcohol use, alongside undiagnosed hepatitis infections are responsible for around 95% of liver disease cases in England. Alcohol is the single biggest contributor to liver disease, with roughly one third of cases being alcohol related.

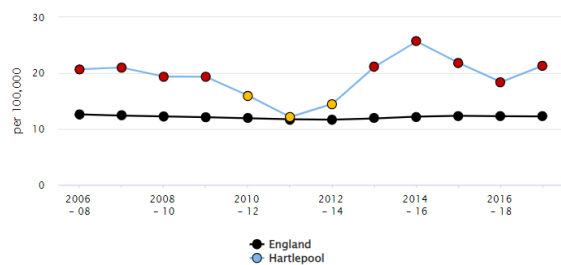
Earlier healthcare diagnosis of liver conditions is the most significant means of reducing the burden of liver disease. However awareness raising campaigns related to alcohol consumption and obesity are also vitally important.

Chronic liver disease can also lead to cirrhosis of the liver, which is where the liver is damaged by a scarring. Cirrhosis of the liver has serious health consequences including portal hypertension (increased pressure in a vein which supplies the liver with blood), which can lead to dangerous fluid buildup around the body.

Liver disease is increasing in prevalence, which is in contrast to other chronic disease such as stroke and heart disease.

Main Issues

Hartlepool's mortality rate for chronic liver disease has been significantly worse than England for the last 5 years.



Recent trend: Could not be calculated

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2006 - 08	54	20.7	15.5	27.0	16.6	12.6
2007 - 09	55	21.0	15.8	27.4	16.8	12.4
2008 - 10	51	19.4	14.4	25.5	16.5	12.2
2009 - 11	52	19.3	14.4	25.4	16.0	12.1
2010 - 12	43	16.0	11.5	21.5	15.4	11.9
2011 - 13	33	12.1	8.3	17.1	15.0	11.7
2012 - 14	39	14.5	10.3	19.8	15.5	11.7
2013 - 15	58	21.1	16.0	27.4	16.6	11.9
2014 - 16	70	25.7	20.0	32.5	17.7	12.2
2015 - 17	59	21.8	16.6	28.2	17.7	12.4
2016 - 18	50	18.4	13.6	24.3	18.1	12.3
2017 - 19	58	21.3	16.2	27.6	18.7	12.2

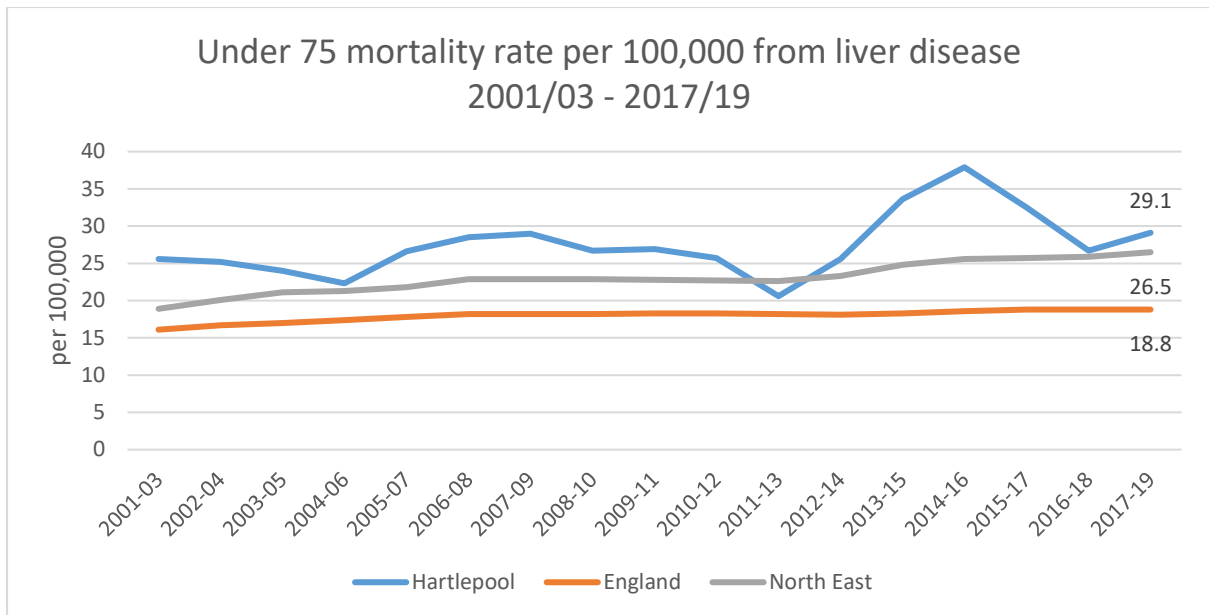
Source: Calculated by OHID: Population Health Analysis (PHA) team from the Office for National Statistics (ONS) Annual Death Registrations Extract and ONS Mid Year Population Estimates

