



Public Health
England

Local authority health protection profile

East Riding of Yorkshire

Field Service, National Infection Service
03 January 2020

Summary

The following indicators were better in East Riding of Yorkshire than in England:

- Shigella incidence rate/100,000 (2017)
- Giardia incidence rate/100,000 (2017)
- Measles incidence rate/100,000 (2018)
- Measles 5-year incidence rate/100,000 (2014 - 18)
- Mumps incidence rate/100,000 (2017)
- Mumps 5-year incidence rate/100,000 (2012 - 16)
- Pertussis incidence rate/100,000 (2017)
- Population vaccination coverage - Dtap / IPV / Hib (1 year old) (2018/19)
- Population vaccination coverage - Hib / MenC booster (2 years old) (2018/19)
- Population vaccination coverage - MMR for one dose (2 years old) (2018/19)
- Population vaccination coverage - Dtap / IPV / Hib (2 years old) (2018/19)
- Population vaccination coverage - Hib / Men C booster (5 years old) (2017/18)
- Population vaccination coverage - MMR for two doses (5 years old) (2018/19)
- Population vaccination coverage - Flu (2-4 years old) - historical method (2016/17)
- Population vaccination coverage - HPV vaccination coverage for two doses (females 13-14 years old) (2017/18)
- TB incidence (three year average) (2016 - 18)
- Hospital admission rate for hepatitis C related end-stage liver disease/hepatocellular carcinoma (2012/13 - 14/15)
- Under 75 mortality rate from hepatitis C related end-stage liver disease/hepatocellular carcinoma (2016 - 18)
- New STI diagnoses (exc chlamydia aged <25) / 100,000 (2018)
- Chlamydia diagnostic rate / 100,000 aged 25+ (2018)
- Gonorrhoea diagnostic rate / 100,000 (2018)

- Syphilis diagnostic rate / 100,000 (2018)
- Genital warts diagnostic rate / 100,000 (2018)
- Genital herpes diagnosis rate / 100,000 (2018)
- New HIV diagnosis rate / 100,000 aged 15+ (2018)
- HIV diagnosed prevalence rate / 1,000 aged 15-59 (2018)
- HIV testing coverage, total (%) (2018)
- HIV testing coverage, women (%) (2018)

The following indicators were worse in East Riding of Yorkshire than in England:

- Campylobacter incidence rate/100,000 (2017)
- Population vaccination coverage - PPV (2017/18)
- Chlamydia detection rate / 100,000 aged 15-24 (2018)
- Chlamydia proportion aged 15-24 screened (2018)
- STI testing rate (exc chlamydia aged <25) / 100,000 (2018)
- HIV testing coverage, men (%) (2018)
- HIV testing coverage, MSM (%) (2018)
- Repeat HIV testing in MSM (%) (2018)
- Adjusted antibiotic prescribing in primary care by the NHS (2018)

The following indicators were lower in East Riding of Yorkshire than in England:

- Hepatitis C detection rate/100,000 (2017)
- Persons in drug misuse treatment who inject drugs - Percentage of eligible persons who have received a hepatitis C test (2017/18)
- All new STI diagnosis rate / 100,000 (2018)
- Chlamydia diagnostic rate / 100,000 (2018)
- STI testing positivity (exc chlamydia aged <25) % (2018)

Figure 1. Chart showing key health protection information for East Riding of Yorkshire local authority residents compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared

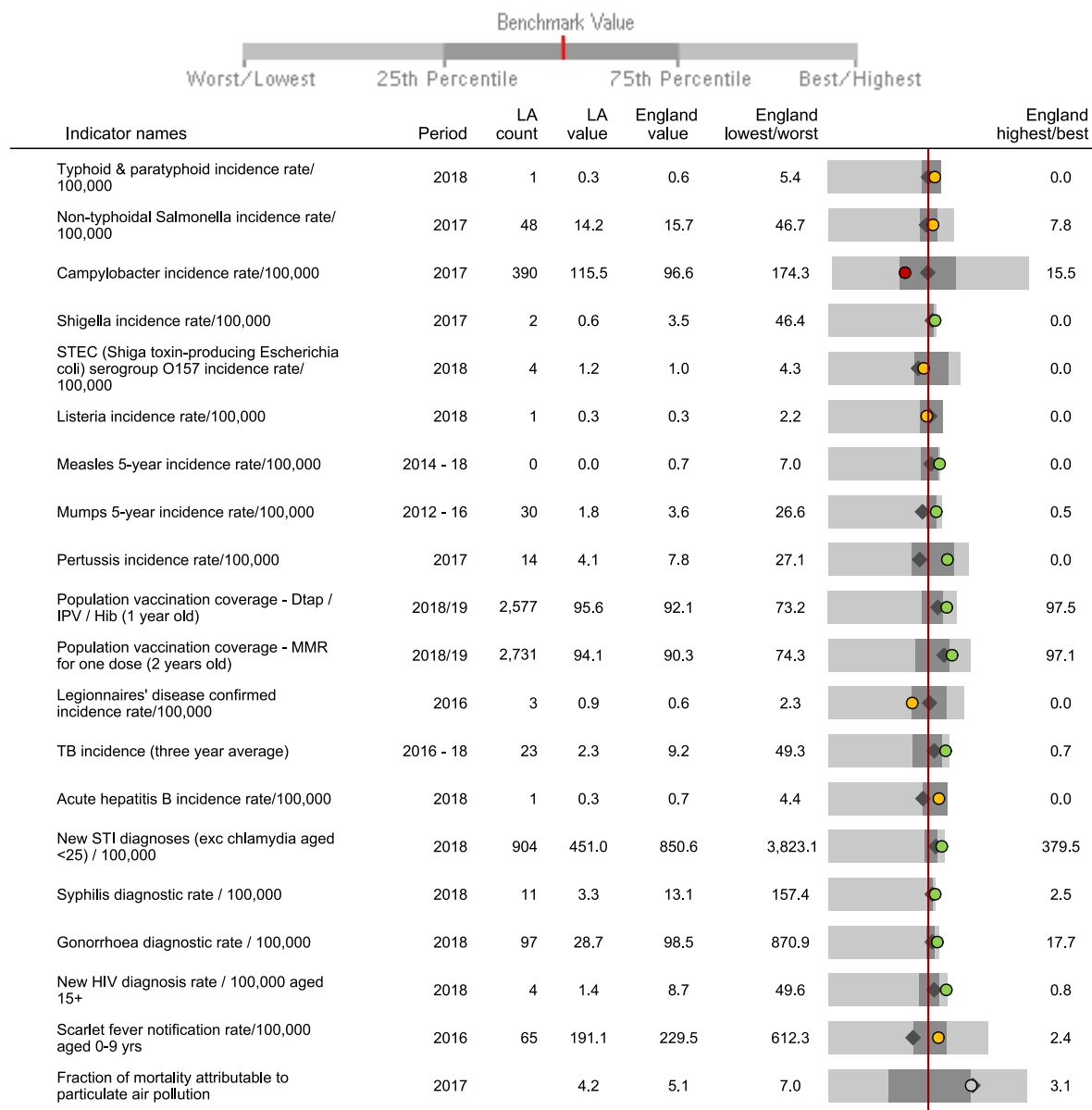


Figure 2. Population vaccine coverage in East Riding of Yorkshire compared to Yorkshire and the Humber PHE Centre and England

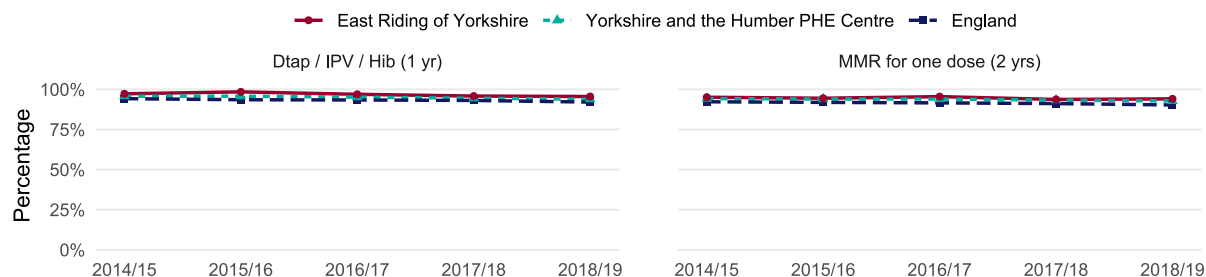


Figure 3. Rates of selected indicators over time in East Riding of Yorkshire compared to Yorkshire and the Humber PHE Centre and England



Introduction

This report presents information on a range of health protection issues in a local area in an integrated way. This is produced alongside other PHE health intelligence tools to help local stakeholders identify health protection priorities.

This report is compiled from publically available data on the online [Health Protection Profiles](#). Please access this tool for further data analysis and more information about the data which is described in the 'definitions' tab for each indicator. A list of data sources is available in the 'Data sources' section of this report.

It is important to understand the limitations of the data presented when interpreting a local authority indicator being higher/lower or better/worse than England. The caveats to each indicator are explained in the 'definitions' tab for each indicator on the online [Health Protection Profiles](#). Interpretation of local variation will need consideration of a range of factors which may include:

- variation in testing
- variation in reporting
- variation in the completeness of residence information. Cases may be assigned incorrectly to a local authority if postcode information is missing. In these circumstances the GP or laboratory postcode may be used instead
- local outbreaks

The information in this report may differ from that originating from different data sources which are defined, collected, analysed in different ways. For example, information presented here may differ from that used locally which is sourced from HPZone, a PHE public health management system used by local Health Protection Teams.

City of London and Isles of Scilly are not included in the rankings in this document. Where comparisons are made to Hackney or Cornwall, please note that the data for these areas may have been combined with City of London and Isles of Scilly respectively. Please check the online Health Protection Profiles for this information.

This report has been developed for the best viewing experience in Google Chrome. It has also been tested with Internet Explorer 11 and Microsoft Edge, but some content may look different (for example, the table of contents is not available in Internet Explorer). When viewed in Google Chrome, this report can be converted to a PDF through the Print menu. Select "Save as PDF" as the destination. For the best result, it is recommended to select the "background graphics" option and deselect the "headers and footers" option. Some other browsers also offer PDF conversion, but the formatting may not display as intended.

Gastrointestinal infections

This section has information on a range of gastrointestinal infections that are the focus of public health activity.

Figure 4. Chart showing gastrointestinal infections in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared

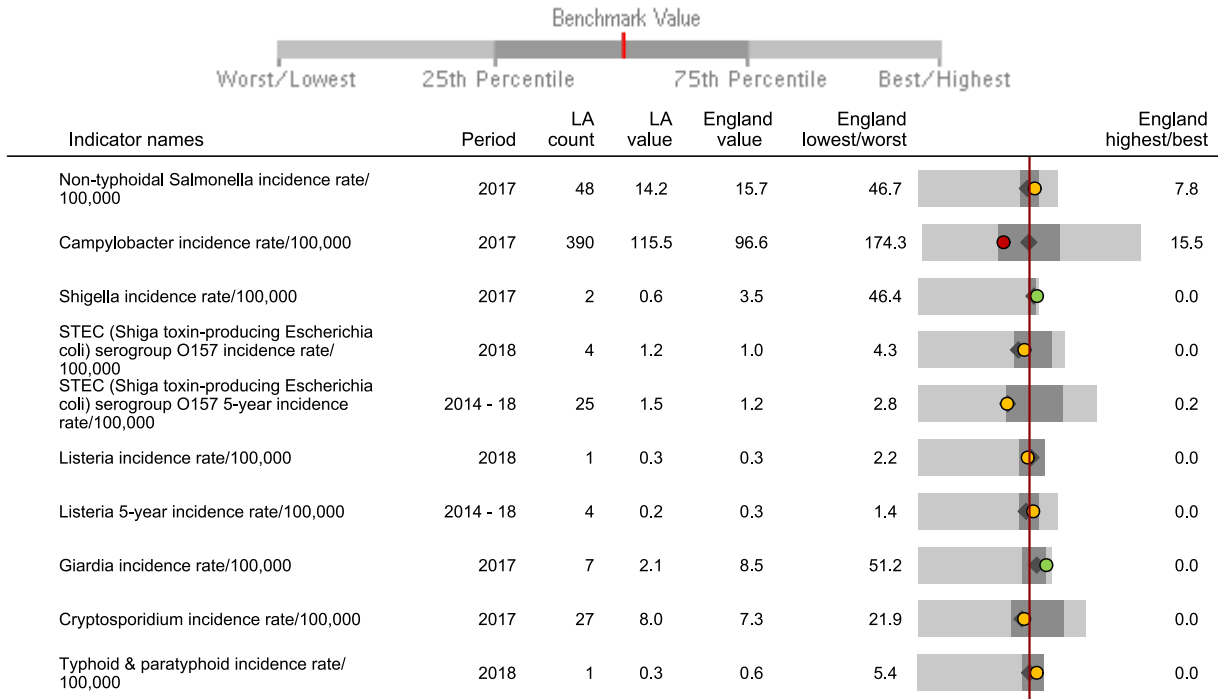


Table 1. Number of new cases of GI pathogens by year, East Riding of Yorkshire

Indicator	2012	2013	2014	2015	2016	2017	2018
Typhoid/paratyphoid	1	0	0	0	1	2	1
Salmonella (non-typhoidal)	-	-	-	36	39	48	-
Campylobacter	-	-	-	367	387	390	-
Shigella	-	-	-	4	1	2	-
STEC O157	6	4	10	2	3	6	4
Listeria	0	1	1	1	1	0	1
Giardia	-	-	-	4	2	7	-
Cryptosporidium	-	-	-	47	63	27	-

Typhoid and paratyphoid

Typhoid and paratyphoid (also known as enteric fever) are diseases caused by *Salmonella enterica* serovar Typhi (typhoid) or Paratyphi A, B and C (paratyphoid). Classic typhoid fever is a serious disease which can be life-threatening unless treated promptly with antibiotics. Paratyphoid is typically milder than typhoid and of shorter duration. Typhoid and paratyphoid are almost exclusively acquired abroad through the ingestion of heavily contaminated food and water. Typhoid and paratyphoid are spread from person-to-person by the faecal-oral route. Therefore, their prevention and control is dependent on good sanitation, clean water and scrupulous personal hygiene. The typhoid vaccine offers limited protection against typhoid and no protection at all against paratyphoid. Variation in rates of typhoid and paratyphoid may reflect variation in underlying populations e.g. by ethnicity, but are also indicative of the need for a public health focus on pre-travel advice and vaccination.

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with typhoid or paratyphoid was 1 (the number in 2017 was 2). The typhoid/paratyphoid rate per 100,000 residents was 0.3 in 2018, similar to 0.6 per 100,000 in England. The rank of East Riding of Yorkshire for this was 79th highest (out of 150 upper tier local authorities and unitary authorities (UTLAs/UAs)).

Figure 5. Rates per 100,000 population of typhoid/paratyphoid in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

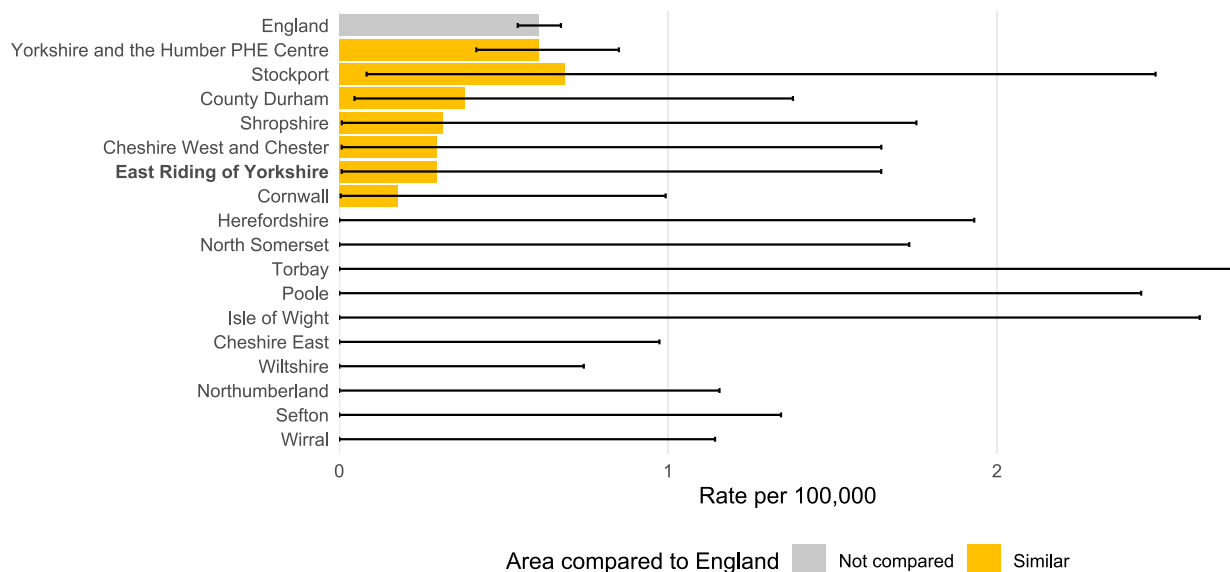
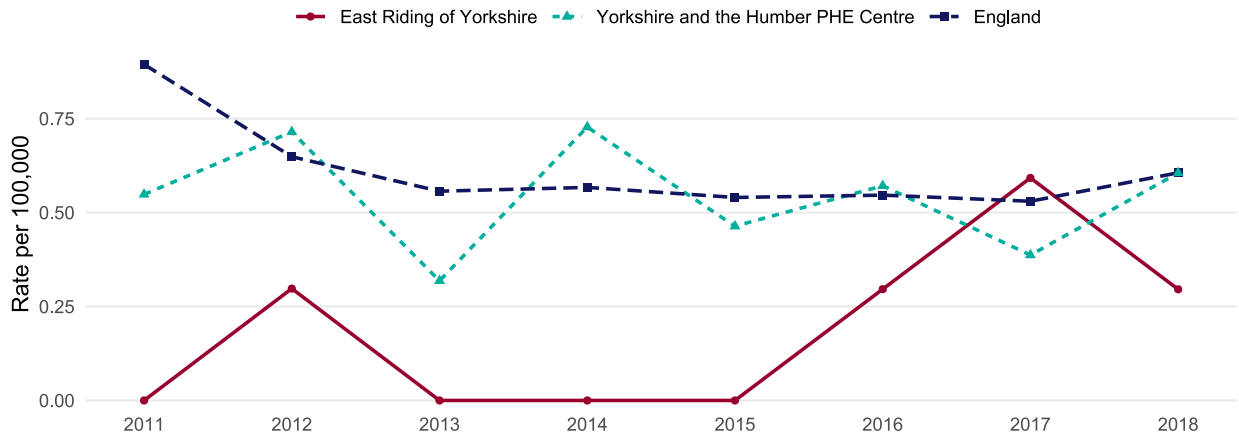


Figure 6. Typhoid and paratyphoid diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Salmonella (non-typhoidal)

Salmonella is a bacteria that lives in the guts of domestic and wild animals including poultry, cattle, pigs, hedgehogs, snakes and lizards. Salmonella infection can cause gastrointestinal illness and in rare cases lead to complications such as sepsis. This section relates to the Salmonella causing food poisoning i.e. non-typhoidal Salmonella (not those causing typhoid or paratyphoid fever).

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with Salmonella was 48 (the number in 2016 was 39). The Salmonella diagnoses rate per 100,000 residents was 14.2 in 2017, similar to 15.7 per 100,000 in England. The rank of East Riding of Yorkshire was 93rd highest (out of 150 UTLAs/UAs). Since 2016, the increase in the rate of Salmonella in East Riding of Yorkshire was 23%.

Figure 7. Rates per 100,000 population of Salmonella in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

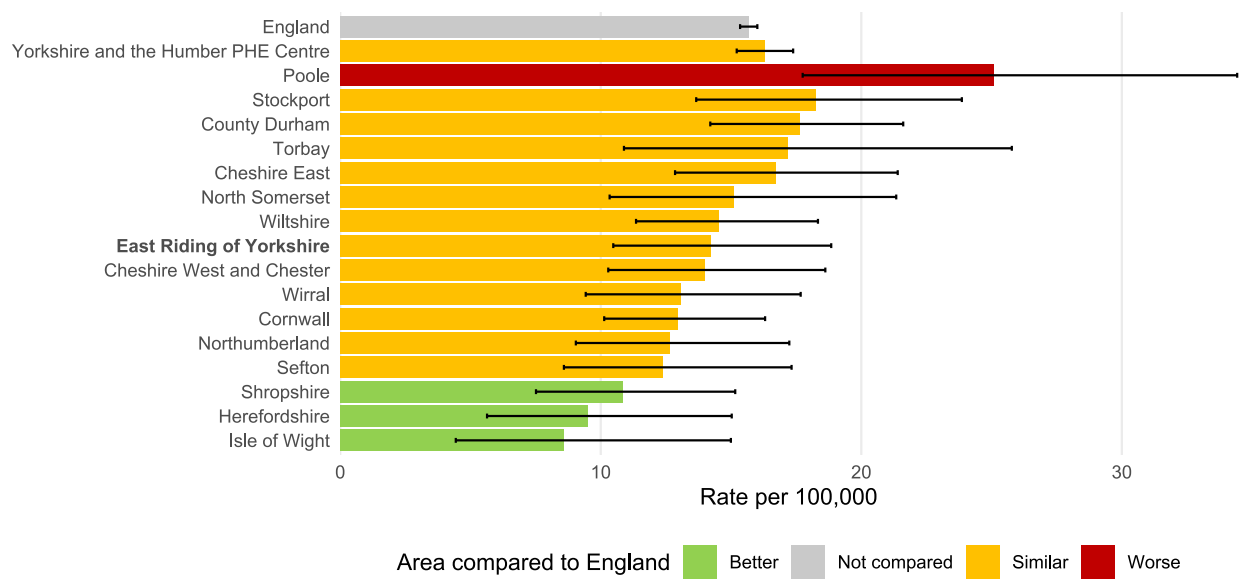
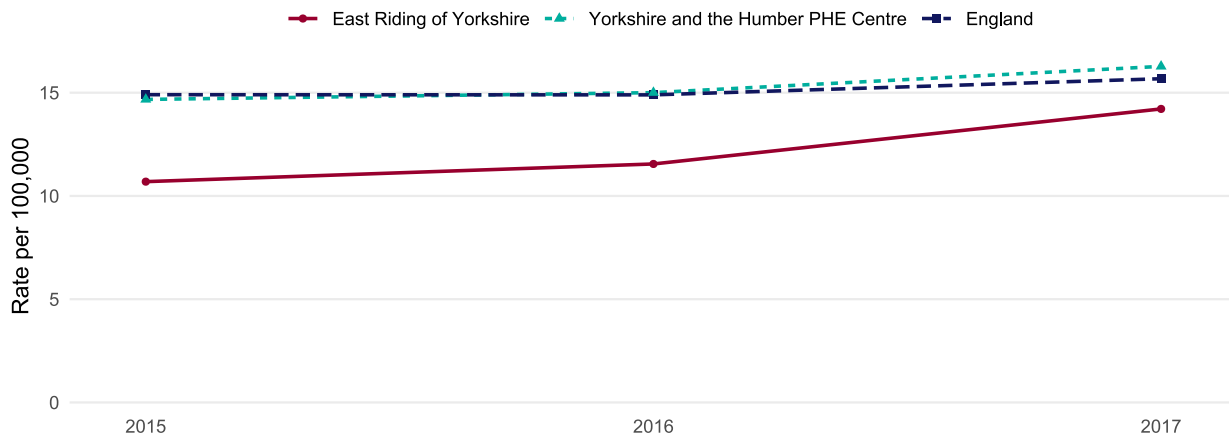


Figure 8. Salmonella diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Campylobacter

Campylobacter causes food poisoning and is the most commonly reported bacterial gastrointestinal pathogen in England. The majority of infections result in self-limiting diarrhoea, however, infection has also been associated with chronic sequelae such as Guillain-Barré syndrome. Campylobacter causes a substantial community and healthcare burden in the UK. The bacteria lives in the gastrointestinal tract of a wide range of livestock (especially poultry) and wildlife species and in pets such as dogs and cats. People can get Campylobacter from raw or undercooked meat, especially chicken meat, unpasteurised milk or untreated water. Bacteria can spread easily through poor hygiene in food preparation, for example if you do not wash your hands, you can spread bacteria from chicken to salads.

