

Wirral Health Protection Strategy 2023 - 2027 Impact Appraisal

September 2025

Data compiled by Public Health Intelligence Team, Wirral Council

Introduction and Summary of Impact (1)

The Wirral Health Protection Strategy 2023-2027, launched to safeguard and enhance public health through proactive, evidence-based interventions, has demonstrated meaningful impact across key priority areas over the past 2 years. This mid-strategy review outlines the outcomes achieved through collaborative action across local health and care partners, reflecting progress against strategic aims in infection prevention, antimicrobial resistance (AMR) mitigation, immunisation, and emergency preparedness.

Key Highlights of Impact:

- **COVID-19 Response:**

- Hospital admissions due to COVID-19 have fallen significantly, from 1,957 per 100,000 population in 2020/21 to 441 in 2023/24. Mortality rates have also declined from 170.3 to 22.1 per 100,000 by 2024, although local rates remain slightly above the national average.

- **Infection Prevention and Control:**

There has been steady progress in reducing healthcare-associated infections:

- *MRSA bacteraemia* rates in Wirral are consistently lower than national and regional averages.
- *E. coli* and *C. difficile* infection rates remain variable but reflect continued efforts to control spread, particularly in community settings.
- *P. aeruginosa* and *Klebsiella spp.* infections show fluctuating trends, with recent increases prompting continued vigilance.

- **Antimicrobial Resistance (AMR):**

- Broad-spectrum antibiotic prescribing has declined, with Wirral achieving the national target of under 10%.
- Hospital admissions for UTIs have reduced by 15% from 2019 levels, exceeding the 10% target.
- However, Wirral's overall antibiotic prescribing remains above national benchmarks, indicating the need for further targeted action.

Introduction and Summary of Impact (2)

- **Vaccination Coverage**
 - Flu vaccination uptake among 65+ remains above the national target (75%); at-risk groups saw a decline to 41.6%.
 - MMR coverage continues to fall below the 95% target but remains higher than regional and national rates.
- **Environmental Health & Emerging Threats**
 - Air pollution-related mortality in Wirral is falling (4.3% in 2023) and now aligns with the national trend.
 - Positive local action supports broader ambitions to be net carbon neutral by 2041.
- **Blood-Borne Viruses and TB**
 - Hepatitis C testing rates have historically improved, but data beyond 2017/18 are lacking.
 - TB treatment completion reached 100% in 2021, exceeding the 90% national target.
 - HIV treatment success is high (97.4% viral suppression, 99.5% ART coverage), but late diagnosis rate remains high at 50%, double the national target.

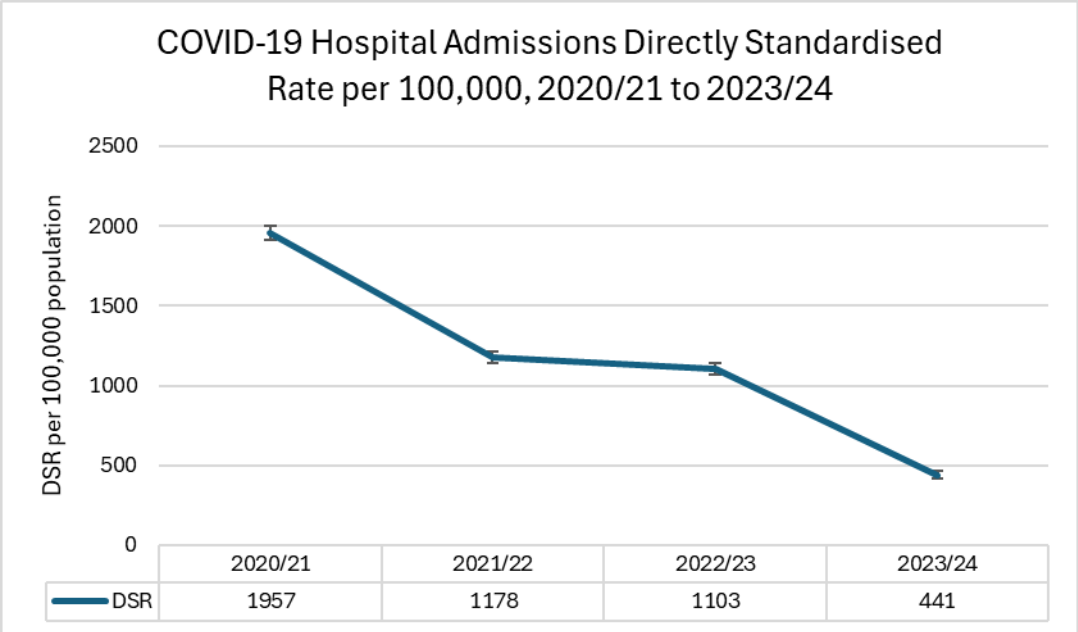
These outcomes reflect the commitment of Wirral's public health system to continuous improvement, using evidence-based and intelligence led approaches to reduce harm, increase resilience, and protect population health. Continued efforts are needed in areas where challenges persist, particularly in reducing total antibiotic prescribing and improving vaccine uptake among at-risk younger populations.