Hartlepool's 2017/19 rate of 21.3 per 100,000 is 74.6% higher than the England rate, and has ended and two year decline in rate, increasing 15.8% on the 2016/18 rate of 18.4 per 100,000. Hartlepool's 2017/19 rate is the 2nd highest in the north east and the 5th highest in England.

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	-	19,443	12.2	12.1	12.4
North East region	-	1,468	18.7	17.7	19.6
South Tyneside	-	105	23.0	18.8	27.9
Sunderland	-	185	22.4	19.3	25.9
Hartlepool	-	58	21.3	16.2	27.6
Middlesbrough	-	79	21.0	16.6	26.2
County Durham	-	309	19.3	17.2	21.6
Newcastle upon Tyne	-	134	19.2	16.0	22.7
Stockton-on-Tees	-	109	19.2	15.7	23.1
Gateshead	-	109	18.3	15.0	22.1
Darlington	-	54	16.9	12.7	22.1
North Tyneside	-	106	16.8	13.7	20.3
Redcar and Cleveland	-	62	14.8	11.3	19.1
Northumberland	-	156	14.6	12.3	17.1

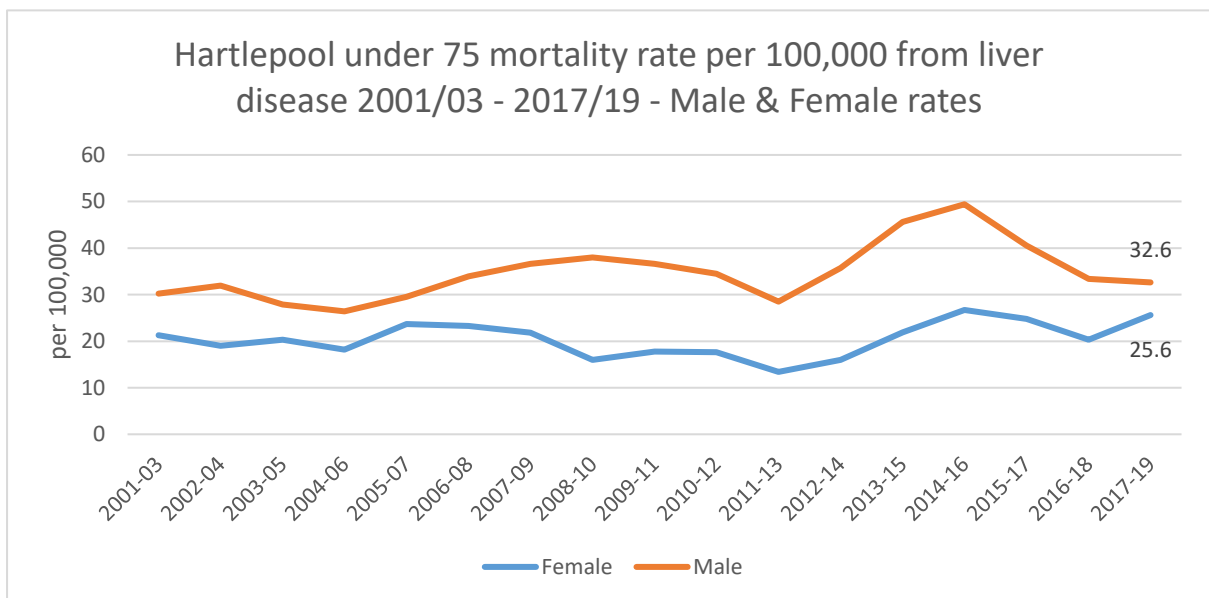
Source: Calculated by OHID: Population Health Analysis (PHA) team from the Office for National Statistics (ONS) Annual Death Registrations Extract and ONS Mid Year Population Estimates