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with Campylobacter was 390 (the number in 2016 was 387). The Campylobacter diagnoses rate per 100,000 residents was 116 in 2017, worse than 96.6 per 100,000 in England. The rank of East Riding of Yorkshire for this was 47th highest (out of 150 UTLAs/UAs). Since 2016, the increase in East Riding of Yorkshire was 1%.

Figure 9. Rates per 100,000 population of Campylobacter in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

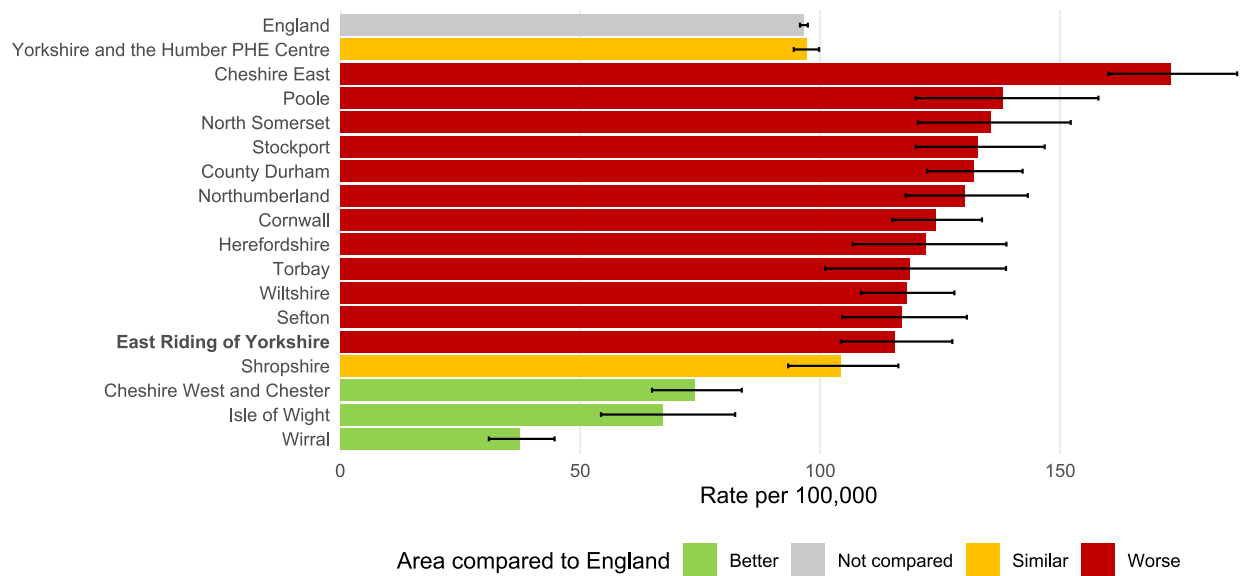
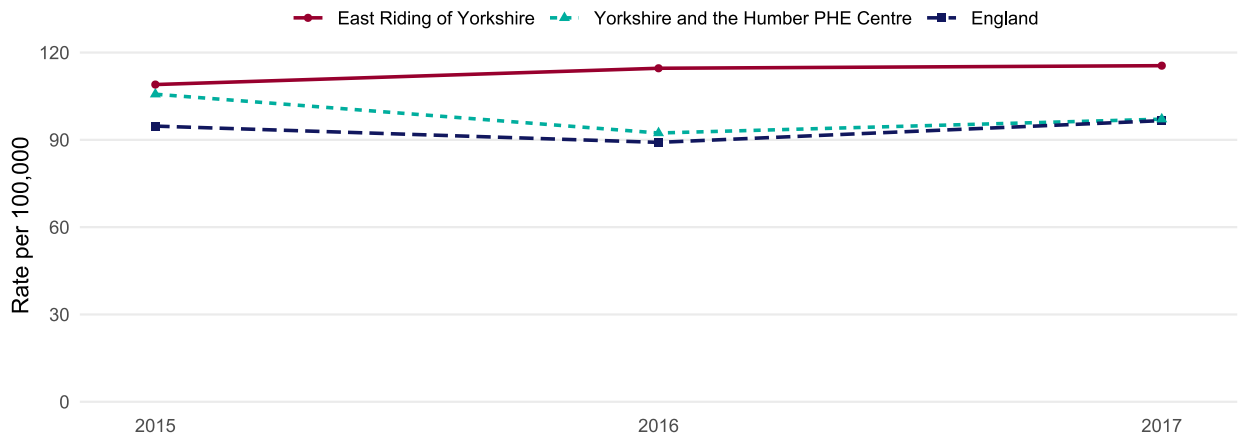


Figure 10. Campylobacter diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



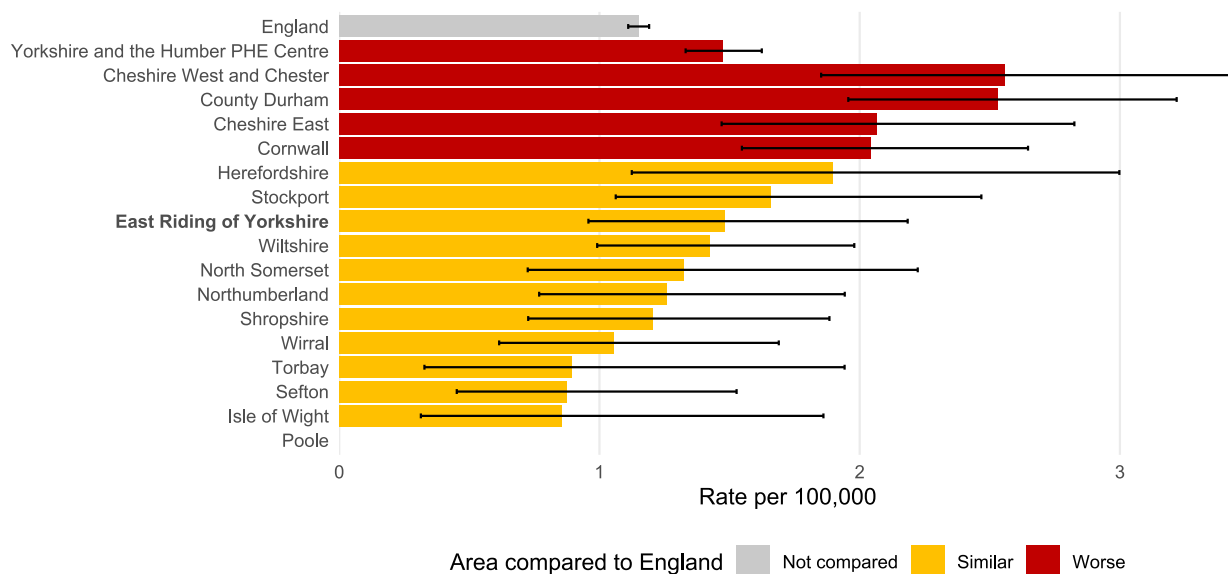
STEC O157

Shiga toxin-producing *Escherichia coli* serogroup O157 (STEC) is a zoonotic gastrointestinal infection for which animals (particularly ruminants such as cattle and sheep) are the main reservoir. Transmission occurs either due to direct contact with infected animal faeces, ingestion of food contaminated with infected animal or human faeces or via contact with the infected faeces of another person. STEC causes moderate to severe disease in humans. Most cases will present with mild (diarrhoea) to moderate (bloody diarrhoea) gastrointestinal symptoms but a proportion (~ 5%) will go on to develop more severe complications such as haemolytic uraemic syndrome (HUS). Some complications may require long-term care or result in permanent disability (e.g. kidney failure). Infants, young children and the elderly are particularly vulnerable to such complications.

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with STEC O157 was 4 (the number in 2017 was 6). The 5 year mean STEC O157 diagnoses rate per 100,000 residents was 1.5 in 2014 - 18, similar to 1.2 per 100,000 in England. The rank of East Riding of Yorkshire for this was 39th highest (out of 147 UTLAs/UAs).

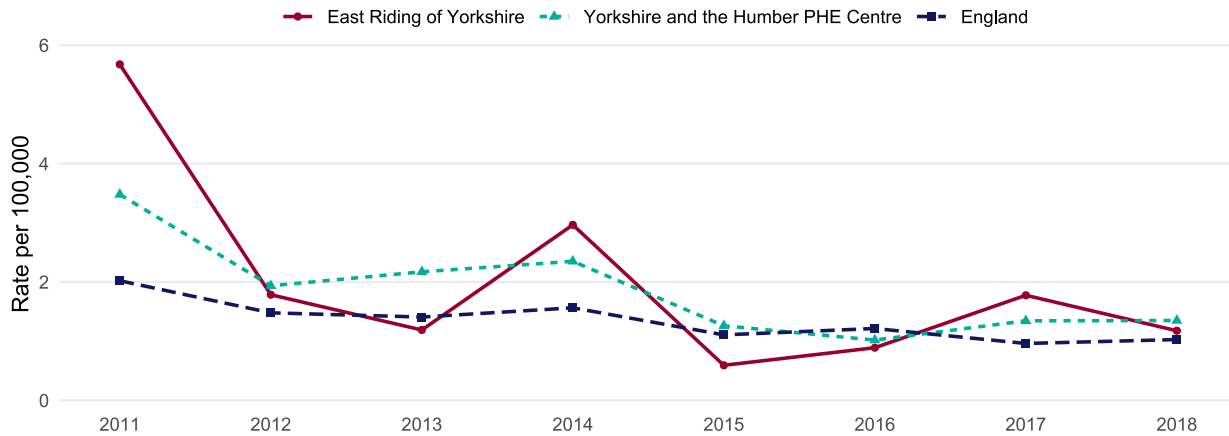
Figure 11. 5 year mean rates per 100,000 population of STEC O157 in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2014 - 18

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

Figure 12. STEC O157 diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



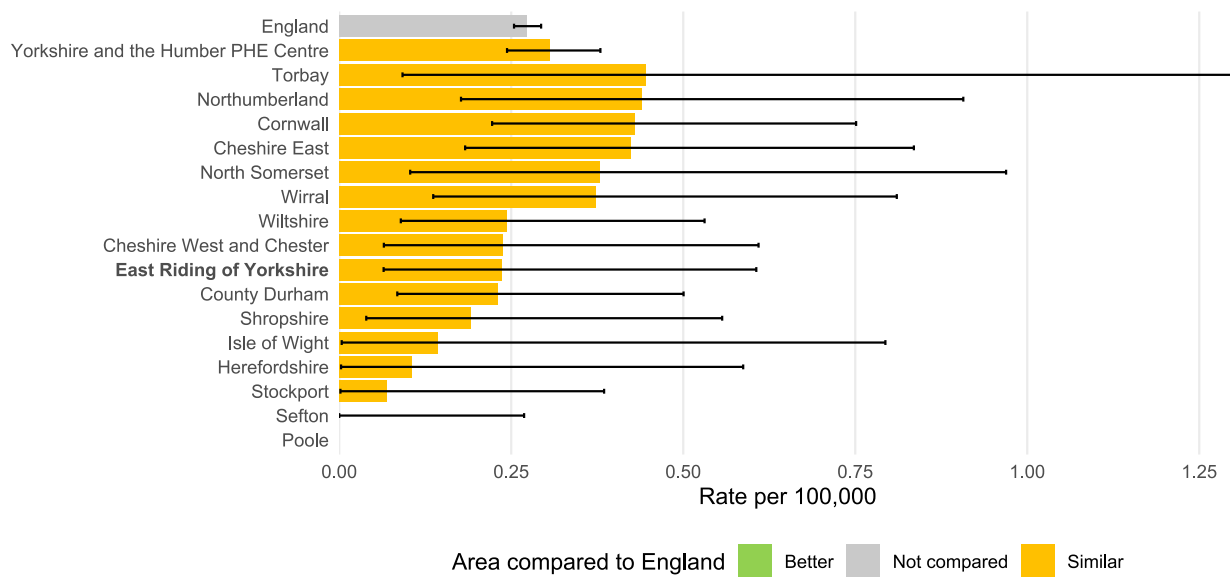
Listeria

Listeria monocytogenes causes listeriosis, a rare but potentially life-threatening disease. Healthy adults are unlikely to experience infection, however, *Listeria* infection (listeriosis) is dangerous to pregnant women, the elderly and people with weakened immune systems. *Listeria* is typically spread by contaminated foods. *Listeria* is an unusual bacterium because it can grow at low temperatures, including refrigeration temperatures of below 5 degrees. It is, however, killed by cooking food thoroughly and by pasteurisation. Local variation in numbers may reflect poor food management, variation in the numbers of people with weakened immune systems or different uptake of food safety messages in pregnant women. Areas with persistent significantly high rates in the absence of known outbreaks should investigate the cause and should enhance prevention advice as appropriate.

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with *Listeria* was 1 (the number in 2017 was 0). The 5 year mean *Listeria* diagnoses rate per 100,000 residents was 0.2 in 2014 - 18, similar to 0.3 per 100,000 in England. The 5 year rank of East Riding of Yorkshire was 90th highest (out of 147 UTLAs/UAs).

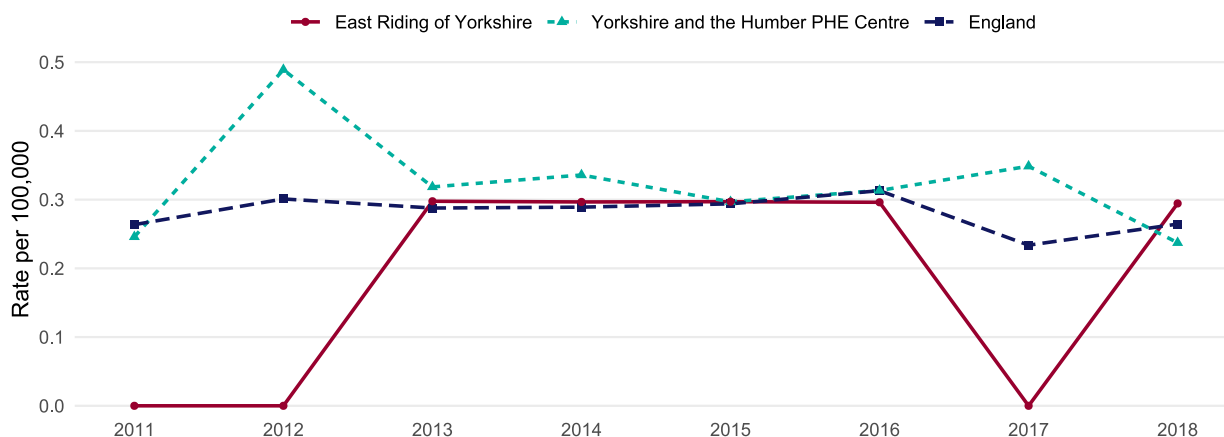
Figure 13. 5 year mean rates per 100,000 population of Listeria in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2014 - 18

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

Figure 14. Listeria diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Shigella

Shigellosis, also known as bacillary dysentery, is caused by four species. *Shigella flexneri* and *Shigella sonnei* are endemic in the UK while infections with *Shigella dysenteriae* and *Shigella boydii* are usually imported. *Shigella* generally causes a relatively mild illness, however 1 in 5 cases may progress to more severe disease, including hospitalisation due to bloody diarrhoea, persistent gastroenteritis or more severe complications such as bacteraemia. Patients with *Shigella dysenteriae* can also develop a very severe condition known as haemolytic uremic syndrome (HUS). Infection is readily transmitted from person to person, via the oro faecal route. In the past, shigellosis has primarily been associated with travel to countries with poor sanitation or transmission between young children and their care-givers in household, nursery or school settings. More recently, outbreaks of *Shigella sonnei* and *Shigella flexneri* have been linked to person-to-person spread among men who have sex with men (MSM).

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with *Shigella* was 2 (the number in 2016 was 1). The *Shigella* diagnoses rate per 100,000 residents was 0.6 in 2017, better than 3.5 per 100,000 in England. The rank of East Riding of Yorkshire was 134th highest (out of 150 UTLAs/UAs).

Figure 15. Rates per 100,000 population of *Shigella* in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

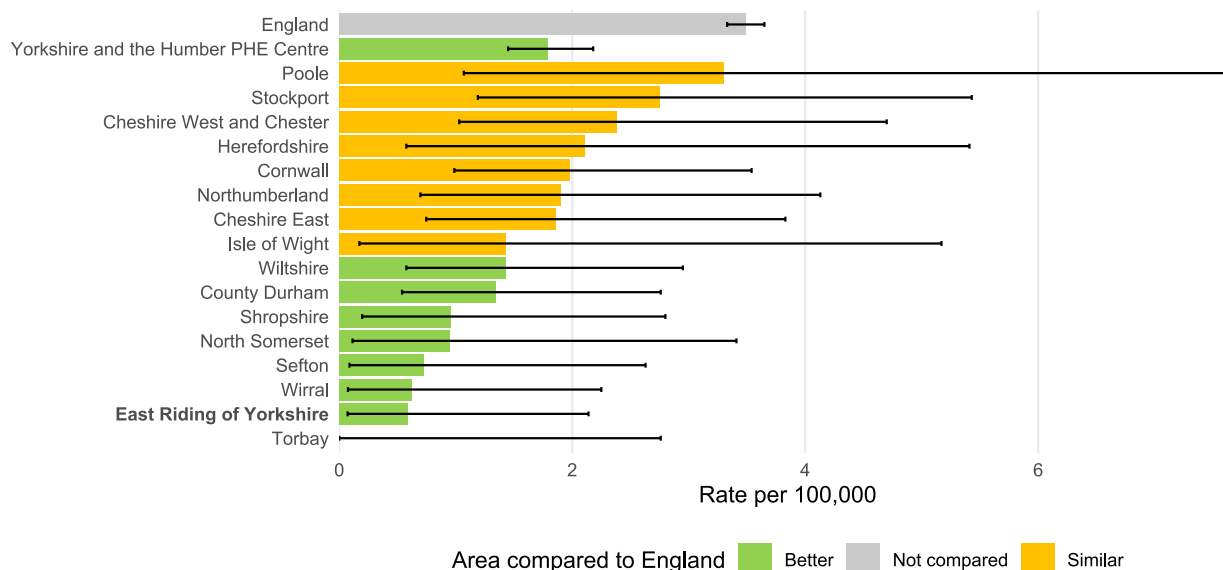
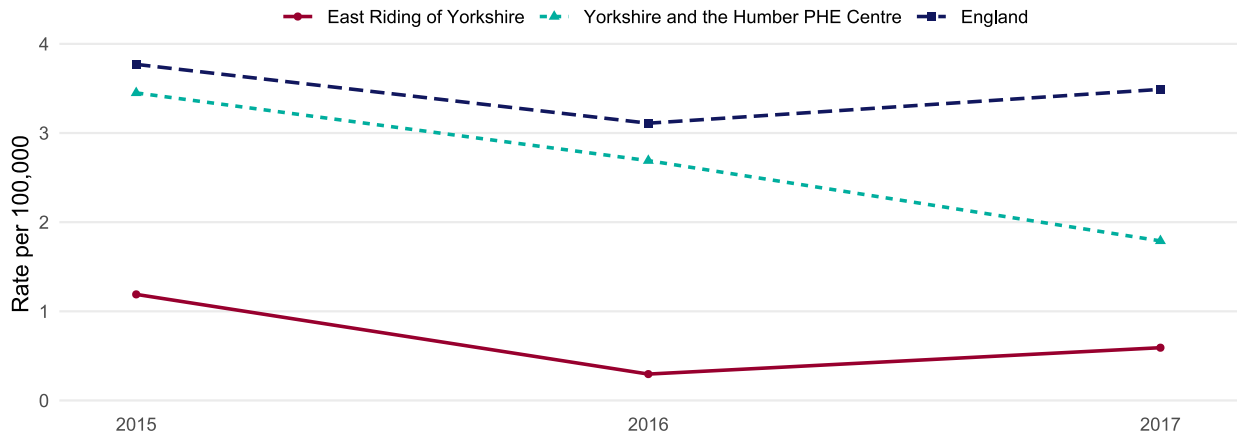


Figure 16. Shigella diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Giardia

Giardia can be transmitted by direct contact with infected animals or humans, or by consumption of water, food or drinks contaminated by the faeces of infected animals or humans. People may also be infected by swimming in contaminated water e.g. lakes or rivers. Many cases are associated with foreign travel. Persistently significantly high rates of Giardia in the absence of known outbreaks would indicate the need to investigate the underlying reasons and reinforce prevention activity as appropriate e.g. advice regarding contact with animals.

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with Giardia was 7 (the number in 2016 was 2). The Giardia diagnoses rate per 100,000 residents was 2.1 in 2017, better than 8.5 per 100,000 in England. The rank of East Riding of Yorkshire was 111st highest (out of 150 UTLAs/UAs). Since 2016, the increase in the rate of Giardia in East Riding of Yorkshire was 250%.