Summary of Impact

Priority Area	Strategic Outcome	Progress Summary
Ongoing COVID-19 Response	Reduction in hospital admissions and mortality	✓ Significant reduction in both metrics; mortality still higher than national average
Infection Prevention & Control	Lower rates of HCAs including MRSA, E. coli, C. difficile	✓ MRSA well-controlled; X C. difficile & E. coli increasing but below regional avg
Reduce Impact of AMR	Reduced prescribing and UTI admissions	✓ Broad-spectrum target met; X Total prescribing remains high; ✓ UTI target exceeded
Vaccine-Preventable Diseases	Increased uptake of MMR and flu vaccines	✓ Over-65 flu coverage achieved; X At-risk flu and MMR uptake below targets
Preparedness, Resilience & Response	Demonstrable system readiness	Quantitative data to evidence unavailable Qualitative evidence of continuous improvement, evaluation and embedding learning
Environmental Health (Climate & Air Quality)	Reduced pollution, climate impact	✓ Positive trend in air-pollution attributable mortality
Blood-Borne Viruses and TB (Hep B, Hep C, HIV)	Reduced transmission, improved treatment outcomes	✓ HIV/TB treatment outcomes strong; X Late HIV diagnosis still high

Priority area: Ongoing covid-19 response, including being prepared for new variants

Figure 1: Covid 19 Hospital Admissions, directly standardised rates

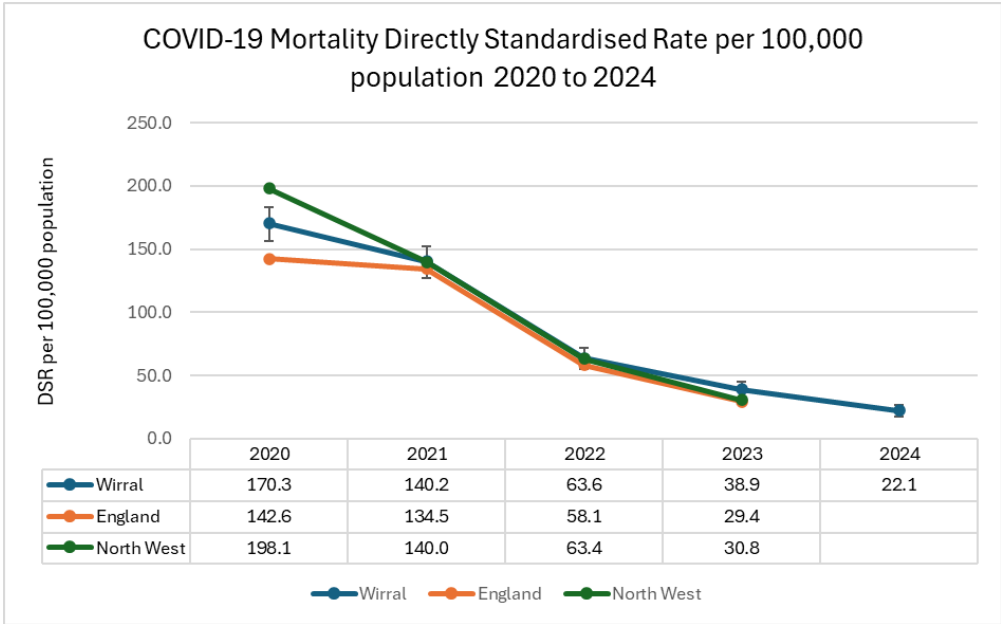


Data Source: Hospital episodes statistics (HES)

Strategic Outcome: Reduction in Covid-19 hospital admissions

- Covid-19 Hospital admissions includes all elective and non-elective hospital admissions based on ICD-10 codes U071, U072, U099 and U109 recorded anywhere on the 20 diagnosis fields
- As shown in figure 1, since 2020/21, the rate of hospital admissions as a result of Covid-19 have reduced from 1,957 per 100,000 population to 441 per 100,000 for the latest available period 2023/24.