Looking more specifically at under 75 mortality from liver disease, Hartlepool 2017/19 rate of 29.1 per 100,000 is 54.8% larger than the England rate, and, similar to the mortality rate from chronic liver disease, has ended a two year declining rate.



Source: OHID, 2022

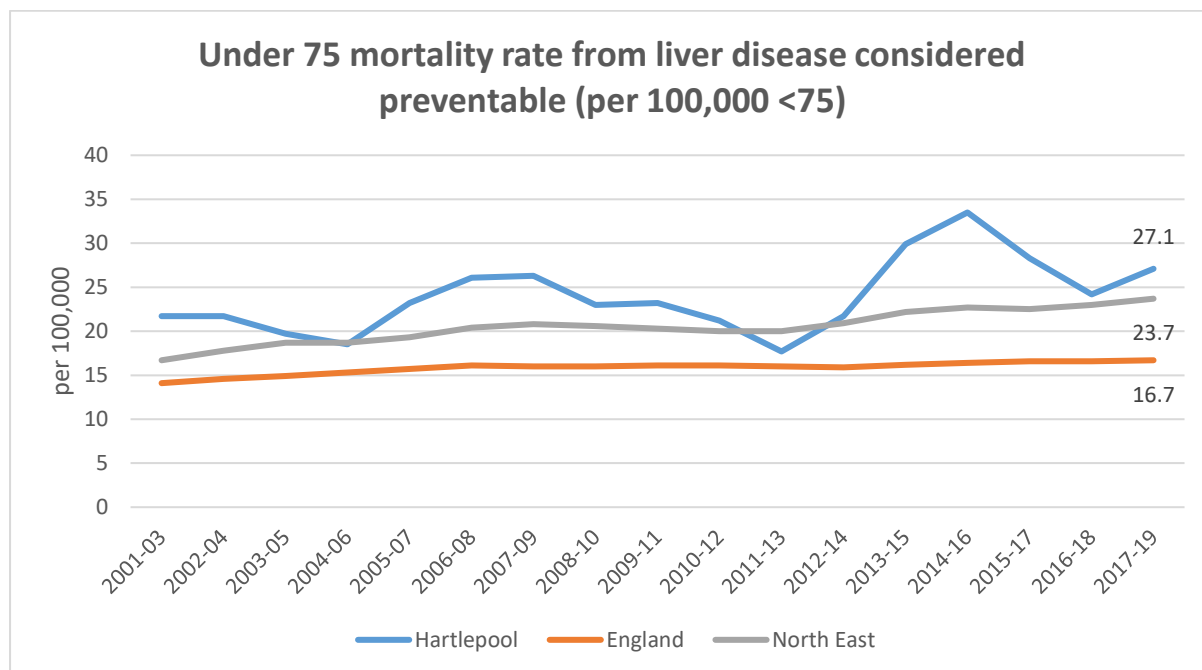
If the Hartlepool rate is broken down by male and female, then it is clear that male rates are driving the overall Hartlepool rate.