Figure 17. Rates per 100,000 population of Giardia in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

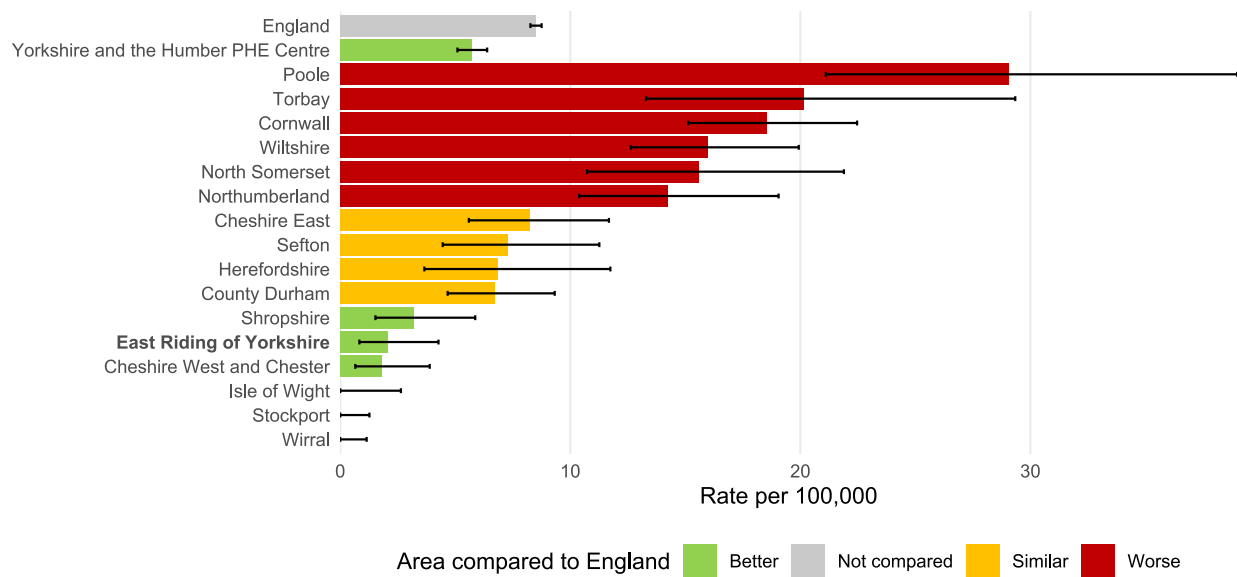
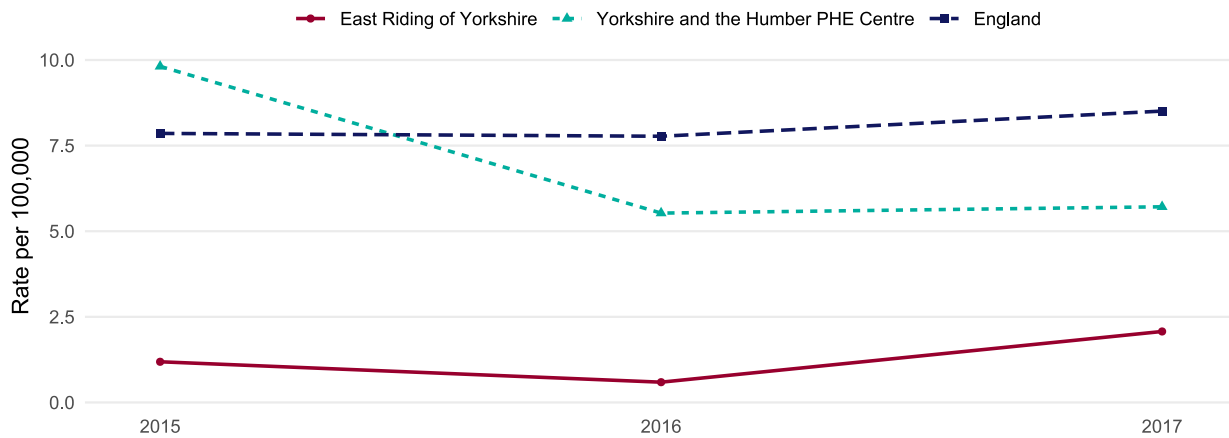


Figure 18. Giardia diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Cryptosporidium

Cryptosporidiosis is a disease usually caused by the parasites *Cryptosporidium hominis* and *C. parvum*. It is most commonly seen in children aged between 1 and 5 years. People with weak immune systems are likely to be more seriously affected. The most common symptom is mild to severe watery diarrhoea. The parasites are resistant to chlorine. Outbreaks of cryptosporidiosis have been linked to drinking or swimming in contaminated water and contact with infected lambs and calves during visits to open farms. Persistently significantly high rates of *Cryptosporidium* in the absence of known outbreaks would indicate the need to investigate the underlying reasons and reinforce prevention activity as appropriate e.g. advice regarding contact with animals.

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with *Cryptosporidium* was 27 (the number in 2016 was 63). The *Cryptosporidium* diagnoses rate per 100,000 residents was 8.0 in 2017, similar to 7.3 per 100,000 in England. The rank of East Riding of Yorkshire was 59th highest (out of 150 UTLAs/UAs). Since 2016, the decrease in the rate of *Cryptosporidium* in East Riding of Yorkshire was 57%.

Figure 19. Rates per 100,000 population of Cryptosporidium in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

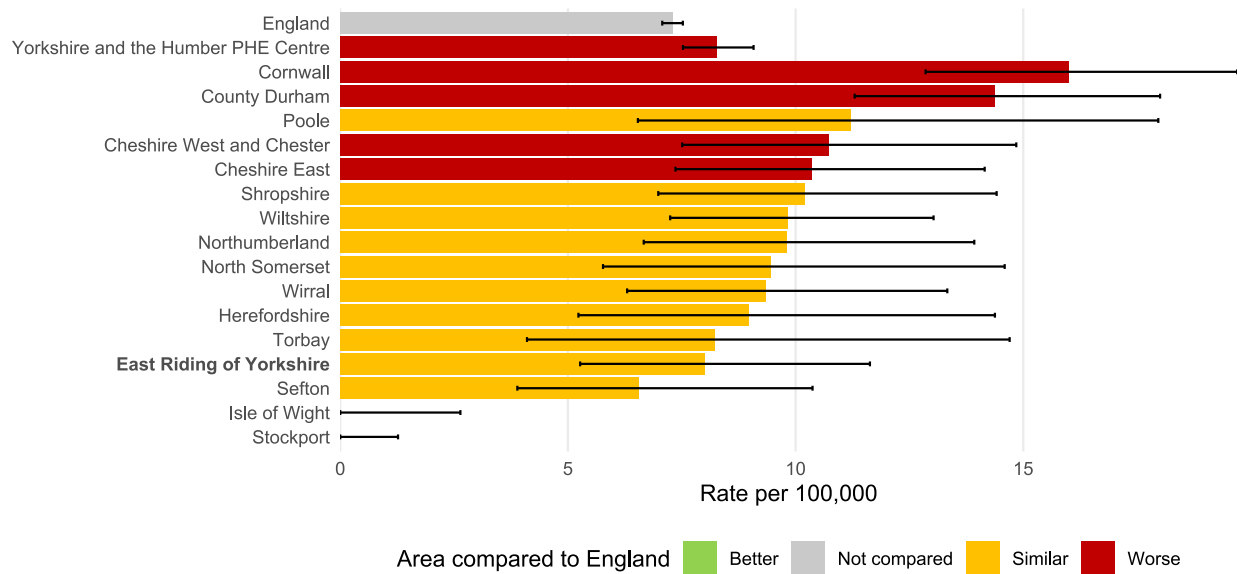
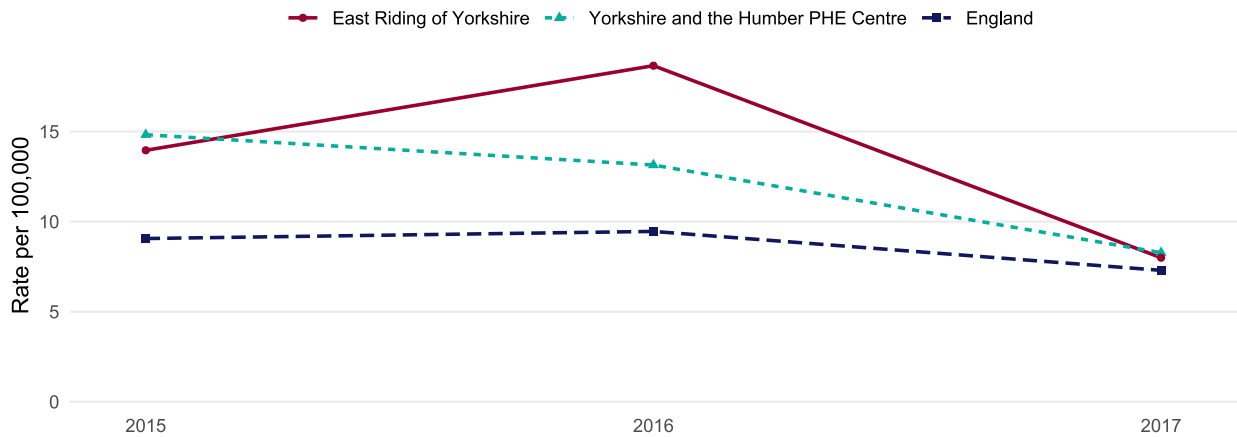


Figure 20. Cryptosporidium diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Selected vaccine preventable diseases and immunisation

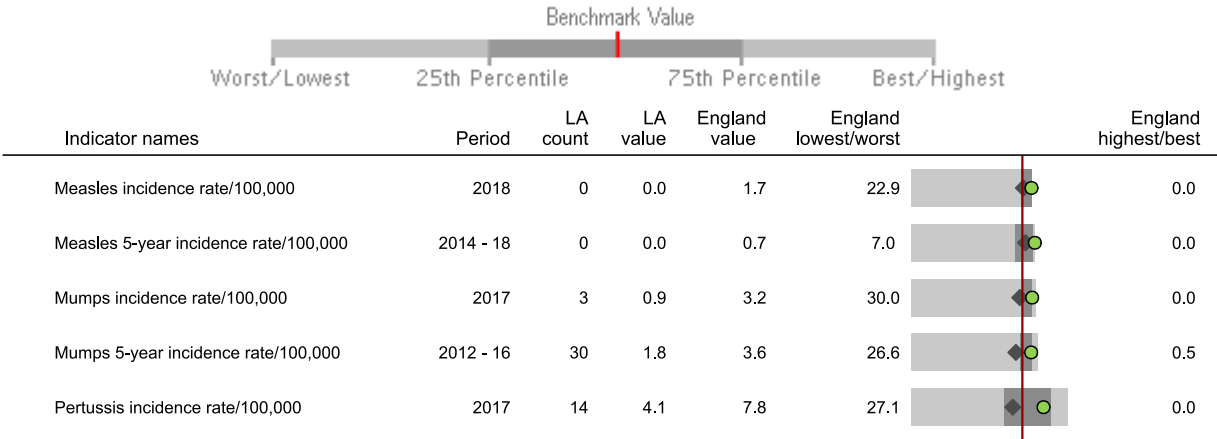
In this section we have included information about measles, mumps and pertussis. Information on invasive meningococcal disease, rubella and polio is not yet available on the Health Protection Profiles. Information on hepatitis B is in the hepatitis section. Variation in the rates of infections may reflect differences in the underlying population, including variation in the uptake of vaccination. High rates should prompt a review of routine immunisation uptake and vaccination of high risk groups.

Figure 21. Chart showing childhood vaccine preventable diseases in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



Measles

Measles is the most infectious of all diseases transmitted through the respiratory route. It can lead to severe complications, particularly in immunosuppressed individuals and young infants. Measles infection during pregnancy increases the risk of miscarriage, stillbirth or preterm delivery. The most effective way to control measles is by achieving high uptake of two doses of measles, mumps, rubella (MMR) vaccine.

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with measles was 0 (the number in 2017 was 0). The 5 year mean measles diagnoses rate per 100,000 residents was 0.0 in 2014 - 18, better than 0.7 per 100,000 in England. The rank of East Riding of Yorkshire for this was 150th highest (out of 150 UTLAs/UAs).

Figure 22. 5 year rates per 100,000 population of measles in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2014 - 18

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

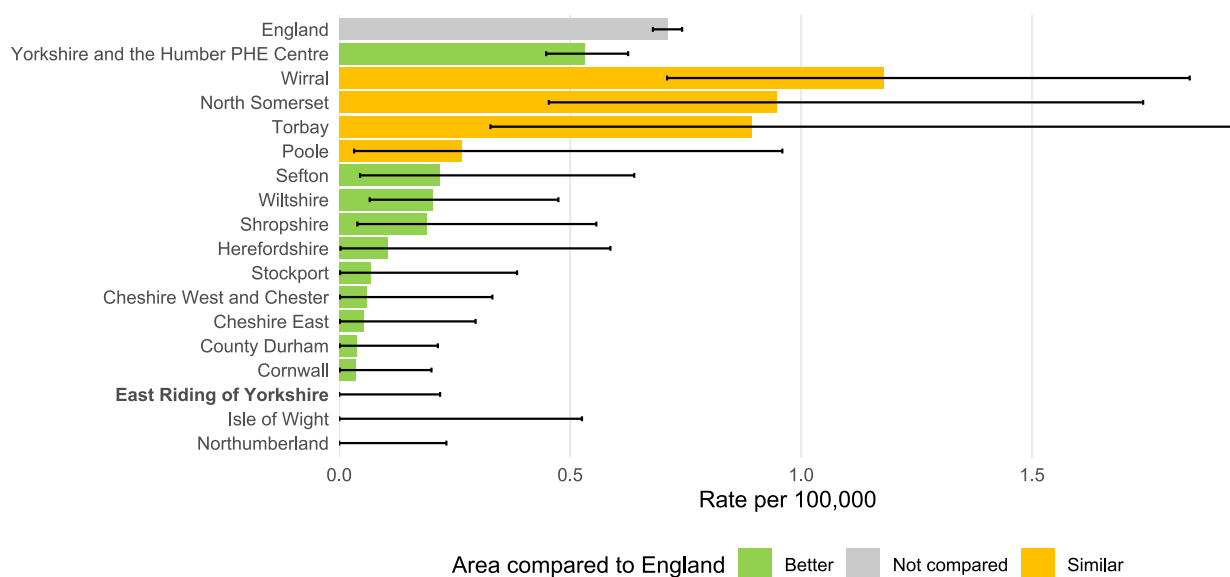
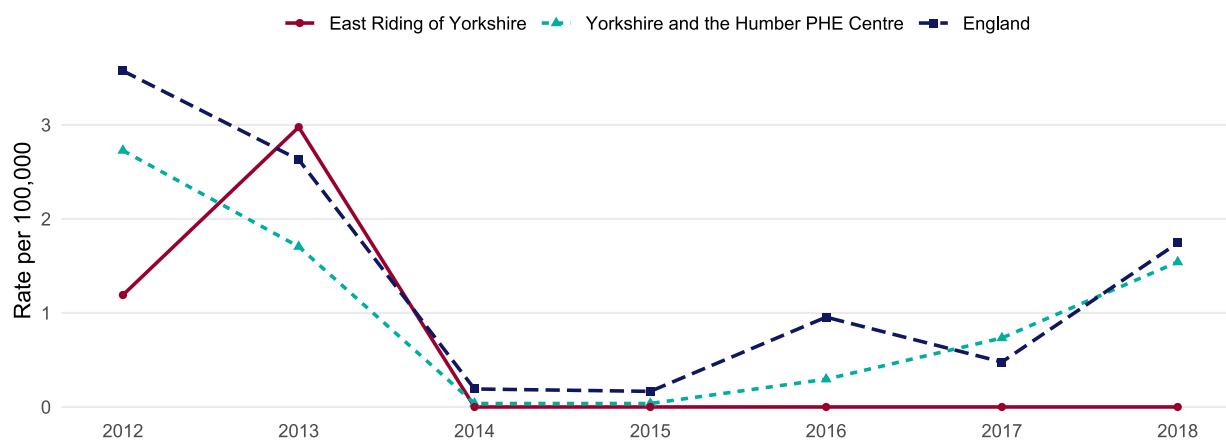


Figure 23. Measles diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Mumps

Mumps is a vaccine preventable viral infection which can occasionally cause severe complications, including swelling of the ovaries (oophoritis), swelling of the testes (orchitis), aseptic meningitis and deafness.

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with mumps was 3 (the number in 2016 was 2). Since 2016, the increase in the rate of mumps in East Riding of Yorkshire was 50%. The 5 year mean mumps diagnoses rate per 100,000 residents was 1.8 in 2012 - 16, better than 3.6 per 100,000 in England. The rank of East Riding of Yorkshire for this was 100th highest (out of 150 UTLAs/UAs).

Figure 24. 5 year rates per 100,000 population of mumps in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2012 - 16

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

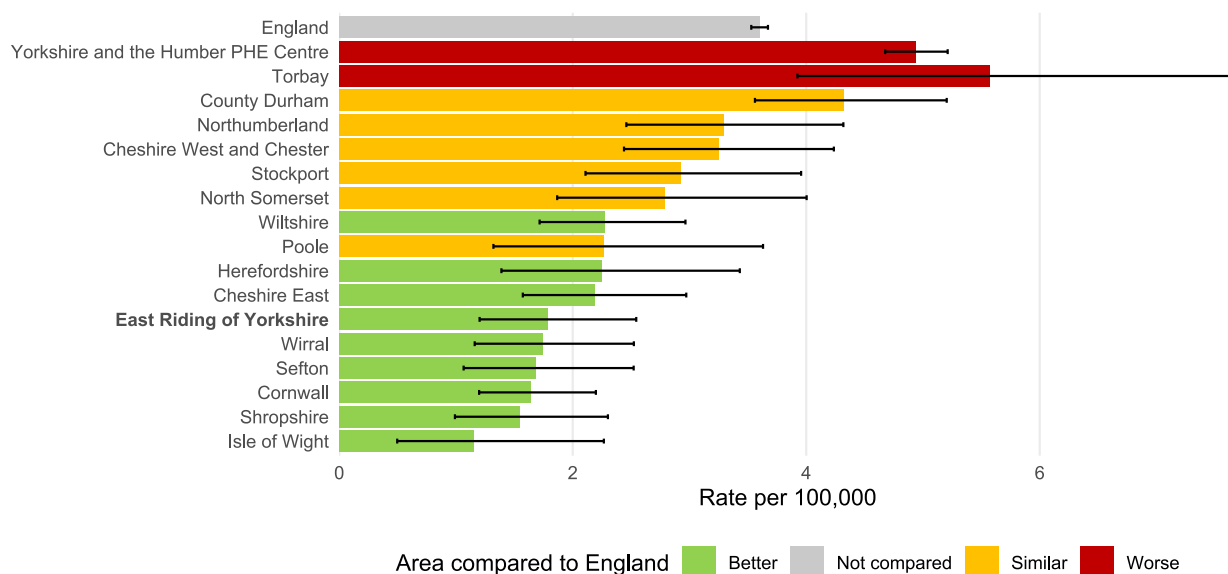
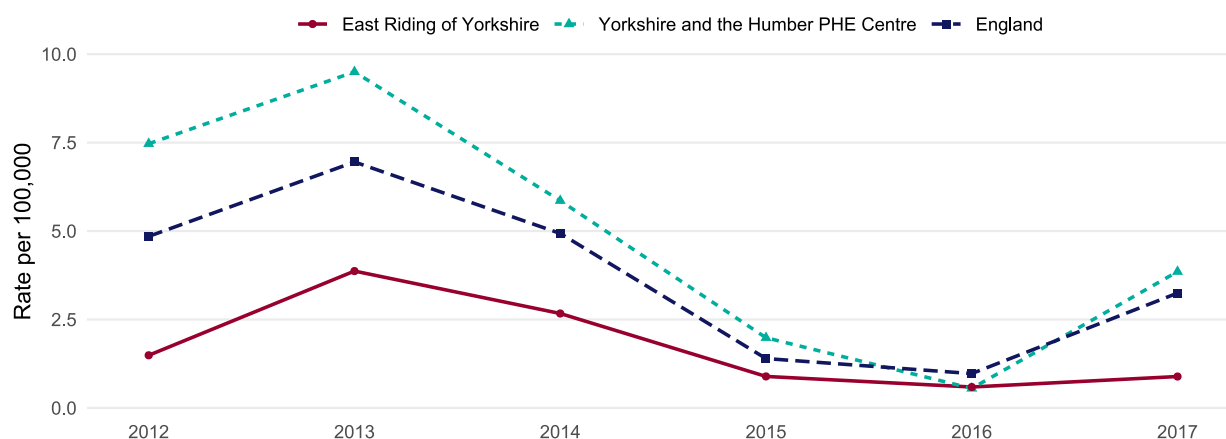


Figure 25. Mumps diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Pertussis

Pertussis (whooping cough) is a vaccine preventable bacterial infection and causes a prolonged cough illness, with the majority of cases occurring in individuals aged 15 years and over. However, it can be life threatening complications in infants under 6 months of age and immunosuppressed individuals.

In 2017, the number of East Riding of Yorkshire residents who were diagnosed with pertussis was 14 (the number in 2016 was 38). The pertussis diagnoses rate per 100,000 residents was 4.1 in 2017, better than 7.8 per 100,000 in England. The rank of East Riding of Yorkshire for this was 91st highest (out of 150 UTLAs/UAs).