Figure 2: Covid 19 Mortality, directly standardised rates



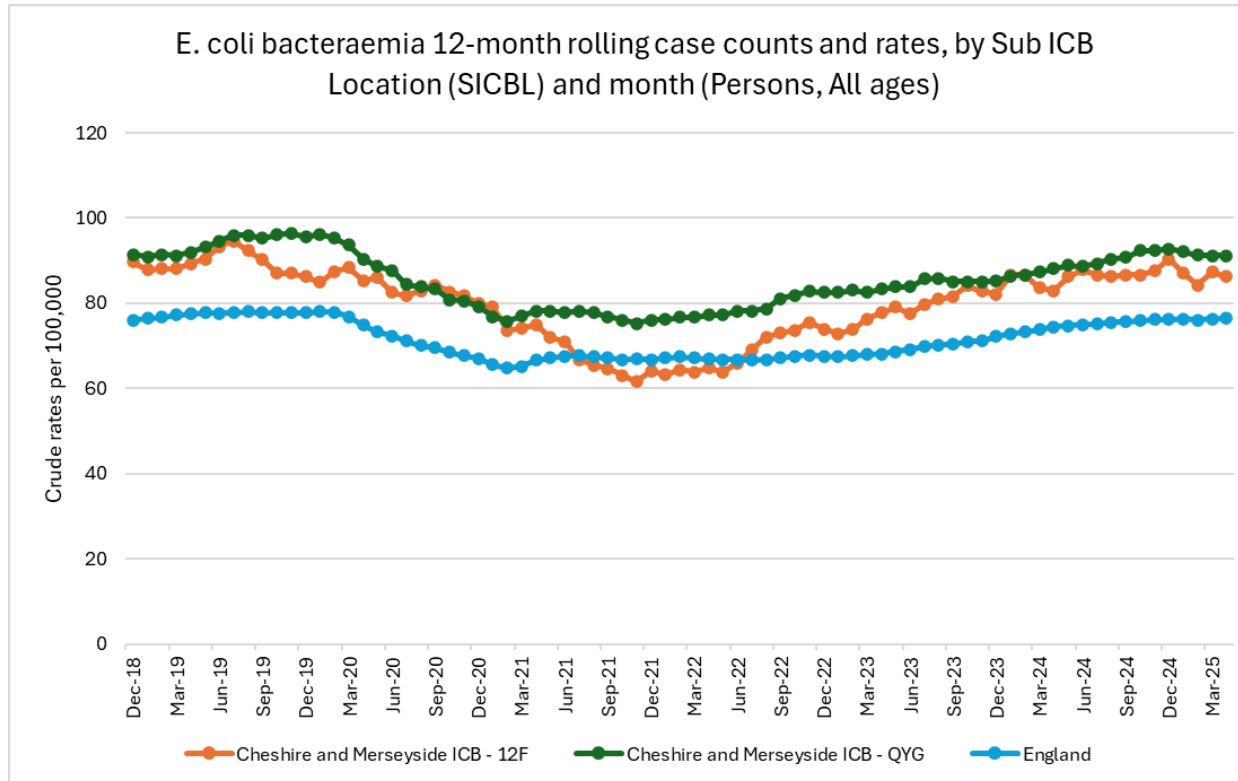
Data Source: Primary Care Mortality Database (PCMD)

Strategic Outcome: Reduction in Covid-19 deaths

- Covid -19 Mortality indicator includes deaths based on ICD-10 codes U071, U072, U099 and U109 recorded on primary cause or and secondary cause of death.
- As shown in figure 2, since 2020, Covid-19 mortality rates have reduced from 170.3 per 100,000 population to 22.1 per 100,000 population in 2024. In 2023, Wirral's rates remained higher the England, and similar to the region.

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (1)

Figure 3: *E.coli* bacteraemia 12- month rolling rates (based on total cases)



Source: UK Health Security Agency

The graph presents a 12-month rolling trend of *E. coli* bacteraemia crude rates per 100,000 population from December 2018 to March 2025.

Key Observations:

- Fluctuations in infection rates are evident across England, the Cheshire and Merseyside region, and Wirral, highlighting variability over time.
- Overall, Wirral's rates tend to be higher than the national average but remain lower than the broader Cheshire and Merseyside ICB region. Since June 2022, the 12-month rolling average in Wirral has shown a steady upward trend, with some intermittent fluctuations.
- The latest figures report a 12-month rolling rate of 86.3 per 100,000 population for Wirral, compared to 91.2 for the Cheshire and Merseyside region, and 76.1 for the England average.