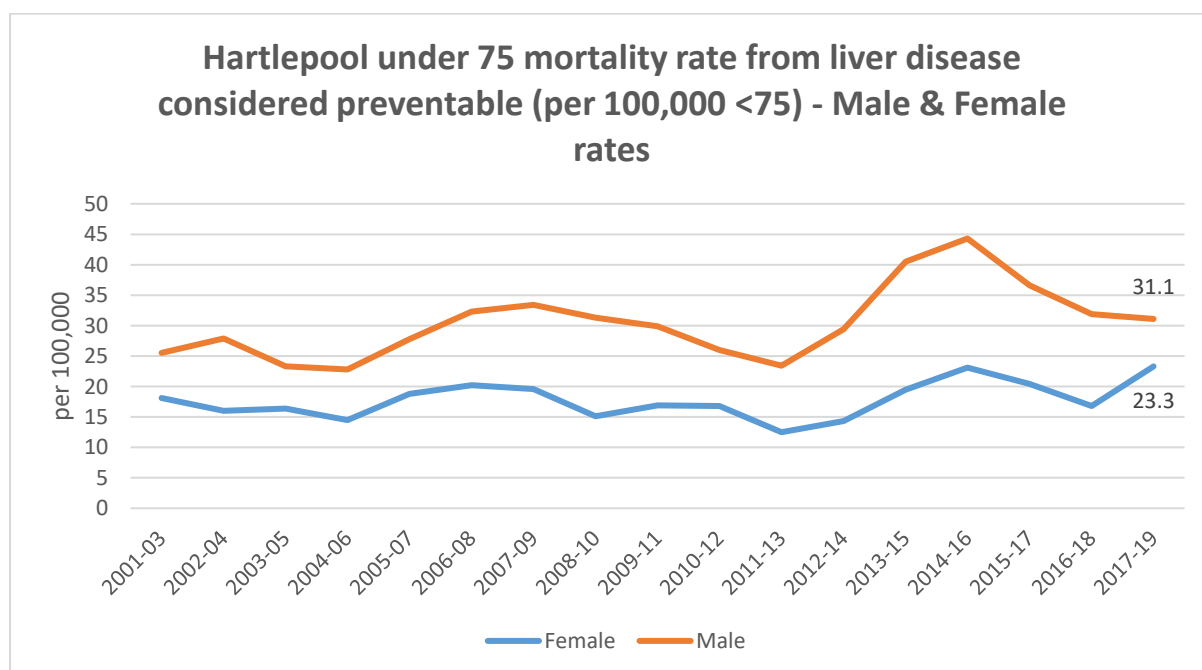
Source: OHID, 2022

Hartlepool's rate for male under 75 mortality from liver disease is 27.3% larger than the female rate in 2017/19, and throughout the reporting period the male rate has been larger than the female rate. The gap in the 2017/19 rate is the lowest since 2005/07, and peaked in 2012/14, when the male rate was more than twice the female rate.

For liver disease mortality considered preventable, Hartlepool has again seen an increase in 2017/19 to end a two year decline in rate, and is again more than 50% higher than the England rate, 62.3% higher.



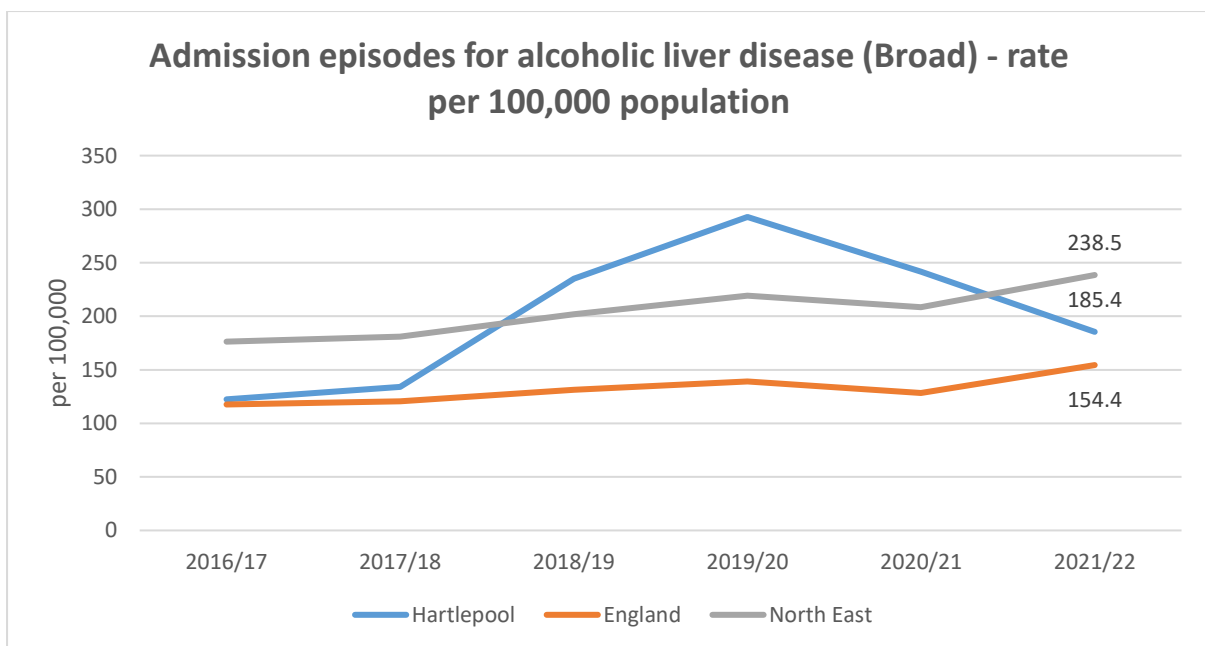
The rates for the male and female preventable mortality from liver disease in under 75s within Hartlepool also follow a similar pattern to that shown earlier.