Figure 26. Rates per 100,000 population of pertussis in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

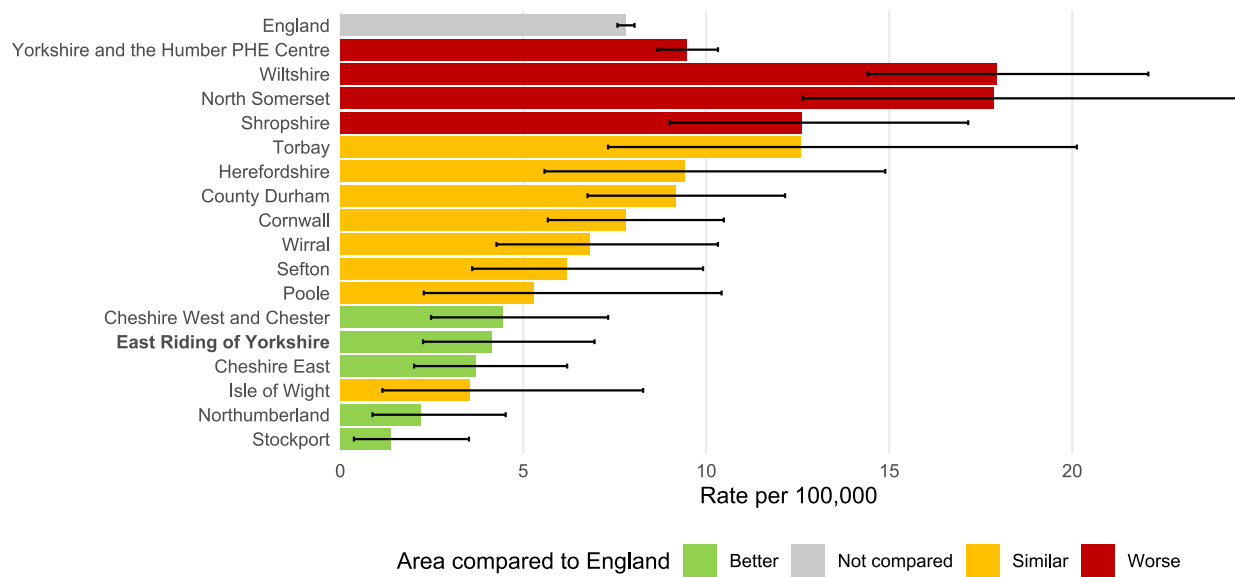
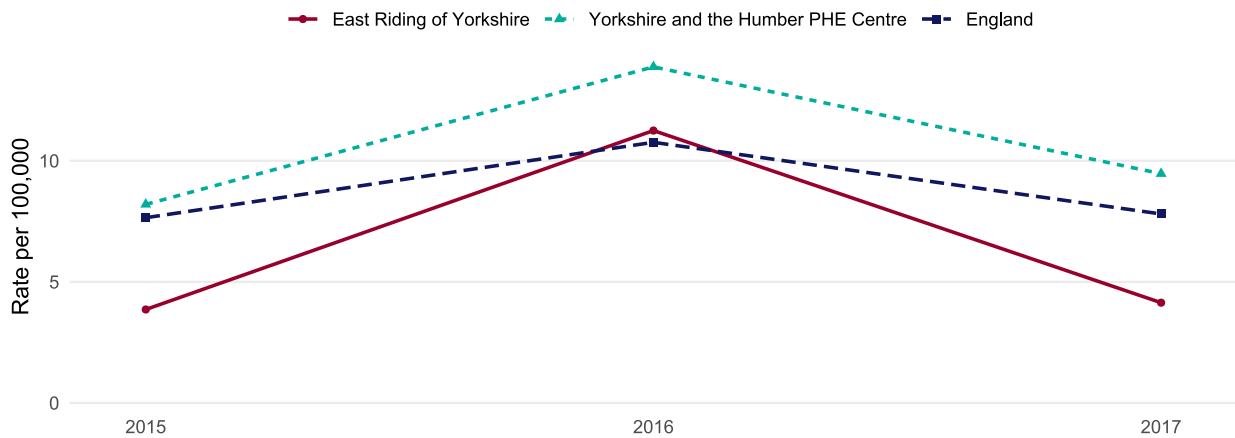


Figure 27. Pertussis diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Immunisation

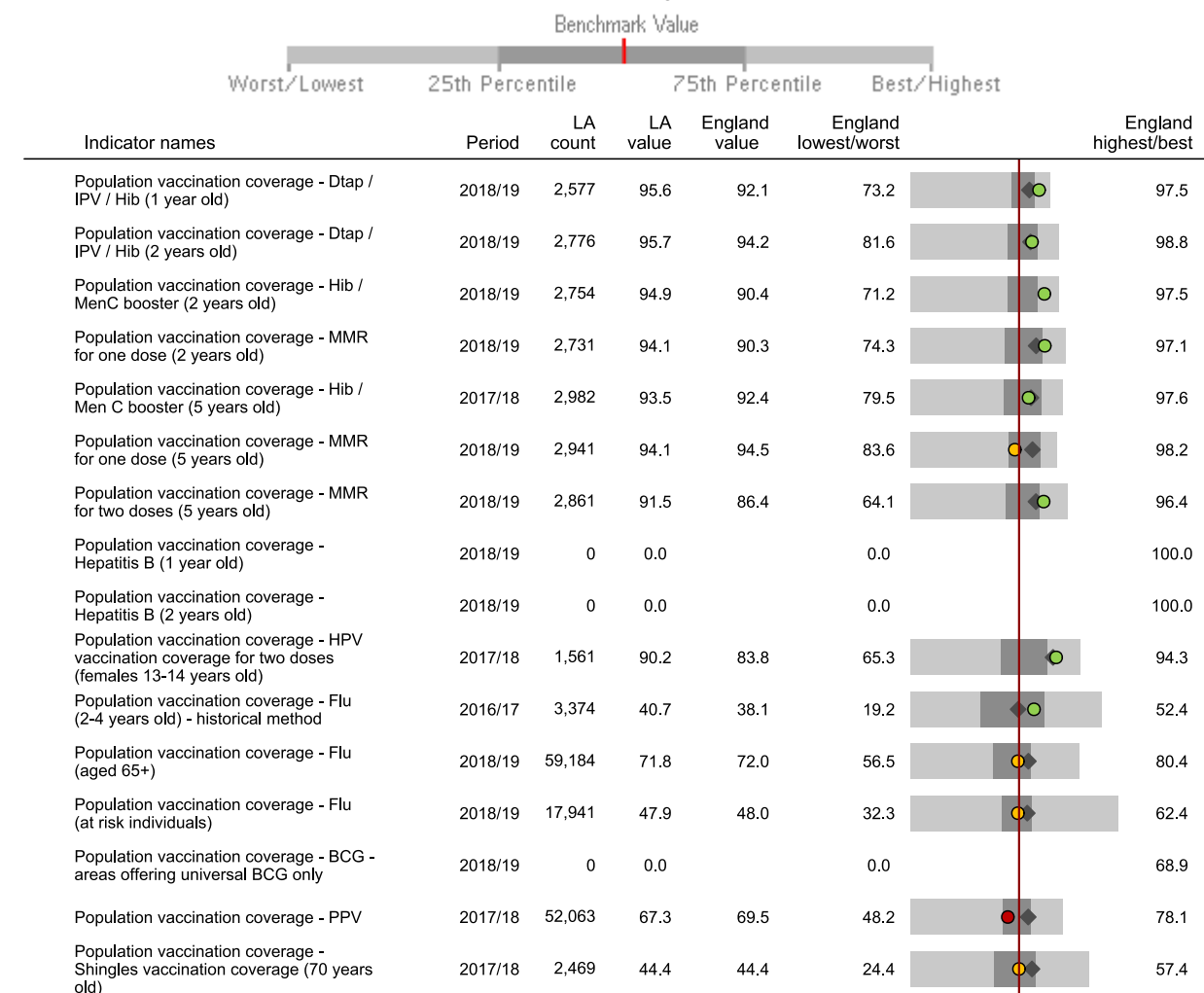
The World Health Organization (WHO) says that the 2 public health interventions that have had the greatest impact on the world's health are clean water and vaccines. 'Immunisation against infectious disease', also known as the [Green Book](#), has the latest information on vaccines and vaccination procedures in the UK. Vaccination coverage is the best indicator of the level of protection a population will have against vaccine preventable communicable diseases. Coverage is closely correlated with levels of disease. Monitoring coverage identifies possible drops in immunity before levels of disease rise. Previous evidence shows that highlighting vaccination programmes encourages improvements in uptake levels. [NICE guidance PH21](#): Reducing differences in the uptake of immunisations aims to increase immunisation uptake among those aged under 19 years from groups where uptake is low.

Figure 28. Chart showing immunisation uptake for selected childhood and adult vaccines in East Riding of Yorkshire compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



In 2018/19, the percentage vaccine coverage of Dtap/IPV/Hib at 1 year old for East Riding of Yorkshire residents was 95.6 (in 2017/18 it was 95.9). This was better than

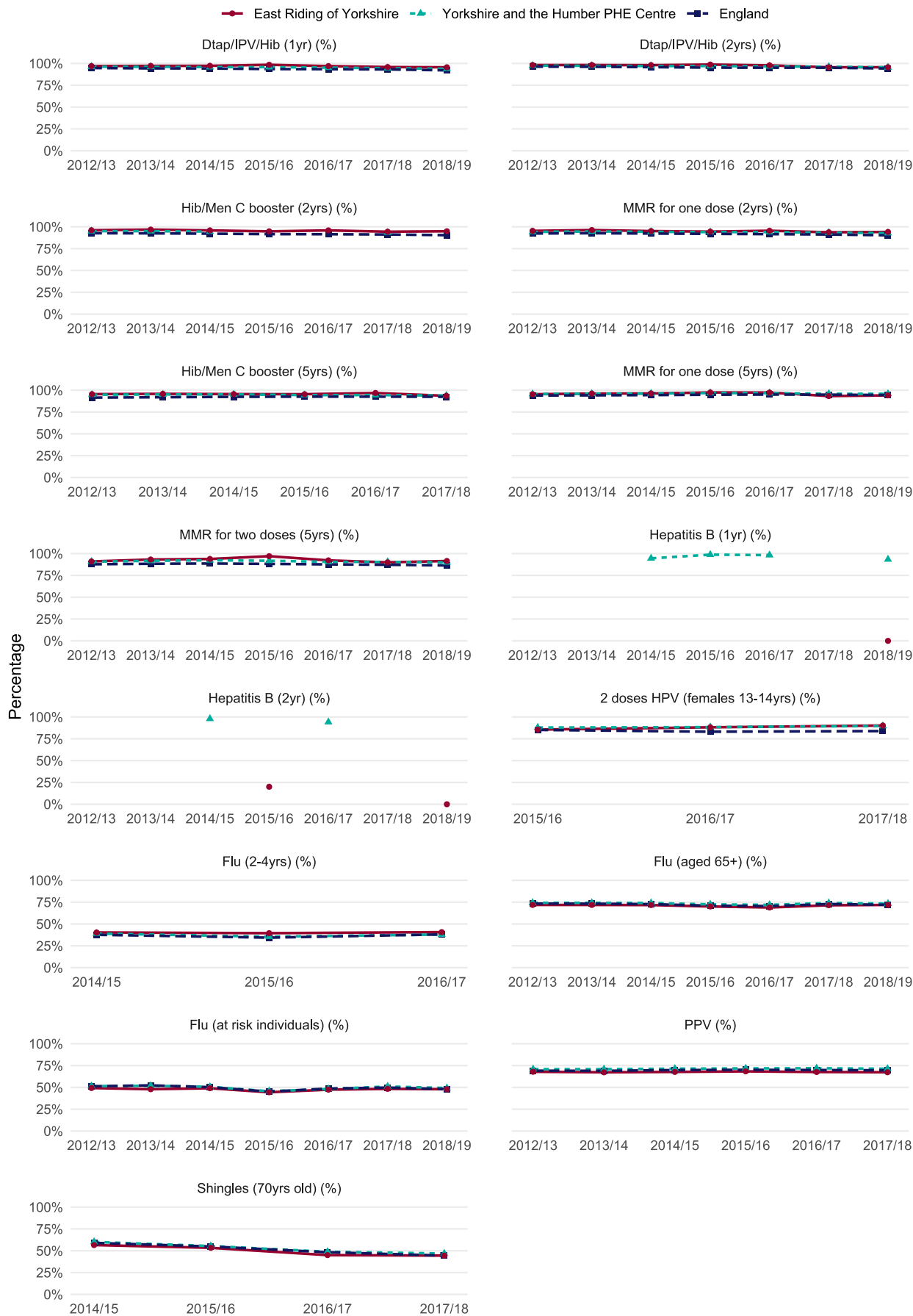
92.1 for England. The rank of East Riding of Yorkshire was 20th highest (out of 150 UTLAs/UAs).

In 2018/19, the percentage vaccine coverage of one dose of MMR at 2 years old for East Riding of Yorkshire residents was 94.1 (in 2017/18 it was 93.7). This was better than 90.3 for England. The rank of East Riding of Yorkshire was 32nd highest (out of 150 UTLAs/UAs).

Table 2. Coverage of selected immunisation by year (%), East Riding of Yorkshire (- indicates no data available)

Indicator	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Dtap/IPV/Hib (1yrs)	97.0	97.2	97.3	98.5	97.0	95.9	95.6
Dtap/IPV/Hib (2yrs)	98.2	98.2	98.1	98.7	97.8	95.6	95.7
Hib/Men C booster (2yrs)	96.1	96.8	95.9	94.8	95.9	94.4	94.9
MMR for one dose (2yrs)	95.3	96.3	95.1	94.5	95.5	93.7	94.1
Hib/Men C booster (5yrs)	95.5	95.8	95.5	95.4	96.8	93.5	-
MMR for one dose (5yrs)	95.3	96.2	96.3	97.4	97.3	93.3	94.1
MMR for two doses (5yrs)	91.0	93.2	93.8	97.0	92.2	90.0	91.5
Hepatitis B (1yr)	-	-	-	-	-	-	0.0
Hepatitis B (2yr)	-	-	-	20.0	-	-	0.0
2 doses HPV (females 13-14yrs)	-	-	-	85.5	88.1	90.2	-
Flu (2-4yrs)	-	-	40.3	39.5	40.7	-	-
Flu (aged 65+)	71.8	71.8	71.7	70.1	68.9	71.5	71.8
Flu (at risk individuals)	49.2	47.9	49.0	44.4	47.3	48.3	47.9
PPV	67.9	67.2	67.7	68.3	67.6	67.3	-
Shingles (70yrs old)	-	-	56.5	53.3	45.0	44.4	-

Figure 29. Immunisation uptake (%) for selected childhood and adult vaccines by year in East Riding of Yorkshire compared to Yorkshire and the Humber PHE Centre and England: 2010/11 to 2018/19



Respiratory infection

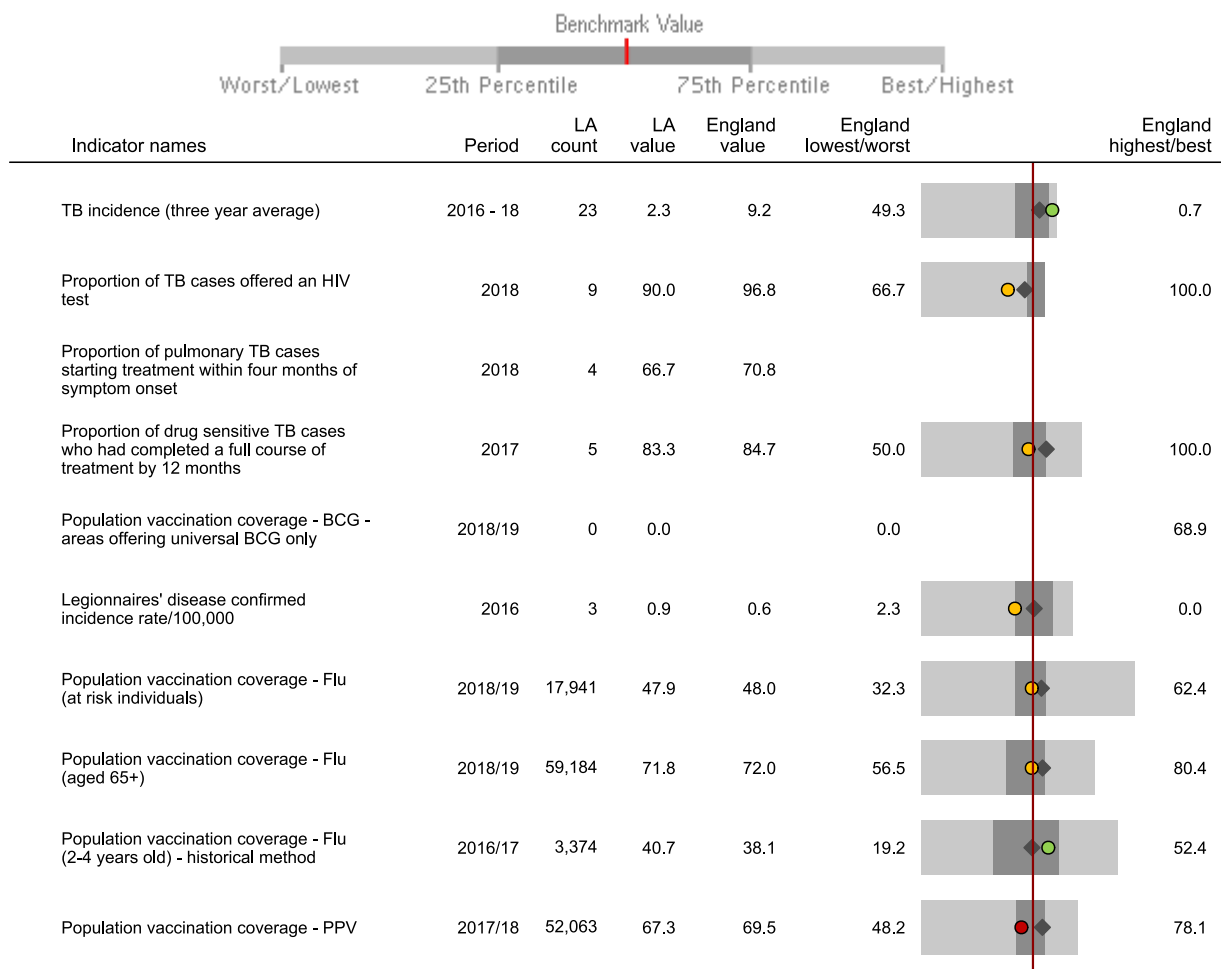
This section has information on Tuberculosis (TB) and Legionella. Information on influenza infection is not yet available on the Health Protection Profiles although some immunisation data is presented.

Figure 30. Chart showing respiratory information in East Riding of Yorkshire compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



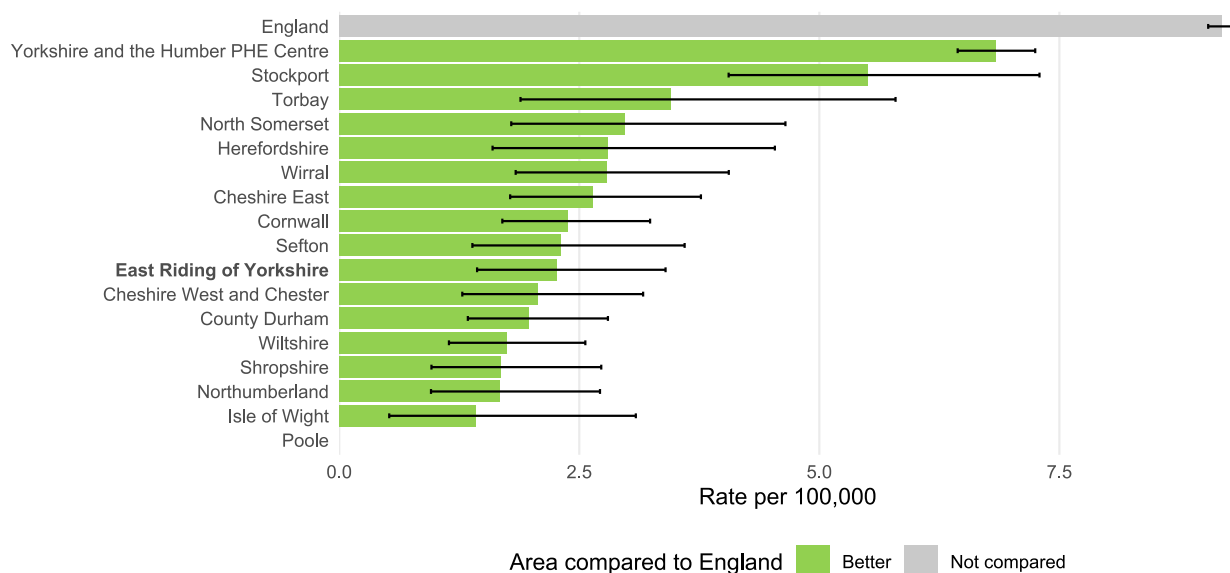
Tuberculosis

Tuberculosis (TB) is an infectious disease that usually affects the lungs, although it can affect almost any part of the body. People at higher risk of TB include those who have medical conditions that weaken the immune system (including HIV), homeless persons, people who inject drugs, those who have lived in areas of the world with high rates of TB, and close contacts of a person who has infectious TB. More local information on TB can be found on the [online TB profiles](#) and [PHE Centre reports](#).

In the 3 years from 2016 - 18, the number of East Riding of Yorkshire residents who were diagnosed with TB was 23 (the number in 2015 - 17 was 16). The 3 year mean TB diagnoses rate per 100,000 residents was 2.3, better than 9.2 per 100,000 in England. The rank of East Riding of Yorkshire was 129th highest (out of 147 UTLAs/UAs). Since 2015 - 17, the increase in East Riding of Yorkshire was 43%; in the 5 years since 2011 - 13, the decrease was 9%.

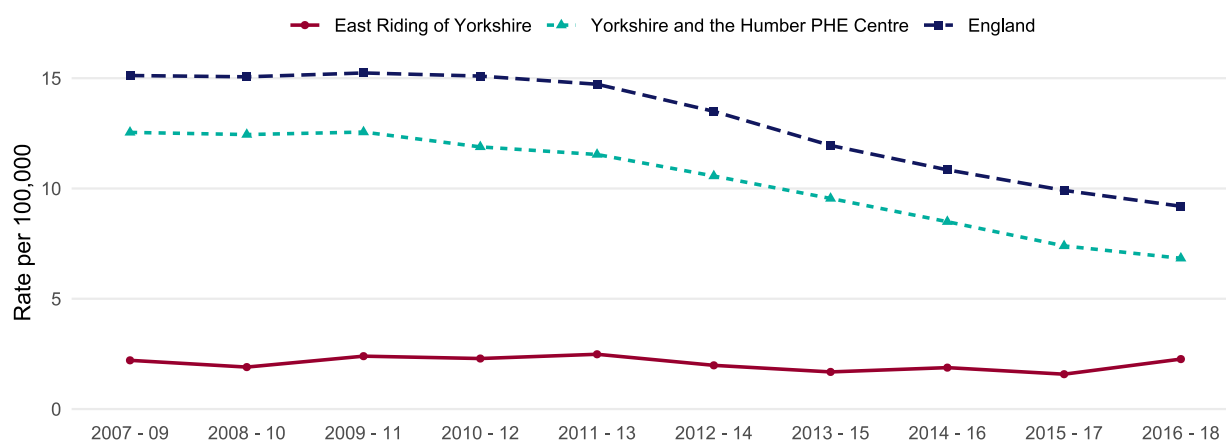
Figure 31. 3 year mean rates per 100,000 population of TB in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2016 - 18

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



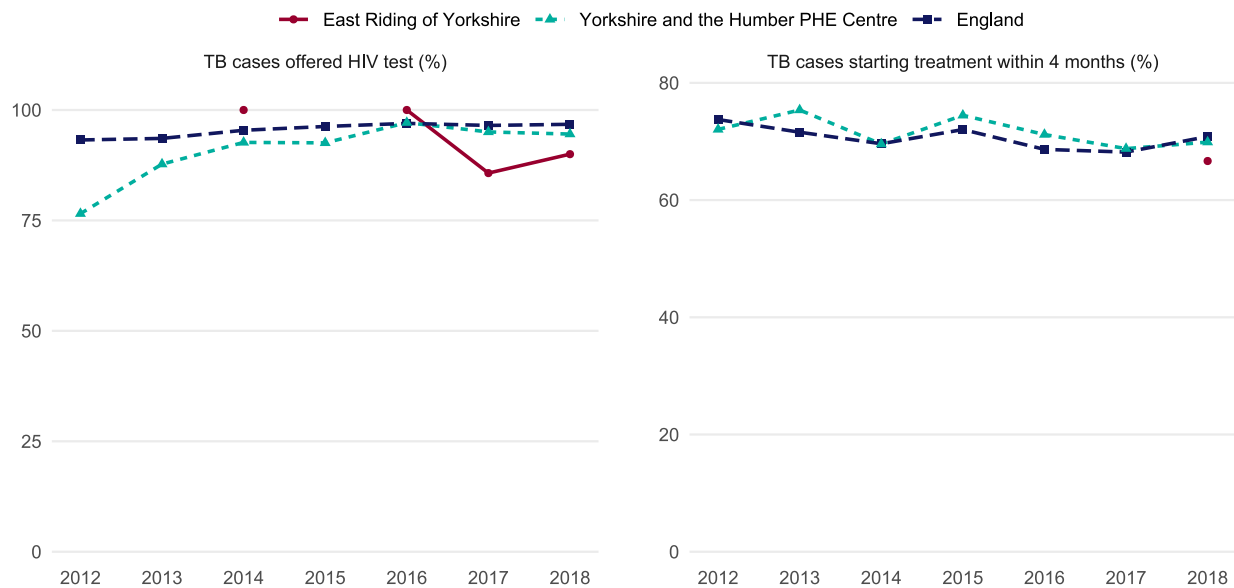
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Figure 32. 3 year mean TB diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



The percentage of TB cases in East Riding of Yorkshire in 2018 who had been offered a test for HIV was 90.0%, similar to 96.8% in England. The percentage of TB cases in East Riding of Yorkshire in 2018 starting treatment within 4 months was 66.7%, similar to 70.8% in England.