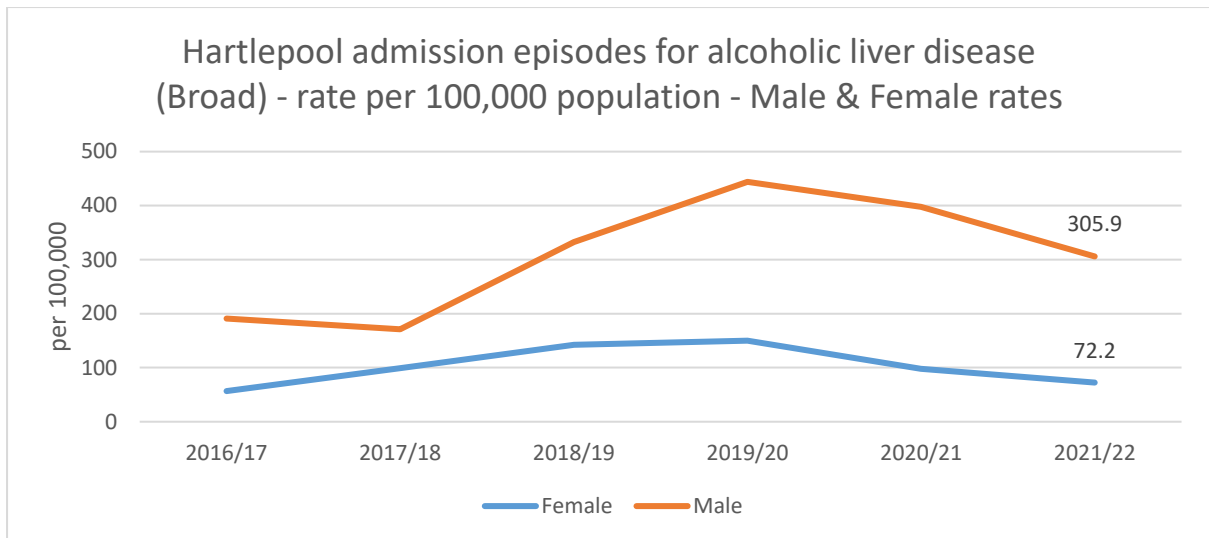
Source: OHID, 2022

The male rate is again higher than the female throughout the reporting period, though again the 2017/19 rate has seen the gap close, from a peak of 107.7% in 2013/15 to 33.5% in 2017/19.

Hospital admissions for alcoholic liver disease for Hartlepool in 2021/22 are on a two year decline, from 292.7 per 100,000 in 2019/20 to 185.4 in 2021/22, a decline of 36.7%. Hartlepool's rate is now below the north east rate, and the gap between Hartlepool and England is at its smallest level since 2016/17, 20.1%. The gap between Hartlepool and England peaked in 2019/20, when Hartlepool's rate was more than twice the England rate.