Figure 33. TB indicators in East Riding of Yorkshire compared to Yorkshire and the Humber PHE Centre and England: 2010/11 to 2018/19



Legionella

Legionnaires' disease is caused by Legionella bacteria. It is an important health protection issue as infection can result in pneumonia and has a high mortality rate, especially in the elderly and immunosuppressed individuals. The organism is ubiquitous and can colonise poorly designed and/or poorly maintained wet cooling systems, which have the potential to cause large outbreaks.

In 2016, the number of East Riding of Yorkshire residents who were diagnosed with legionella was 3 (the number in 2015 was 1). The legionella diagnoses rate per 100,000 residents was 0.9 in 2016, similar to 0.6 per 100,000 in England. The rank of East Riding of Yorkshire was 39th highest (out of 150 UTLAs/UAs).

Figure 34. Rates per 100,000 population of legionella in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2016

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

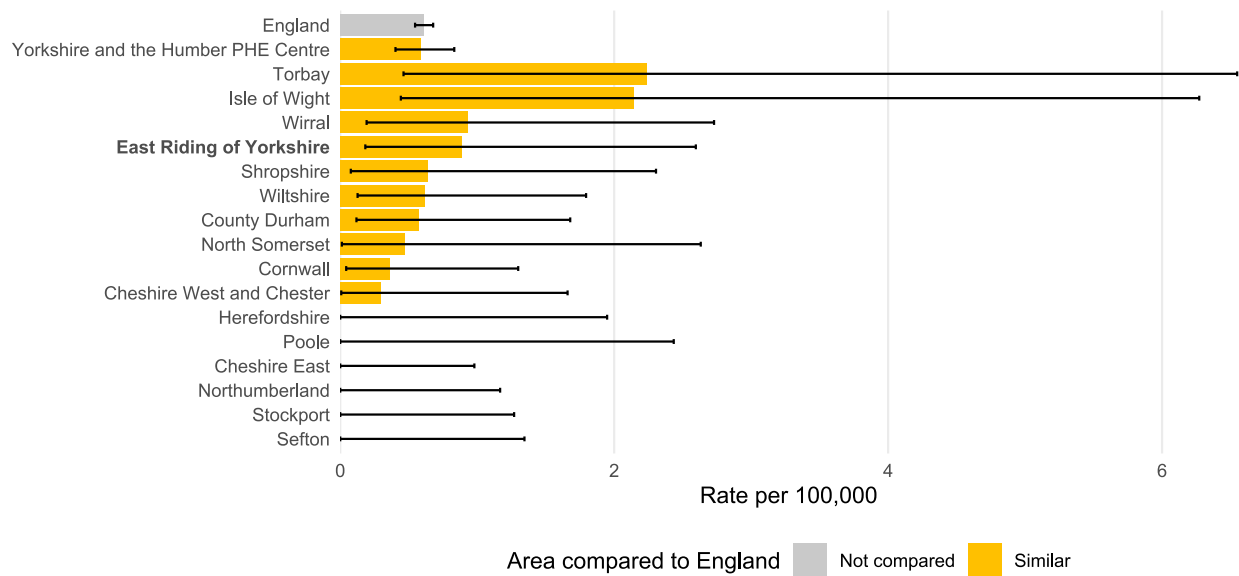
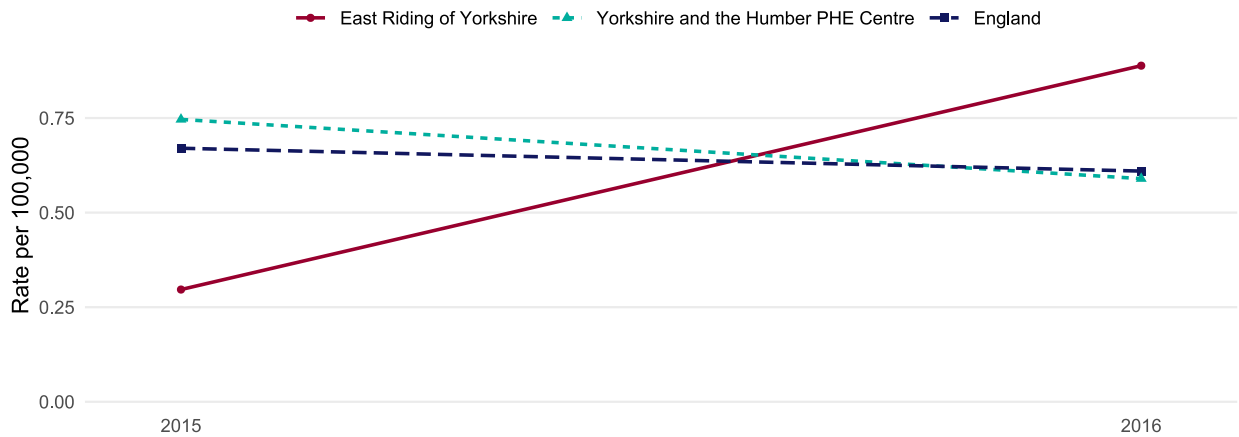


Figure 35. Legionella diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Hepatitis

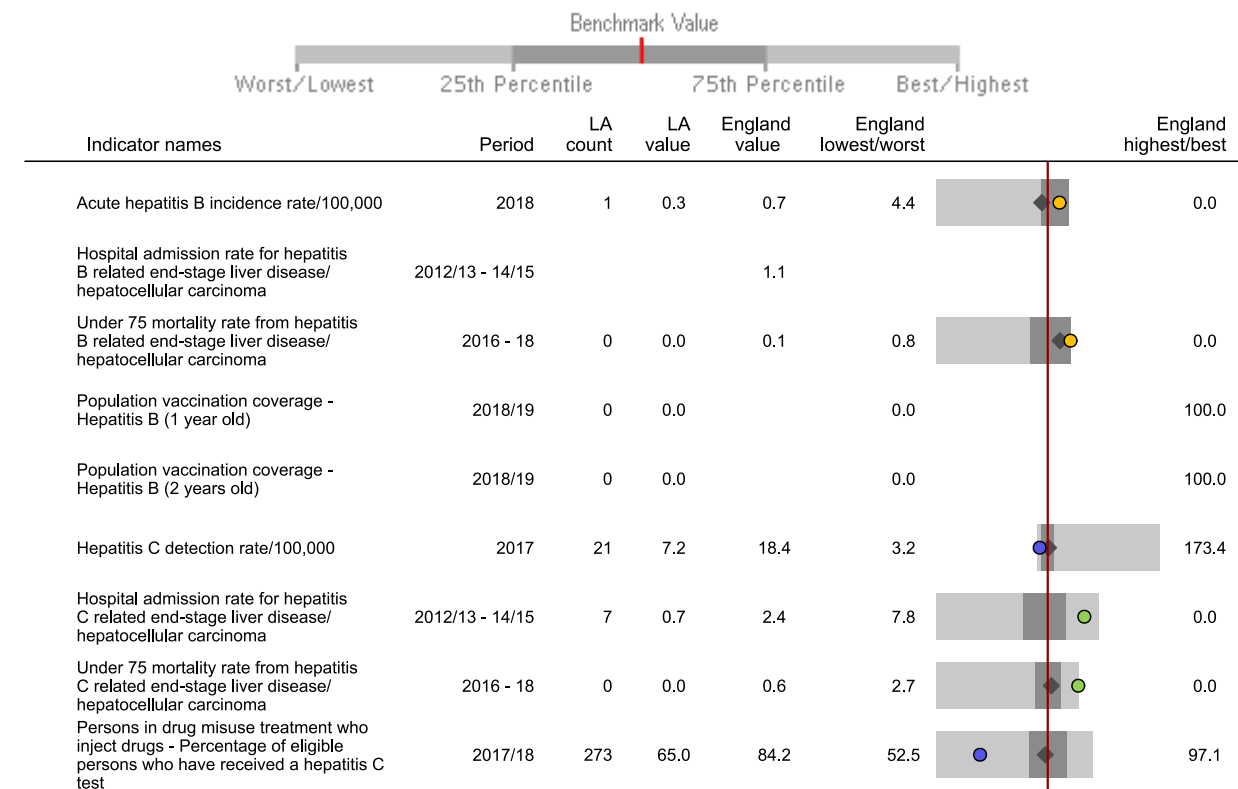
Hepatitis refers to inflammation of the liver, which can be due to infectious and non-infectious causes. In this section, information is presented on the viral infections hepatitis B and C. Information on hepatitis A is not currently available on the Health Protection Profiles. For more local information on hepatitis please access PHE Centre [hepatitis B](#) and [hepatitis C](#) reports.

Figure 36. Chart showing hepatitis information in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



Hepatitis B

Hepatitis B is vaccine preventable and an important health protection issue that can cause serious disease. Variation in the incidence rate may reflect outbreaks, differences in the number of people in risk groups (such as migrants from countries with a high prevalence of hepatitis B, men who have sex with men, people who inject drugs), in addition to variation in uptake of vaccination of risk groups. High rates of acute hepatitis B should prompt a review of cases to determine underlying reasons and to identify appropriate interventions.

In 2018, the number of East Riding of Yorkshire residents who were newly diagnosed with acute hepatitis B was 1 (the number in 2017 was 3). The rate of new diagnoses per 100,000 residents was 0.3, similar to the rate of 0.7 per 100,000 in England. The rank of East Riding of Yorkshire for the rate of new acute hepatitis B diagnoses was 86th highest (out of 150 UTLAs/UAs).

Figure 37. Rates per 100,000 population of acute hepatitis B in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

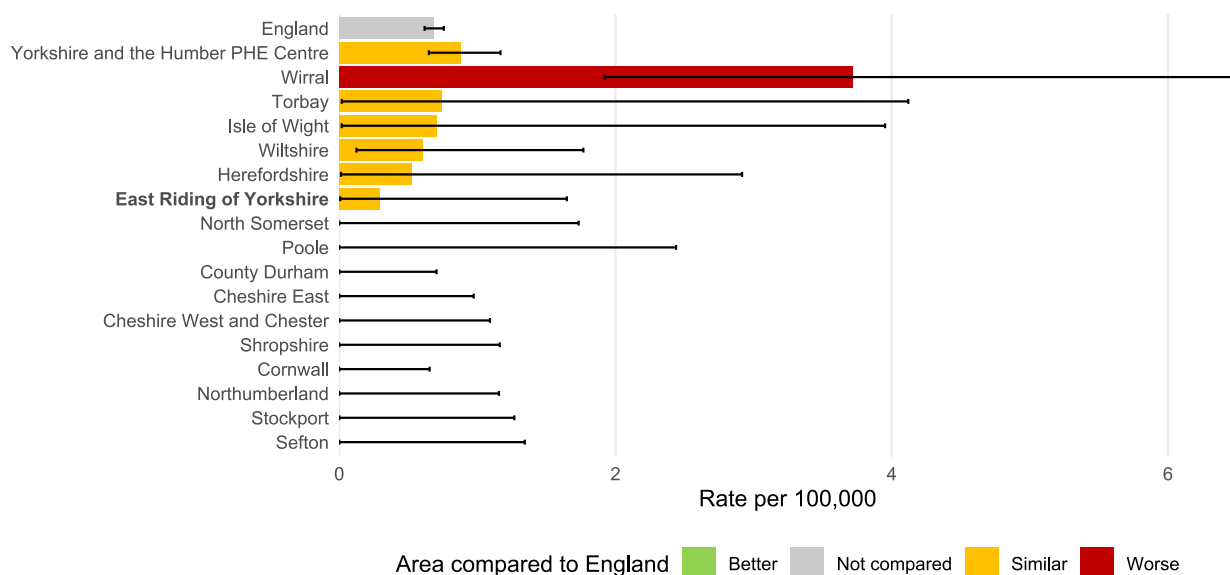
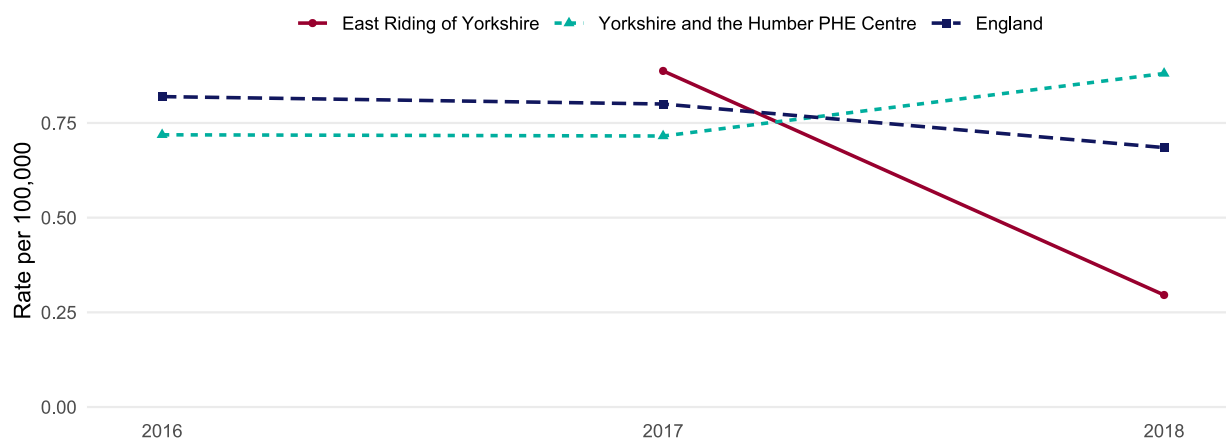


Figure 38. Acute hepatitis B diagnoses per 100,000 population in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



In 2016 - 18 the under 75 mortality rate from hepatitis B related end-stage liver disease/hepatocellular carcinoma per 100,000 residents was 0.0, similar to the rate of 0.1 per 100,000 in England. The rank of East Riding of Yorkshire was 132nd highest (out of 146 UTLAs/UAs).

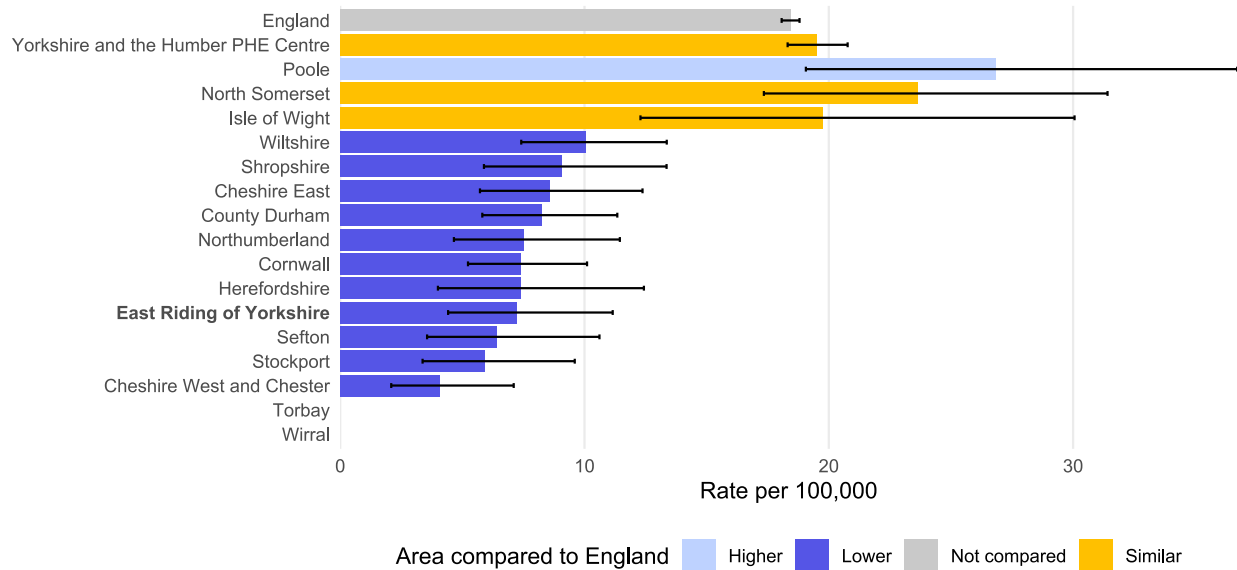
Hepatitis C

Hepatitis C is an important health protection issue. The infection increases people's risk of developing serious long term disease. About a third of people infected with hepatitis C virus will eventually develop liver cirrhosis accompanied with an increased risk of developing liver cancer. Hepatitis C is difficult to diagnose. Variation in detection rates may reflect differences in local testing activity as well as differences in the number of people in risk groups (such as people who inject drugs).

In 2017 the rate of hepatitis C detection in per 100,000 residents was 7.2, lower than the rate of 18.4 per 100,000 in England. The rank of East Riding of Yorkshire for the rate of hepatitis C detections was 129th highest (out of 141 UTLAs/UAs).

Figure 39. Rates per 100,000 population of hepatitis C detection in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2017

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 2 local authorities.

In 2016 - 18 the under 75 mortality rate from hepatitis C related end-stage liver disease/hepatocellular carcinoma per 100,000 residents was 0.0, better than the rate of 0.6 per 100,000 in England. The rank of East Riding of Yorkshire was 146th highest (out of 146 UTLAs/UAs).

STIs and HIV

Sexually transmitted infections

As STIs are often asymptomatic, frequent screening of risk groups is important. Early detection and treatment can reduce important long-term consequences, such as infertility and ectopic pregnancy. While vaccination is a measure that can be used to control genital warts, hepatitis A and hepatitis B, control of other STIs relies on consistent and correct condom use, behaviour change to decrease overlapping and multiple partners, ensuring prompt access to testing and treatment, and ensuring partners of cases are notified and tested.

The burden of STIs in England continues to be greatest in young people, gay, bisexual and other men who have sex with men (MSM) and black ethnic minorities. Of all age-groups, the highest STI diagnosis rates in England are in young people aged 15-24 years. High levels of gonorrhoea transmission are of particular concern due to the emergence of extensively drug resistant gonorrhoea (XDR-NG) in England.

For more information on local sexual health access the [sexual and reproductive health profiles](#) which include downloadable summary profiles, and [PHE Centre reports](#).

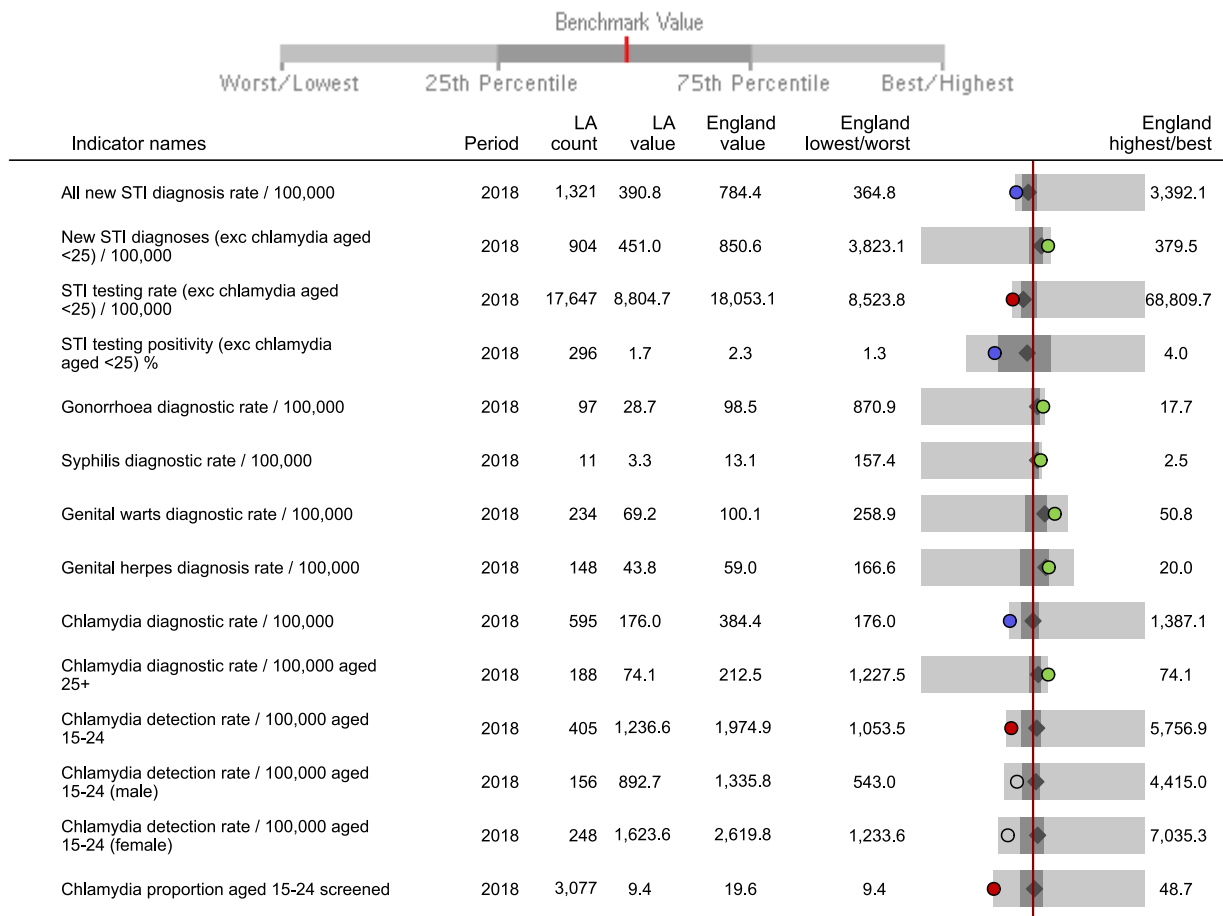
It should be noted that if high rates of gonorrhoea and syphilis are observed in a population, this reflects high levels of risky sexual behaviour. When interpreting trends, please note that recent decreases in genital warts diagnoses may be due to the protective effect of HPV vaccination, and are particularly evident in the younger age groups, offered the vaccine since the national programme began. An increase in genital herpes diagnoses may be due to the use of more sensitive tests.

Figure 40. Chart showing key STI indicators in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



Burden and trend of new STIs

Overall, the number of new sexually transmitted infections (STIs) diagnosed among residents of East Riding of Yorkshire in 2018 was 1,321. The rate was 391 per 100,000 residents, lower than the rate of 784 per 100,000 in England.

East Riding of Yorkshire ranked 141st highest out of 147 UTLAs/UAs for new STI diagnoses (excluding chlamydia among young people aged 15-24 years) in 2018, with a rate of 451 per 100,000 residents, better than the rate of 851 per 100,000 for England.

Since 2017, the change in the rate of new STI diagnoses (excluding chlamydia among young people aged 15-24 years) in East Riding of Yorkshire was 0%, and since 2013, the increase was 3%.

Table 3. Rates per 100,000 population of new STIs in East Riding of Yorkshire and England: 2017-2018

Diagnoses	2017	2018	% change 2017 to 2018*	Rank among 16 similar UTLAs†	Rank within England: 2018‡	Value for England: 2018
New STIs	410.9	390.8	-4.9%	14	145	784.4
New STIs (exc chlamydia aged <25) ¹	453.0	451.0	-0.4%	14	141	850.6
Chlamydia	188.4	176.0	-6.6%	15	147	384.4
Gonorrhoea	26.6	28.7	7.8%	12	142	98.5
Syphilis	2.7	3.3	22.2%	15	140	13.1
Genital warts	74.2	69.2	-6.8%	13	136	100.1
Genital herpes	47.0	43.8	-6.9%	11	112	59.0

* Percent change not provided where the value in 2017 was 0. Calculated from unrounded values.

† These are East Riding of Yorkshire and its 15 statistical nearest neighbours, excluding those where values were suppressed due to small numbers. First rank has the highest value. Nearest neighbours are derived from [CIPFA's Nearest Neighbours Model](#).

‡ Out of 150 upper-tier (county) local authorities in England, excluding those where values were suppressed due to small numbers. City of London and Isles of Scilly are always excluded. First rank has the highest value. Where the value was 0, ranks are based on order of local authority names.

¹ Population is restricted to those aged 15-64 years

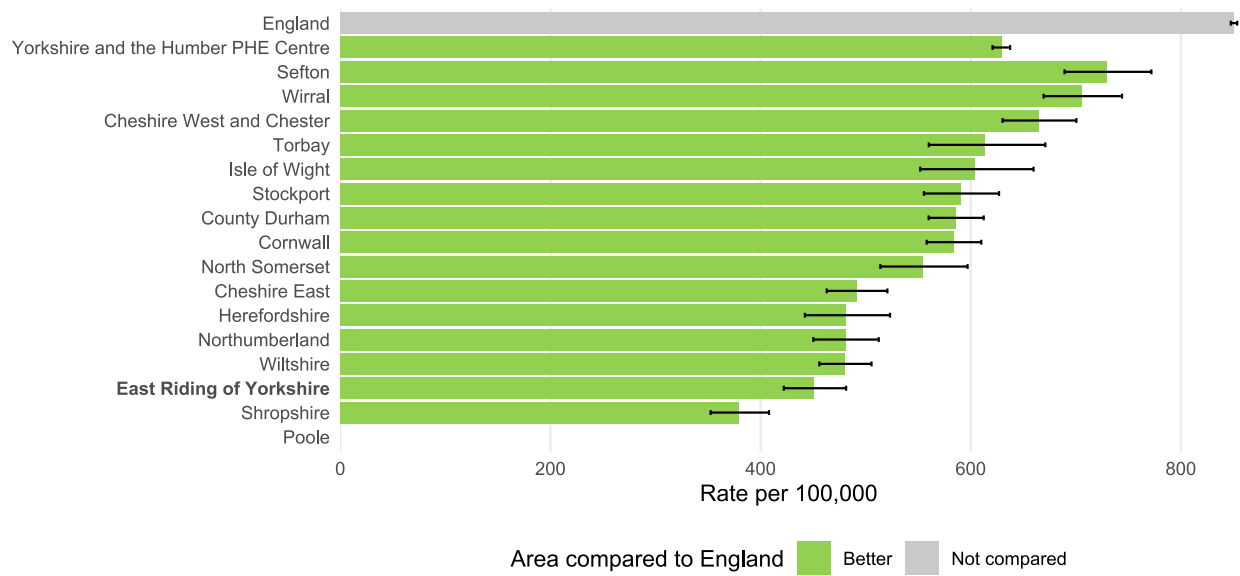
Table 4. Number of new STIs by year, East Riding of Yorkshire

Diagnoses	2012	2013	2014	2015	2016	2017	2018
New STIs	893	1,455	1,654	1,753	1,563	1,389	1,321
New STIs (exc chlamydia aged <25) ¹	587	900	936	993	959	908	904
Chlamydia	447	699	885	980	795	637	595
Gonorrhoea	21	31	49	100	84	90	97
Syphilis	3	9	7	3	7	9	11
Genital warts	186	314	325	289	297	251	234
Genital herpes	71	117	108	129	137	159	148

¹ Population is restricted to those aged 15-64 years

Figure 41. Rates per 100,000 population of new STIs excluding chlamydia in <25 years in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

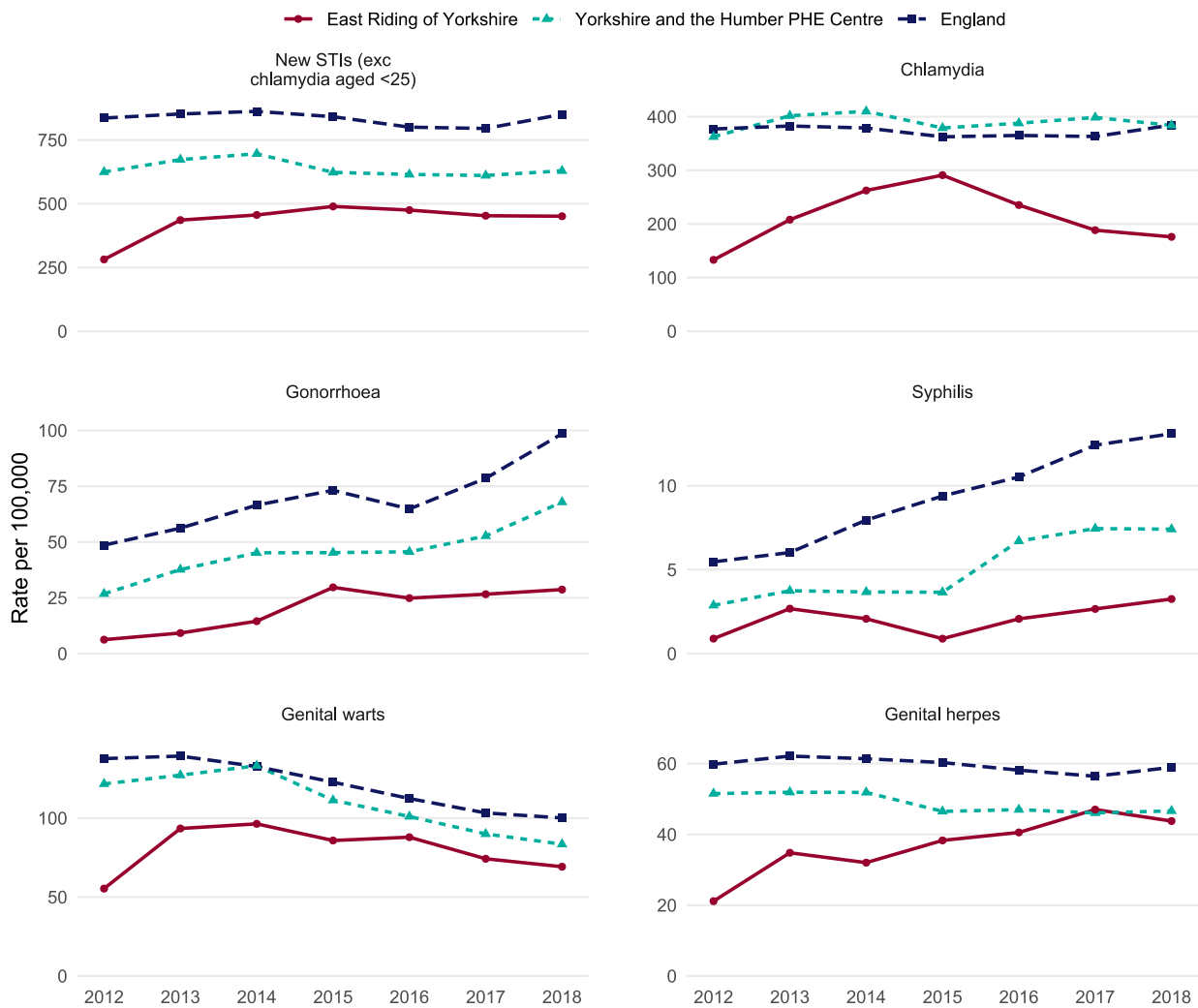
Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

Figure 42. Rates per 100,000 population by diagnosis by year in East Riding of Yorkshire compared to rates in the Yorkshire and the Humber PHE Centre and England: 2012 to 2018

Please note the charts have different y axis scales.

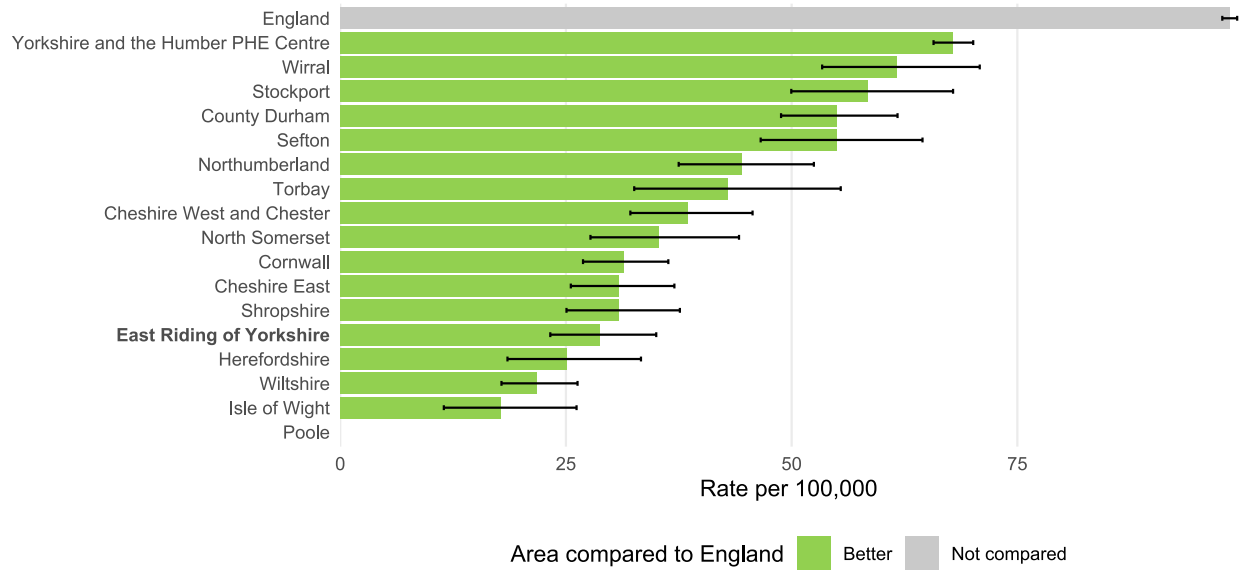


Gonorrhoea

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with gonorrhoea was 97 (the number in 2017 was 90). The gonorrhoea diagnoses rate per 100,000 residents was 28.7 in 2018, better than 98.5 per 100,000 in England. The rank of East Riding of Yorkshire was 142nd highest (out of 147 UTLAs/UAs). Since 2017, the increase in the rate of gonorrhoea in East Riding of Yorkshire was 8% and in the 5 years since 2013, the increase was 211%.

Figure 43. Rates per 100,000 population of gonorrhoea in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



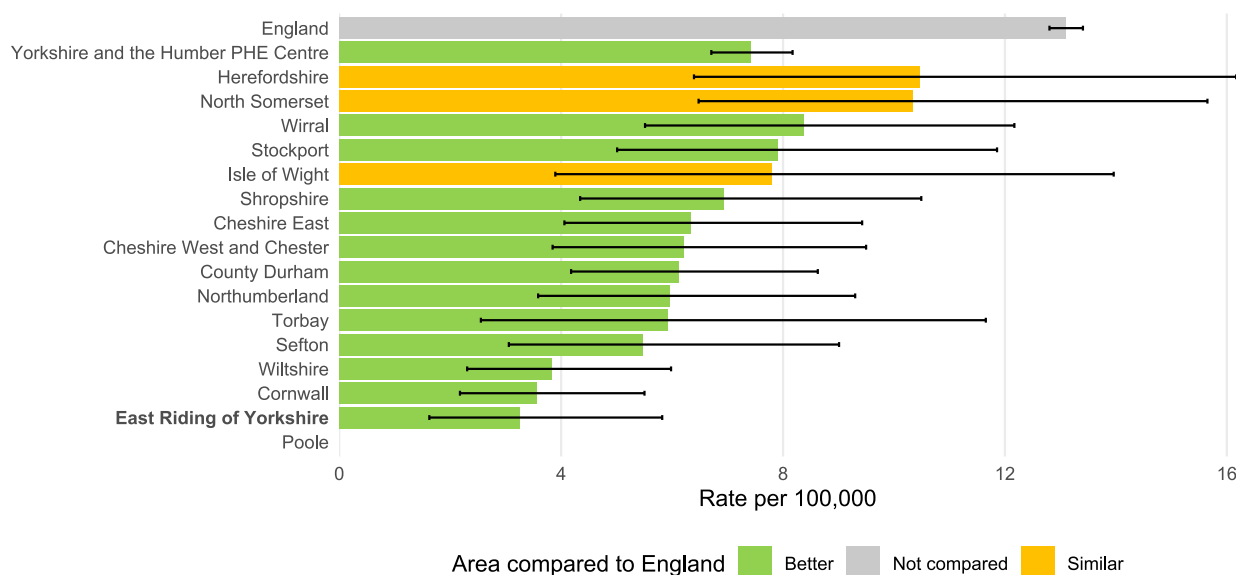
Value suppressed for 1 local authority.

Syphilis

In 2018, the number of East Riding of Yorkshire residents who were diagnosed with syphilis was 11 (the number in 2017 was 9). The syphilis diagnoses rate per 100,000 residents was 3.3 in 2018, better than 13.1 per 100,000 in England. The rank of East Riding of Yorkshire was 140th highest (out of 147 UTLAs/UAs). Since 2017, the increase in the rate of syphilis in East Riding of Yorkshire was 22%, and in the 5 years since 2013, the increase was 22%.

Figure 44. Rates per 100,000 population of syphilis in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018.

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

Chlamydia detection

Since chlamydia is most often asymptomatic, a high detection rate reflects success at identifying infections that, if left untreated, may lead to serious reproductive health consequences. The detection rate is not a measure of prevalence. PHE recommends that local areas achieve a rate of at least 2,300 per 100,000 resident 15-24 year olds, a level which is expected to produce a decrease in chlamydia prevalence. Areas already achieving this rate should aim to maintain or increase it. Areas not currently achieving this rate should work towards it. High detection levels can only be achieved through the ongoing commissioning of high-volume, good quality screening services across primary care and sexual health services.

The chlamydia detection rate in 15-24 year olds in 2018 in East Riding of Yorkshire was 1,237 per 100,000 population (405 positives out of 3,077 screened), lower than the 2,300 target. 9.4% of 15-24 year olds were tested for chlamydia, compared to 19.6% nationally. The detection rate per 100,000 and its rank in Yorkshire and the Humber PHE Centre and England are shown in Table 5.

Table 5. Chlamydia detection rate per 100,000 population and percentage screened in 15-24 year olds in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England: 2018

	2017	2018	% change 2017 to 2018*	Rank among 16 similar UTLAs†	Rank within England: 2018‡	Value for England: 2018
Detection rate						
Total	1,429.0	1,236.6	-13.5%	15	138	1,974.9
Women	2,068.7	1,623.6	-21.5%	15	140	2,619.8
Men	864.0	892.7	3.3%	12	127	1,335.8
Percentage screened						
People aged 15- 24	10.6	9.4	-11.8%	15	147	19.6

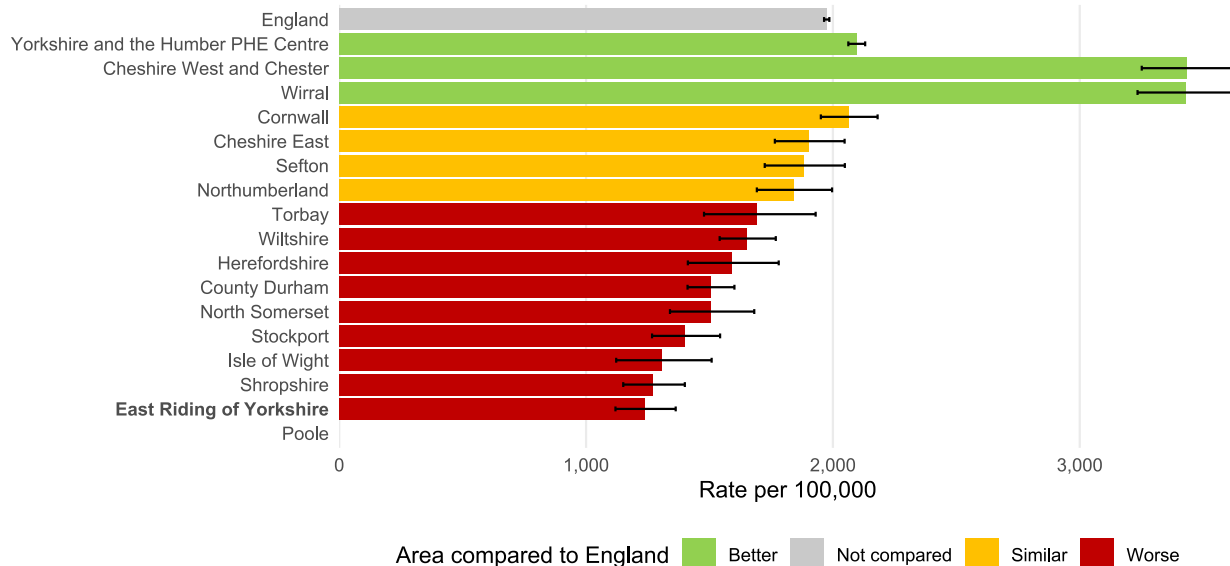
* Percent change proportional to the value in 2017, not a change in percentage points. Percent change not provided where the value in 2017 was 0. Calculated from unrounded values.

† These are East Riding of Yorkshire and its 15 statistical nearest neighbours, excluding those where values were suppressed due to small numbers. First rank has the highest value. Nearest neighbours are derived from [CIPFA's Nearest Neighbours Model](#).

‡ Out of 150 upper-tier (county) local authorities in England, excluding those where values were suppressed due to small numbers. City of London and Isles of Scilly are always excluded. First rank has the highest value. Where the value was 0, ranks are based on order of local authority names.

Figure 45. Chlamydia detection rate per 100,000 population in 15-24 year olds in 16 similar UTLAs/UTAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

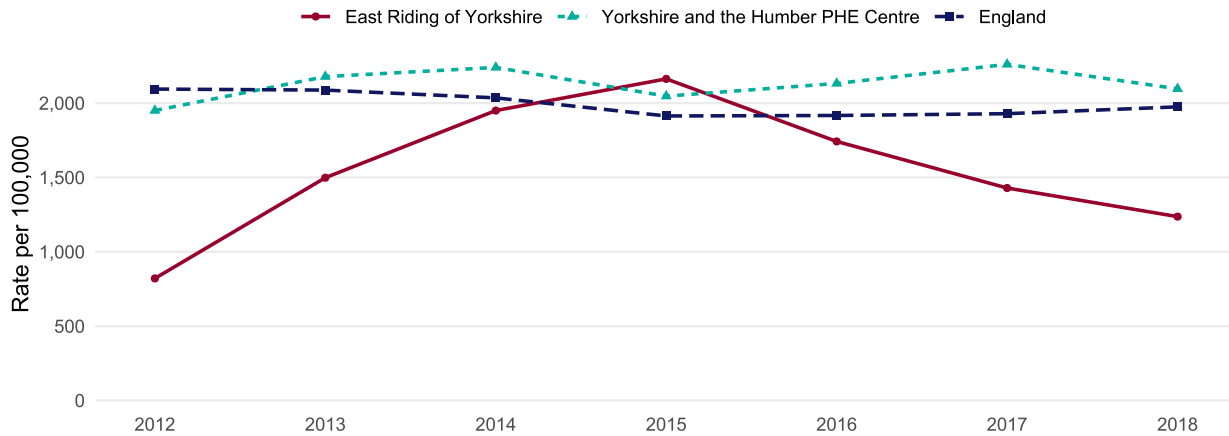
Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

In the five years from 2013 to 2018, there was a 17% decrease in the chlamydia detection rate among 15-24 year olds in East Riding of Yorkshire. From 2017, the decrease was 13%.

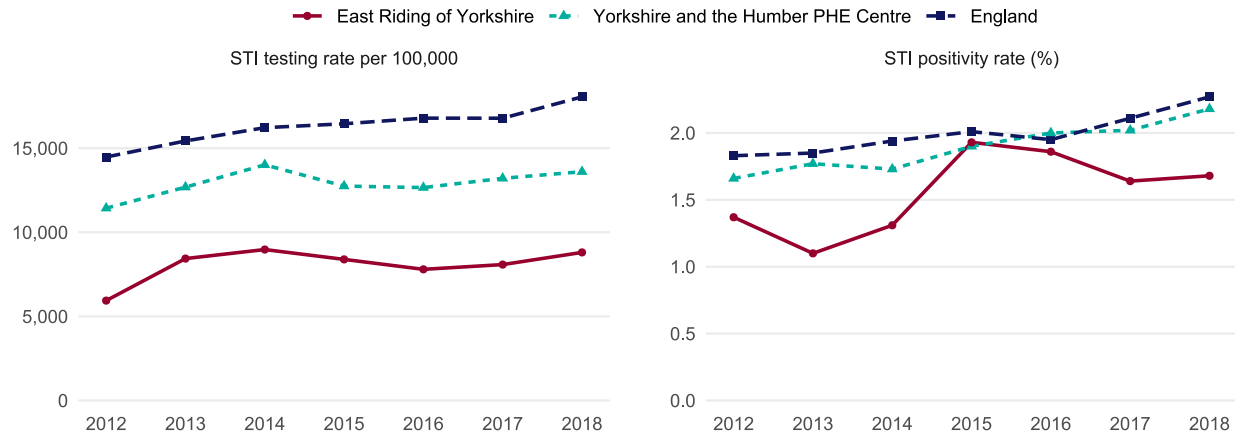
Figure 46. Chlamydia detection rate per 100,000 population in 15-24 year olds by year in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



STI testing in sexual health services

In 2018 the rate of STI testing (excluding chlamydia in under 25 year olds) in sexual health services in East Riding of Yorkshire was 8,805 per 100,000 aged 15 to 64 years, a 9% increase compared to 2017. This is worse than the rate of 18,053 per 100,000 in England in 2018. The positivity rate in East Riding of Yorkshire was 1.7% in 2018, lower than 2.3% in England.