If the Hartlepool rate is again broken down into male and female, the again the male rate is the major driver, with the male rate in 2021/22 more than four times the female rate.



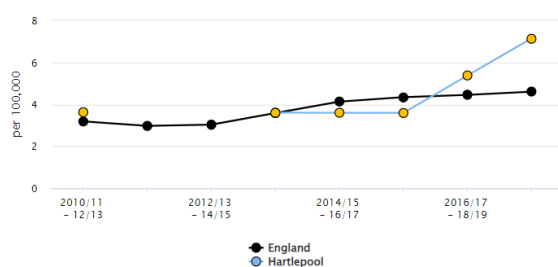
Source: OHID, 2022

The 2021/22 gap is the largest in the reporting period, though the rates have both seen a two year decline, falling 51.9% for females, from 150 per 100,000 in 2019/20 to 72.2 in 2021/22, and 31.1% for males, falling from 444 per 100,000 in 2019/20 to 305.9 in 2021/22.

Hospital admissions for non-alcoholic fatty liver disease (NAFLD) in Hartlepool have increase for the last two years worth of data, from 3.6 per 100,000 in 2015/16-17/18 to 7.1 per 100,000 in 2017/18-19/20, an increase of 97.2%.

Hospital admission rate for non-alcoholic fatty liver disease (NAFLD) (3 year range)

Crude rate - per 100,000



Recent trend: Could not be calculated

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2010/11 - 12/13	10	3.6	1.3	5.7	5.5	3.2
2011/12 - 13/14	-	*	-	-	5.2	3.0
2012/13 - 14/15	-	*	-	-	4.9	3.0
2013/14 - 15/16	10	3.6	1.5	6.2	5.5	3.6
2014/15 - 16/17	10	3.6	2.0	7.1	5.8	4.1
2015/16 - 17/18	10	3.6	2.2	7.5	6.3	4.3
2016/17 - 18/19	15	5.4	3.3	9.3	6.7	4.4
2017/18 - 19/20	20	7.1	4.4	11.0	7.5	4.6

Source: Calculated by Office for Health Improvement and Disparities (OHID): Health & Social Care using data from NHS England (NHSE) - Hospital Episode Statistics (HES), Admitted Patient Care (APC) and Office for National Statistics (ONS), Mid-year population estimates

Hartlepool's rate remains similar to the England rate, though the gap between the two rates is at its largest in the reporting period, 54.3%.

Current Services

The only UK cause of premature death that is increasing in those of working age is liver disease. It is believed liver disease can ultimately be avoided and is caused by poor lifestyle choices.

This is mainly due to lifestyle factors such as obesity and type 2 diabetes mellitus causing non-alcoholic fatty liver disease; alcohol related liver damage and to a lesser degree viral hepatitis. North Cumbria and the North East have higher than average rates of obesity, type 2 diabetes mellitus, and higher alcohol consumption. Not surprisingly this is reflected in higher than expected admissions to hospital due to alcohol and deaths from liver disease.

The early stages of liver disease do not show any symptoms, which means the liver is already scarred by the time complications present themselves. Unfortunately around 80 per cent of liver disease patients first visit hospital when little or nothing can be done to reverse the problem.

GPs have been briefed by our liver disease specialists from secondary care on how to recognise signs of liver disease. The CCG have jointly developed a piece of work with North Tees Hospitals Foundation Trust to encourage GP practices to review their practice level data to help identify more patients who are currently undiagnosed with Liver Disease.

Future Intentions

The NHS Long Term plan highlights that alcohol contributes to conditions including cardiovascular disease, cancer and liver disease, harm from accidents, violence and self-harm, and puts substantial pressure on the NHS. Alcohol Care Teams (ACTs) significantly reduced accident and emergency (A&E) attendances, bed days, readmissions and ambulance call-outs. Over the next five years, those hospitals with the highest rate of alcohol dependence-related admissions will be supported to fully establish ACTs using funding from their clinical commissioning groups (CCGs) health inequalities funding supplement, working in partnership with local authority commissioners of drug and alcohol services. Over the coming year the CCG will jointly develop plans with the local authority to drive this forward.