Figure 47. STI testing rate and positivity rate (excluding chlamydia in under 25 year olds) per 100,000 population aged 15-64 years by year in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England: 2012 to 2018



Other infections transmitted sexually

Other infections can be spread through sexual intercourse in addition to other routes, e.g. hepatitis B, hepatitis C and some infections are spread faecal-orally during sexual activity - termed sexually transmissible enteric infections (STEI) e.g. hepatitis A and Shigella.

HIV

Free and effective antiretroviral therapy (ART) in the UK has transformed HIV from a fatal infection into a chronic but manageable condition. People living with HIV in the UK can now expect to have a near normal life expectancy if diagnosed promptly and they adhere to treatment. The population groups who have been most at risk of HIV in the UK have been MSM and black African people. With progressive strengthening of combination prevention (including condom use, expanded HIV testing, prompt antiretroviral therapy and availability of pre-exposure prophylaxis), HIV transmission, AIDS and HIV-related deaths could be eliminated in the UK. For more local information on HIV please access the [PHE Centre Reports](#).

Figure 48. Chart showing key HIV indicators in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



People living with diagnosed HIV

In 2018, the number of East Riding of Yorkshire residents aged 15-59 years who were seen at HIV services (the prevalence of diagnosed HIV) was 101. The diagnosed prevalence per 1,000 residents aged 15-59 years was 0.6, better than 2.4 per 1,000 in England). The rank of East Riding of Yorkshire was 146th highest (out of 147 UTLAs/UAs). Since 2017, the increase in East Riding of Yorkshire was 1%; in the 5 years since 2013, the increase was 29%.

Figure 49. Diagnosed HIV prevalence per 1,000 population aged 15-59 years by year in East Riding of Yorkshire compared to rates in the Yorkshire and the Humber PHE Centre and England: 2010 to 2018.

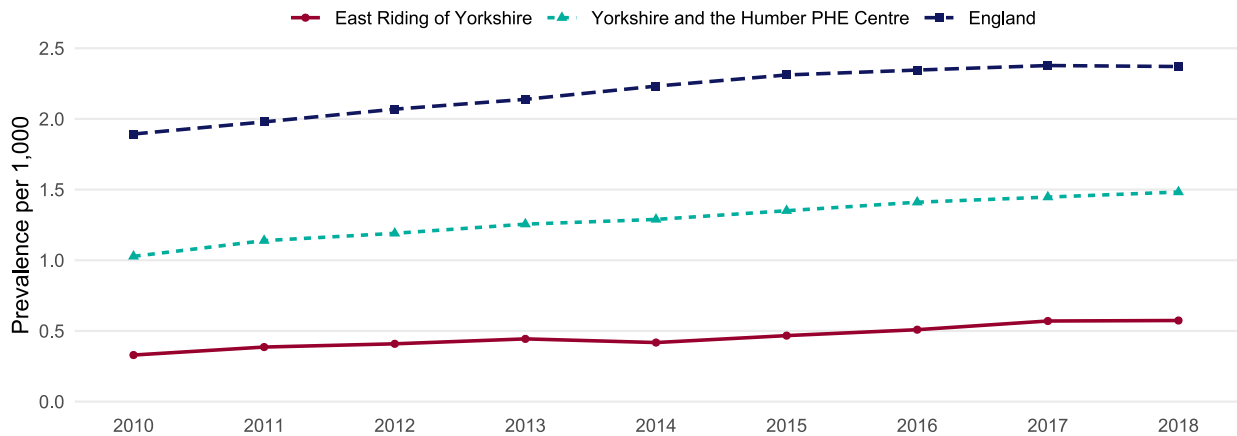
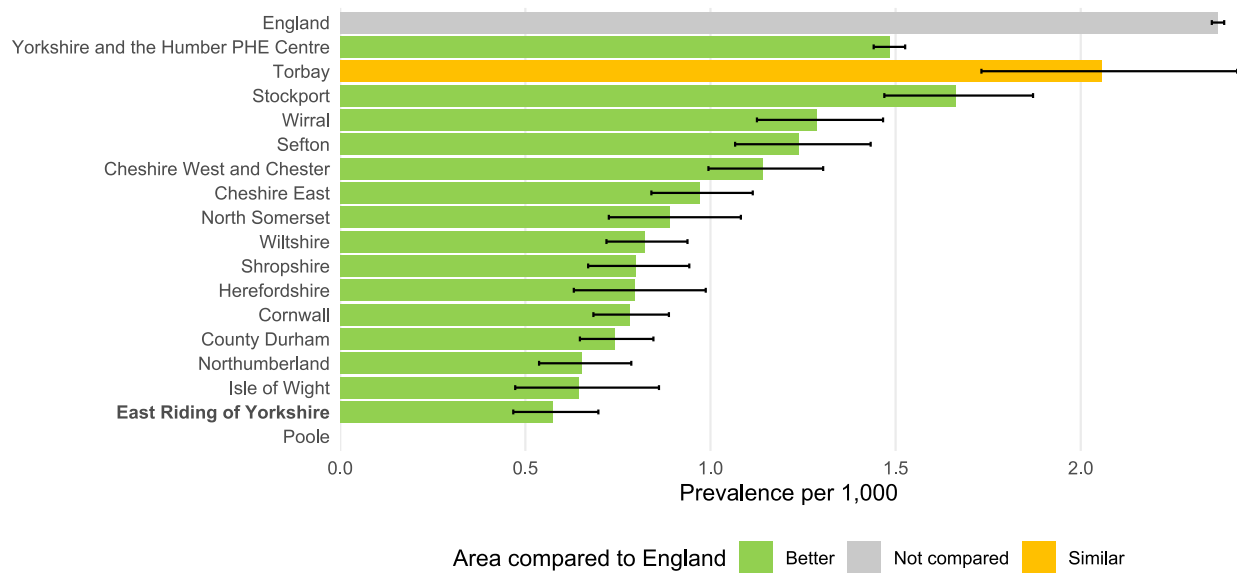


Figure 50. Diagnosed HIV prevalence per 1,000 population aged 15-59 years in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

The percentage of people in East Riding of Yorkshire newly diagnosed with HIV from 2016 - 18 who started antiretroviral therapy (ART) promptly (within 91 days of their diagnosis) was 82.4%, similar to 79.1% in England.

The percentage of adults in East Riding of Yorkshire accessing HIV care in 2018 who were virally suppressed (undetectable viral load) was 96.7%, similar to 97.2% in England.

New HIV diagnoses

In 2018, the number of East Riding of Yorkshire residents aged 15 years and older who were newly diagnosed with HIV was 4. The rate of new diagnoses per 100,000 residents was 1.4, better than the rate of 8.7 per 100,000 in England. This represented a 60% decrease since 2017 and a 74% decrease in the 5 years since 2013. The rank of East Riding of Yorkshire for the rate of new HIV diagnoses was 145th highest (out of 147 UTLAs/UAs).

Figure 51. Rate of new HIV diagnoses per 100,000 population among people aged 15 years or above by year in East Riding of Yorkshire compared to rates in the Yorkshire and the Humber PHE Centre and England: 2011 to 2018.

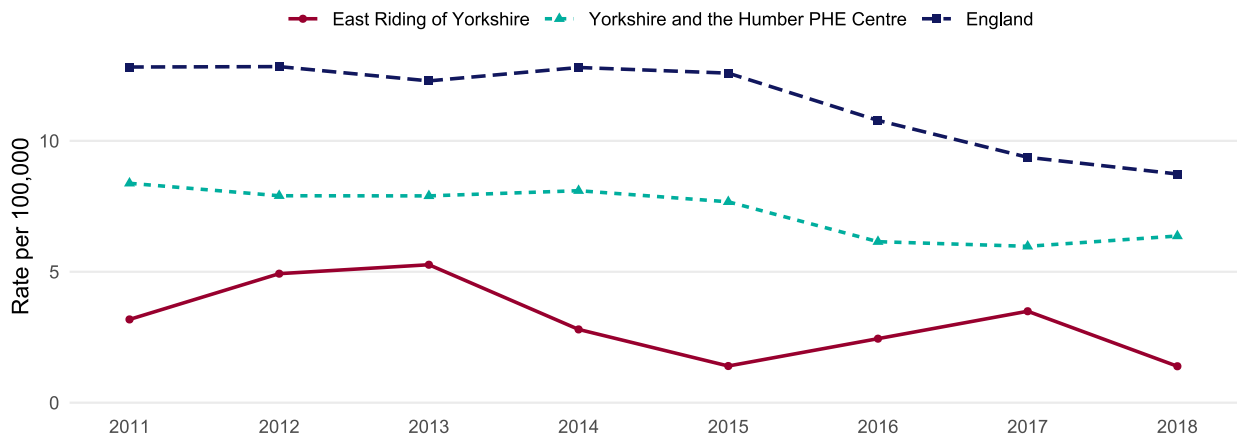
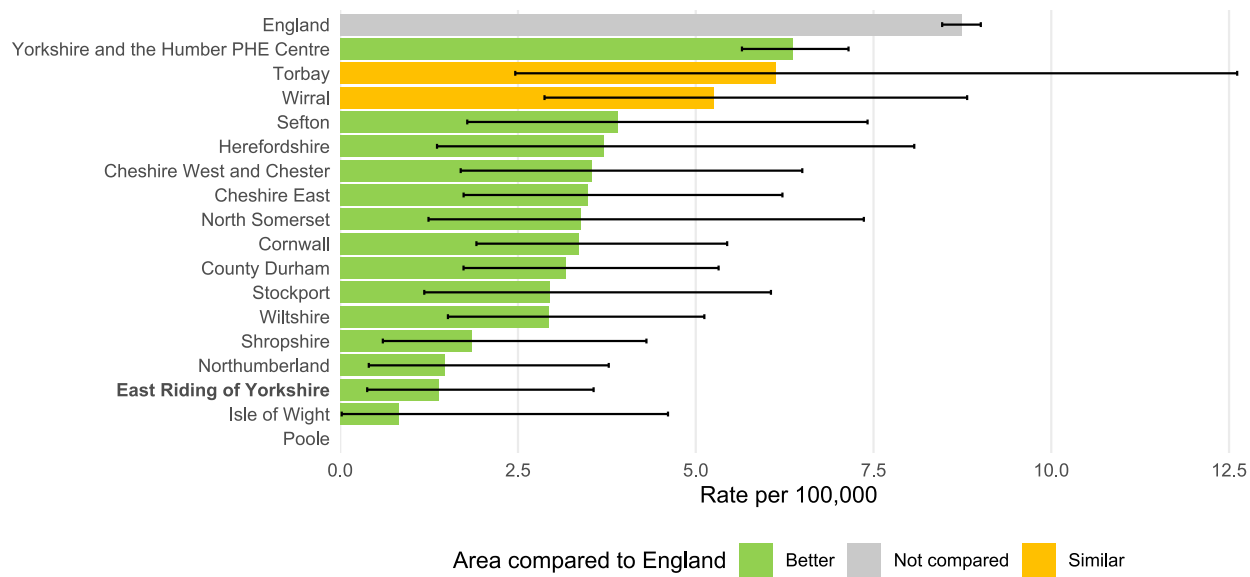


Figure 52. New HIV diagnoses rate per 100,000 population aged 15 years and above in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2018

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 1 local authority.

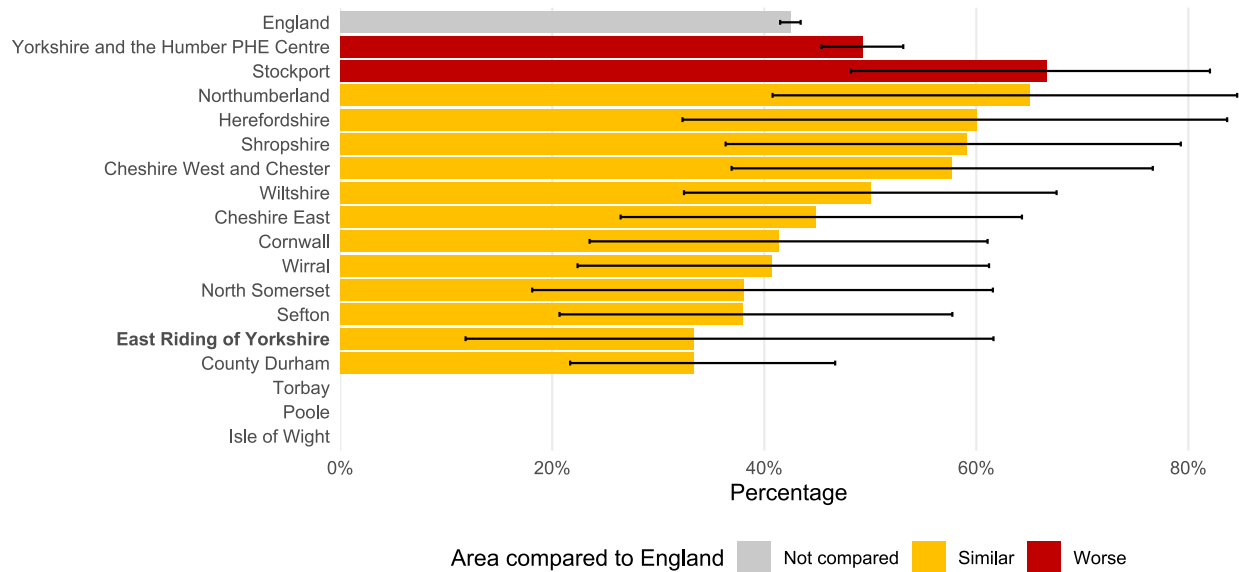
Late HIV diagnosis

Late diagnosis is the most important predictor of HIV-related morbidity and short-term mortality. It is a critical component of the PHOF, and monitoring is essential to evaluate the success of local HIV testing efforts. Diagnoses made at a late stage of infection are defined as having a CD4 cell count less than 350 cells per mm³ within three months of diagnosis.

In East Riding of Yorkshire, the percentage of HIV diagnoses made at a late stage of infection in 2016 - 18 was 33.3% (95% CI 11.8 to 61.6), similar to 42.5% (95% CI 41.5 to 43.4) in England.

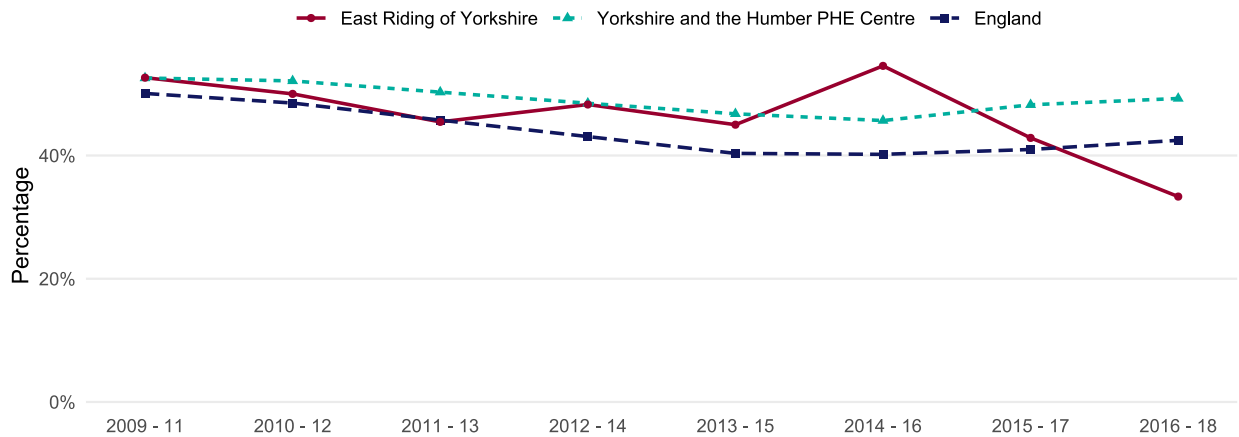
Figure 53. Percentage of late HIV diagnoses in 16 similar UTLAs/UAs and Yorkshire and the Humber PHE Centre, compared to England: 2016 - 18

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)



Value suppressed for 3 local authorities.

Figure 54. Percentage of late HIV diagnoses in East Riding of Yorkshire compared to the Yorkshire and the Humber PHE Centre and England: 2009-11 to 2016-18



For East Riding of Yorkshire residents, the percentage of HIV diagnoses made at a late stage of infection for different risk groups in 2016 - 18 was as follows: MSM - 16.7% (95% CI 0.4 to 64.1), similar to 32.5% (95% CI 31.2 to 33.8) in England; heterosexual

men - 40.0% (95% CI 5.3 to 85.3), similar to 59.4% (95% CI 57.0 to 61.7) in England; heterosexual women - suppressed (95% CI suppressed), and not compared to 49.4% (95% CI 47.2 to 51.6) in England.

HIV testing

In 2018, the percentage of eligible SHS attendees in East Riding of Yorkshire who received an HIV test was 69.2%, better than 64.5% for England. This represented a 20% increase since 2017, and a 3% increase since 2013. For 2018, the percentage of MSM in East Riding of Yorkshire who had tested more than once in the previous year was 29.6%, worse than 44.8% in England.

Table 6. Coverage of HIV testing among eligible patients at specialist SHSs East Riding of Yorkshire, Yorkshire and the Humber PHE Centre and England: 2018

	2017	2018	% change 2017 to 2018*	Rank among 16 similar UTLAs†	Rank within England: 2018‡	Value for England: 2018
Total	57.6	69.2	20.3%	4	61	64.5
Women	54.9	67.6	23.1%	2	30	55.2
Men	61.2	71.5	16.8%	11	118	78.4
MSM	76.6	81.0	5.9%	15	141	87.8

When calculating these rates, eligibility for HIV testing is determined by reviewing previous HIV diagnosis and testing history for each patient. Those who are known to be HIV positive, based on their GUMCADv2 history, are not considered eligible for testing. Those who have been tested already are not considered eligible to be tested again until six weeks have passed (i.e. eligibility for testing occurs only once every six weeks).

* Percent change proportional to the value in 2017, not a change in percentage points. Percent change not provided where the value in 2017 was 0. Calculated from unrounded values.

† These are East Riding of Yorkshire and its 15 statistical nearest neighbours, excluding those where values were suppressed due to small numbers. First rank has the highest value. Nearest neighbours are derived from [CIPFA's Nearest Neighbours Model](#).

‡ Out of 150 upper-tier (county) local authorities in England, excluding those where values were suppressed due to small numbers. City of London and Isles of Scilly are always excluded. First rank has the highest value. Where the value was 0, ranks are based on order of local authority names.

Group A streptococcal infection

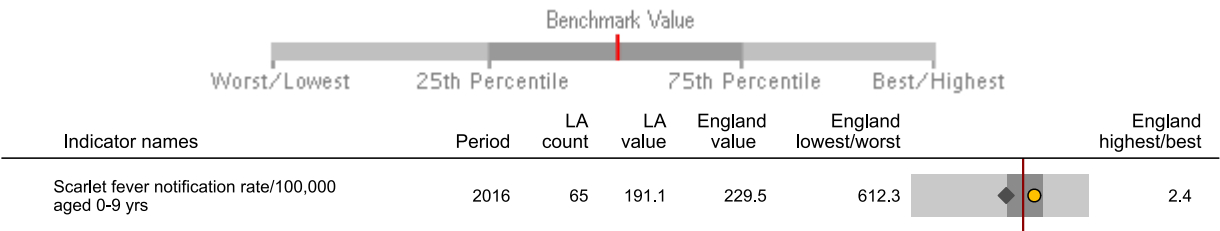
Streptococcus pyogenes or group A streptococci (GAS) bacteria is of public health importance because it is highly contagious and occasionally the GAS can cause serious and life threatening disease.

Figure 55. Chart showing group A streptococcal information in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared



Scarlet fever is caused by GAS. Those most at risk of infection are children between the ages of two and eight years. Variation in notification rates may reflect differences in the underlying population or variation in the level of reporting of scarlet fever by clinicians.

In 2016, the number of East Riding of Yorkshire residents under 10 years who were notified as having scarlet fever was 65 (the number in 2015 was 157). The scarlet fever notification rate per 100,000 residents aged under 10 years was 191 in 2016, similar to 230 per 100,000 in England. The rank of East Riding of Yorkshire was 96th highest (out of 150 UTLAs/UAs).

Figure 56. Scarlet fever notification rates per 100,000 population in 16 similar UTLAs/UAs and the Yorkshire and the Humber PHE Centre, compared to England: 2016

Similar refers to statistical nearest neighbours, derived from [CIPFA's Nearest Neighbours Model](#)

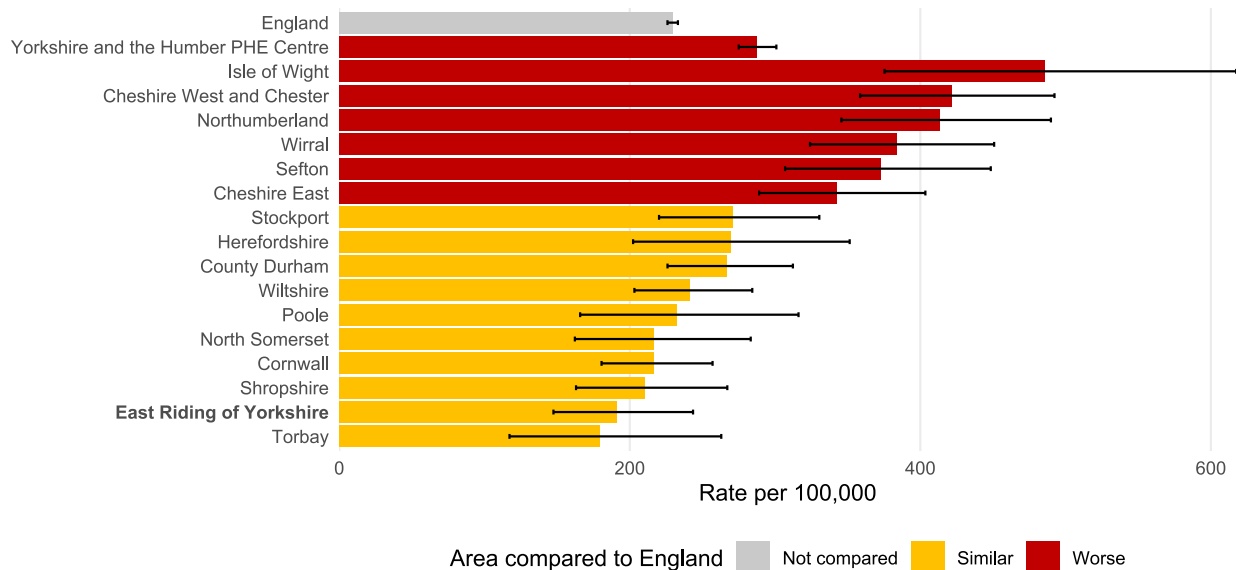
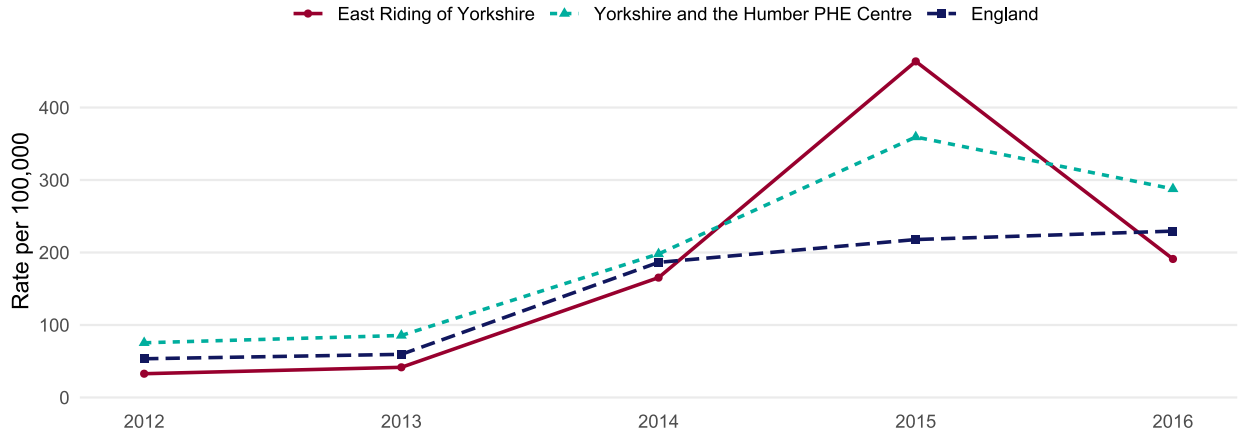


Figure 57. Rate of scarlet fever notifications per 100,000 population aged 0-9 years by year in East Riding of Yorkshire compared to rates in the Yorkshire and the Humber PHE Centre and England: 2012 to 2016.



Health care associated infection

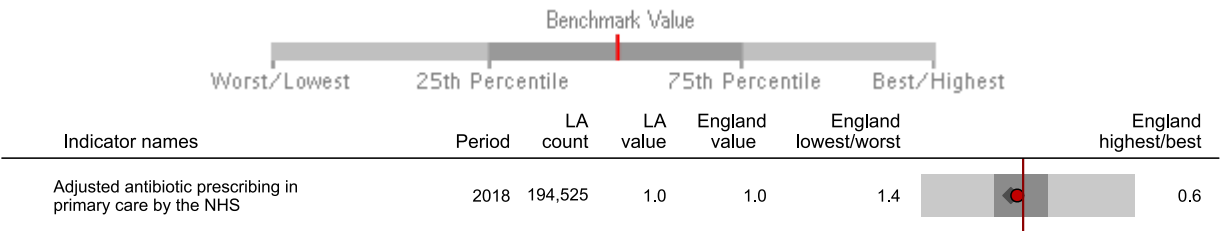
The only information presented here relates to antibiotic prescribing. For more information on anti-microbial resistance (AMR) in hospital and other settings please access the [AMR local indicators site](#).

Figure 58. Chart showing HCAI information in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared

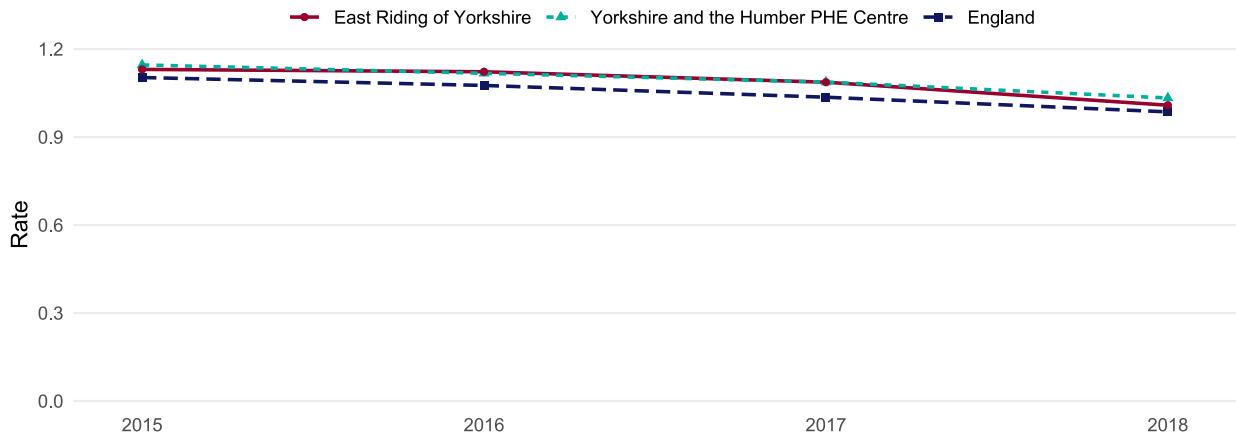


Antibiotic prescribing in primary care

Reducing antibiotic consumption is a well-recognised target in anti-microbial policies and can be used as an overall metric for benchmarking across local authorities. In order to fully appreciate antimicrobial prescribing, it is necessary to take into consideration demographic characteristics of the population as it may influence levels of prescribing and therefore this data is adjusted for both age and sex.

In 2018, the number of antibiotic items prescribed in primary care in East Riding of Yorkshire was 194,525, a 6% decrease since 2017 (n = 207294). The adjusted primary care prescribing rate was 1.0 in 2018, worse than 1.0 per 100,000 in England. The rank of East Riding of Yorkshire for this was 68th highest (out of 147 UTLAs/UAs).

Figure 59. Adjusted antibiotic prescribing rate in primary care by the NHS in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Non-infectious environmental hazards

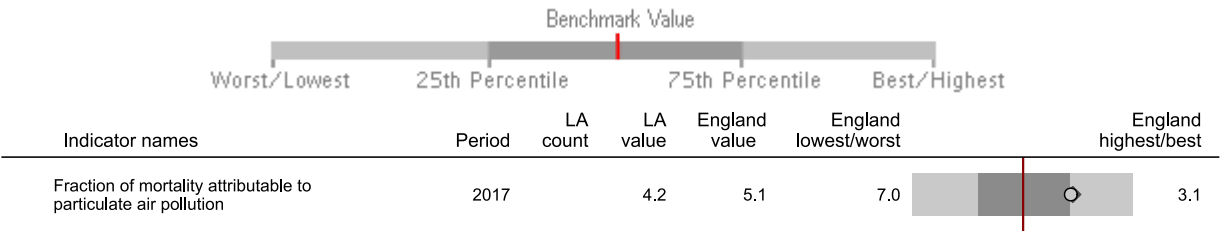
The only information presented here is mortality attributable to particulate air pollution.

Figure 60. Chart showing non-infectious environmental hazards information in East Riding of Yorkshire local authority compared to the rest of England

The local result for each indicator is shown as a circle, against the range of results for England shown as a grey bar. The line at the centre of the chart shows the England average, the diamond shows the average for the Yorkshire and the Humber PHE Centre.

Compared to England:

● Better ● Similar ● Worse or ● Lower ● Similar ● Higher or ○ Not compared

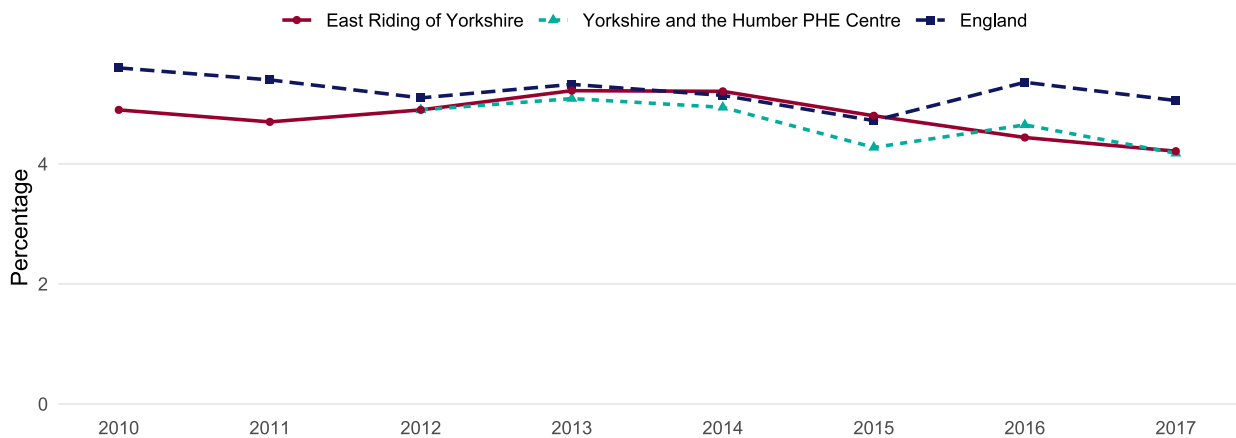


Air pollution

Poor air quality is a significant public health issue. The burden of air pollution in the UK in 2013 was estimated to be equivalent to approximately 28,000-36,000 deaths at typical ages and an associated loss of population life of 328,000-416,000 life years lost ¹. This indicator displays the fraction of mortality attributable to particular air pollution and will enable local authorities to prioritise action on air quality in their local area to help reduce the health burden from air pollution.

The fraction of mortality attributable to particulate air pollution was 4.2 in 2017, and not compared to 5.1 in England. The rank of East Riding of Yorkshire for this was 113rd highest (out of 150 UTLAs/UAs).

Figure 61. Fraction of mortality attributable to particulate air pollution in East Riding of Yorkshire, the Yorkshire and the Humber PHE Centre and England



Data sources

- **Acute hepatitis B incidence rate/100,000.** Center for infectious diseases, surveillance Acute Hepatitis B dataset, compiled from laboratory and Health Protection Team reports
- **Adjusted antibiotic prescribing in primary care by the NHS.** Data is sourced from ePACT2 from NHS Digital
- **All new STI diagnosis rate / 100,000.** Public Health England
- **Campylobacter incidence rate/100,000.** Public Health England, Second Generation Surveillance System - SGSS - (Laboratory Surveillance)
- **Chlamydia detection rate / 100,000 aged 15-24.** Public Health England
- **Chlamydia detection rate / 100,000 aged 15-24.** Public Health England
- **Chlamydia diagnostic rate / 100,000.** Public Health England
- **Chlamydia diagnostic rate / 100,000 aged 25+.** Public Health England
- **Chlamydia proportion aged 15-24 screened.** Public Health England
- **Cryptosporidium incidence rate/100,000.** Public Health England, Second Generation Surveillance System - SGSS - (Laboratory Surveillance)
- **Fraction of mortality attributable to particulate air pollution.** Background annual average PM2.5 concentrations for the year of interest are modelled on a 1km x 1km grid using an air dispersion model, and calibrated using measured concentrations taken from background sites in Defra's Automatic Urban and Rural Network (<http://uk-air.defra.gov.uk/interactive-map>.) Data on primary emissions from different sources and a combination of measurement data for secondary inorganic aerosol and models for sources not included in the emission inventory (including re-suspension of dusts) are used to estimate the anthropogenic (human-made) component of these concentrations. By approximating LA boundaries to the 1km by 1km grid, and using census population data, population weighted background PM2.5 concentrations for each lower tier LA are calculated. This work is completed under contract to Defra, as a small extension of its obligations under the Ambient Air Quality Directive (2008/50/EC). Concentrations of anthropogenic, rather than total, PM2.5 are used as the basis for this indicator, as burden estimates based on total PM2.5 might give a misleading impression of the scale of the potential influence of policy interventions (COMEAP, 2012).
- **Genital herpes diagnosis rate / 100,000.** Public Health England
- **Genital warts diagnostic rate / 100,000.** Public Health England
- **Giardia incidence rate/100,000.** Public Health England, Second Generation Surveillance System - SGSS - (Laboratory Surveillance)
- **Gonorrhoea diagnostic rate / 100,000.** Public Health England
- **Hepatitis C detection rate/100,000.** SGSS data (Second Generation Surveillance System) - Laboratory reporting. CIDSC, National Infection Service, PHE
- **HIV diagnosed prevalence rate / 1,000 aged 15-59.** Public Health England
- **HIV late diagnosis (%).** Public Health England
- **HIV late diagnosis (%) in heterosexual women.** Public Health England
- **HIV late diagnosis (%) in heterosexual men.** Public Health England
- **HIV late diagnosis (%) in MSM.** Public Health England
- **HIV testing coverage, men (%).** Public Health England
- **HIV testing coverage, MSM (%).** Public Health England
- **HIV testing coverage, total (%).** Public Health England
- **HIV testing coverage, women (%).** Public Health England
- **Hospital admission rate for hepatitis B related end-stage liver disease/hepatocellular carcinoma.** Calculated by Public Health England: Clinical Epidemiology Knowledge and Intelligence from data from NHS Digital, formally the Health and Social Care Information Centre (HSCIC) - Hospital Episode Statistics (HES) and Office for National Statistics (ONS) - Mid Year Population Estimates
- **Hospital admission rate for hepatitis C related end-stage liver disease/hepatocellular carcinoma.** Calculated by Public Health England: Clinical Epidemiology Knowledge and Intelligence from data from NHS Digital, formally the Health and Social Care Information Centre (HSCIC) - Hospital Episode Statistics (HES) and Office for National Statistics (ONS) - Mid Year Population Estimates
- **Legionnaires' disease confirmed incidence rate/100,000.** National Enhanced Surveillance Scheme for Legionnaires' disease in residents of England, National Infection Service, Public Health England
- **Listeria 5-year incidence rate/100,000.** National Enhanced Surveillance Scheme for Listeria for residents of England and Wales, National Infection Service, Public Health England

- **Listeria incidence rate/100,000.** National Enhanced Surveillance Scheme for Listeria for residents of England and Wales, National Infection Service, Public Health England
- **Measles 5-year incidence rate/100,000.** PHE Centre of Infectious Disease Surveillance and Control (CIDSC) Measles Enhanced Surveillance Programme.
- **Measles incidence rate/100,000.** PHE Centre of Infectious Disease Surveillance and Control (CIDSC) Measles Enhanced Surveillance Programme.
- **Mumps 5-year incidence rate/100,000.** PHE Centre of Infectious Disease Surveillance and Control (CIDSC) Mumps Enhanced Surveillance Programme
- **Mumps incidence rate/100,000.** PHE Centre of Infectious Disease Surveillance and Control (CIDSC) Mumps Enhanced Surveillance Programme
- **New HIV diagnosis rate / 100,000 aged 15+.** Public Health England
- **New STI diagnoses (exc chlamydia aged <25) / 100,000.** Public Health England
- **Non-typhoidal Salmonella incidence rate/100,000.** Public Health England, Second Generation Surveillance System - SGSS - (Laboratory Surveillance)
- **Persons entering drug misuse treatment - Percentage of eligible persons completing a course of hepatitis B vaccination.** Public Health England, National Drug Treatment Monitoring System (NDTMS)
- **Persons in drug misuse treatment who inject drugs - Percentage of eligible persons who have received a hepatitis C test.** Public Health England, (based on National Drug Treatment Monitoring System data)
- **Pertussis incidence rate/100,000.** PHE pertussis enhanced surveillance programme
- **Population vaccination coverage - BCG - areas offering universal BCG only.** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE)
- **Population vaccination coverage - Dtap / IPV / Hib (1 year old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - Dtap / IPV / Hib (2 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - Flu (2-4 years old) - historical method.** <http://www.gov.uk/government/collections/vaccine-uptake>
- **Population vaccination coverage - Flu (aged 65+).** <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake:-figures>
- **Population vaccination coverage - Flu (at risk individuals).** <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake:-figures>
- **Population vaccination coverage - Hepatitis B (1 year old).** Cover of vaccination evaluated rapidly (COVER) data collected by Public Health England (formerly Health Protection Agency). Available from NHS Digital (former Health and Social Care Information Centre) and Public Health England
- **Population vaccination coverage - Hepatitis B (2 years old).** Cover of vaccination evaluated rapidly (COVER) data collected by Public Health England (formerly Health Protection Agency). Available from NHS Digital (former Health and Social Care Information Centre)
- **Population vaccination coverage - Hib / Men C booster (5 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - Hib / MenC booster (2 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - HPV vaccination coverage for two doses (females 13-14 years old).** Public Health England
- **Population vaccination coverage - MenC.** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from The Health and Social Care Information Centre (HSCIC).
- **Population vaccination coverage - MMR for one dose (2 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - MMR for one dose (5 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital
- **Population vaccination coverage - MMR for two doses (5 years old).** Cover of Vaccination Evaluated Rapidly (COVER) data collected by Public Health England (PHE). Available from NHS Digital "
- **Population vaccination coverage - PPV.** Public Health England
- **Population vaccination coverage - Shingles vaccination coverage (70 years old).** Public Health England
- **Prompt ART initiation in people newly diagnosed with HIV (%).** Public Health England
- **Proportion of culture confirmed TB cases with drug susceptibility testing reported for the four first line agents.** Enhanced Tuberculosis Surveillance system (ETS)

- Proportion of drug sensitive TB cases who had completed a full course of treatment by 12 months. Enhanced Tuberculosis Surveillance system (ETS)
- Proportion of drug sensitive TB cases who had died at last reported outcome. Enhanced Tuberculosis Surveillance system (ETS)
- Proportion of drug sensitive TB cases who were lost to follow up at last reported outcome. Enhanced Tuberculosis System (ETS) and Office for National Statistics (ONS)
- Proportion of pulmonary TB cases starting treatment within four months of symptom onset. Enhanced Tuberculosis Surveillance system (ETS)
- Proportion of pulmonary TB cases starting treatment within two months of symptom onset. Enhanced Tuberculosis Surveillance system (ETS)
- Proportion of pulmonary TB cases that were culture confirmed. Enhanced Tuberculosis Surveillance system (ETS)
- Proportion of TB cases offered an HIV test. Enhanced Tuberculosis Surveillance System (ETS)
- Repeat HIV testing in MSM (%). Public Health England
- Scarlet fever notification rate/100,000 aged 0-9 yrs. NOIDS (Notifications of Infectious Disease Surveillance) <https://www.gov.uk/government/collections/notifications-of-infectious-diseases-noids>
- Shigella incidence rate/100,000. Public Health England national Second Generation Surveillance System (SGSS) for laboratory surveillance of infectious disease
- STEC (Shiga toxin-producing Escherichia coli) serogroup O157 5-year incidence rate/100,000. National Enhanced Shiga toxin producing Escherichia coli Surveillance System (NESSSy) for residents of England, National Infection Service, Public Health England
- STEC (Shiga toxin-producing Escherichia coli) serogroup O157 incidence rate/100,000. National Enhanced Shiga toxin-producing Escherichia coli Surveillance System (NESSSy) for residents of England, National Infection Service, Public Health England
- STI testing positivity (exc chlamydia aged <25) %. Public Health England
- STI testing rate (exc chlamydia aged <25) / 100,000. Public Health England
- Syphilis diagnostic rate / 100,000. Public Health England
- TB incidence (three year average). Enhanced Tuberculosis Surveillance system (ETS) and Office for National Statistics (ONS)
- Typhoid & paratyphoid incidence rate/100,000. National Enhanced Surveillance Scheme for Typhoid and Paratyphoid in residents of England, Public Health England
- Under 75 mortality rate from hepatitis B related end-stage liver disease/hepatocellular carcinoma. Public Health England (based on ONS source data)
- Under 75 mortality rate from hepatitis C related end-stage liver disease/hepatocellular carcinoma. Public Health England (based on ONS source data)
- Virological success in adults accessing HIV care (%). Public Health England

Appendix 1: Counts of selected indicators

Table 7. Counts of selected indicators by year, East Riding of Yorkshire (- indicates no data available)

Indicator	2012	2013	2014	2015	2016	2017	2018
Salmonella (non-typhoidal)	-	-	-	36	39	48	-
Campylobacter	-	-	-	367	387	390	-
Shigella	-	-	-	4	1	2	-
STEC	6	4	10	2	3	6	4
Listeria	0	1	1	1	1	0	1
Giardia	-	-	-	4	2	7	-
Cryptosporidium	-	-	-	47	63	27	-
Typhoid/paratyphoid	1	0	0	0	1	2	1
Measles	4	10	0	0	0	0	0
Mumps	5	13	9	3	2	3	-
Pertussis	-	-	-	13	38	14	-
Legionella	-	-	-	1	3	-	-
Acute Hepatitis B	-	-	-	-	-	3	1
Hepatitis C detection	-	-	-	-	15	21	-
New STIs	893	1,455	1,654	1,753	1,563	1,389	1,321
New STIs (exc chlamydia aged <25)	587	900	936	993	959	908	904
Chlamydia	447	699	885	980	795	637	595
Gonorrhoea	21	31	49	100	84	90	97
Syphilis	3	9	7	3	7	9	11
Genital warts	186	314	325	289	297	251	234
Genital herpes	71	117	108	129	137	159	148
People living with diagnosed HIV	75	81	76	84	91	101	101
New HIV diagnoses	14	15	8	4	7	10	4
Scarlet fever (0-9 years)	11	14	56	157	65	-	-

Acknowledgements

This report was developed by Paul Crook and Oliver McManus from the Field Service South East and London, National Infection Service. They would like to thank the following:

- colleagues in PHE Health Improvement for developing tools in R for manipulating public health profile data
- the PHE Fingertips team
- the Health Protection Profiles steering group for guidance on content
- PHE topic area teams for supplying the data on the Health Protection Profiles
- the Health Protection Profiles team for coordination of data, uploading and QA

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1. Associations of long-term average concentrations of nitrogen dioxide with mortality. A report by the Committee on the Medical Effects of Air Pollutants 2018
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734799/CO_MEAP_NO2_Report.pdf