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (2)

Figure 4: E.coli bacteraemia 12- month rolling rates of community onset

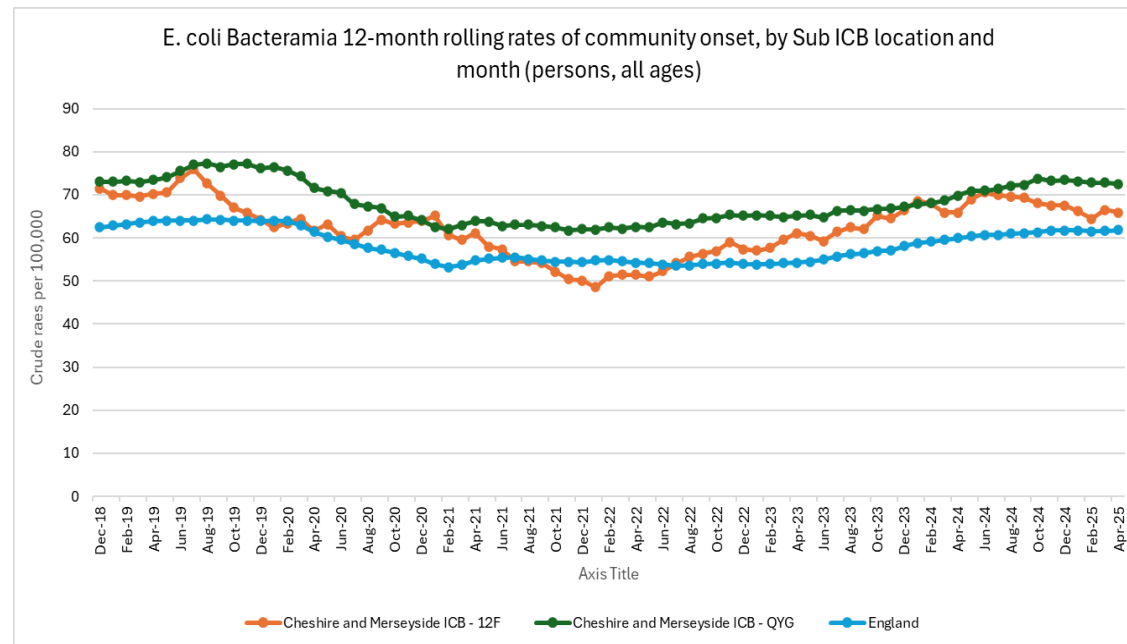
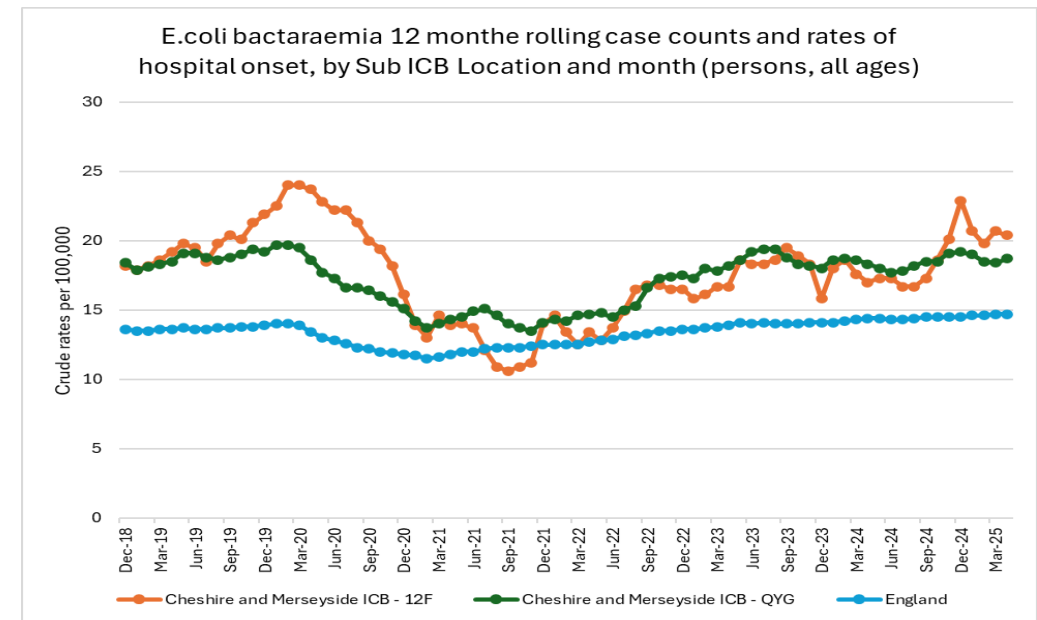


Figure 5: E.coli bacteraemia 12- month rolling rates of hospital onset



- Figure 4 presents the 12-month rolling crude rates per 100,000 population for community-onset E. coli bacteraemia, while Figure 5 displays the corresponding rates for hospital-onset cases. Both figures cover the same reporting period, from December 2018 to April 2025.
- The trend in crude rates for community-onset E. coli closely mirrors that of the total E. coli cases (refer to Figure 3), indicating a consistent pattern over time. In contrast, hospital-onset rates exhibit more pronounced fluctuations throughout the observed period across Wirral, the Cheshire and Merseyside ICB region. Notably, in recent months, Wirral's hospital-onset rates have exceeded both regional and national averages.
- As of April 2025, the 12-month rolling crude rate for community-onset E. coli bacteraemia stands at - 65.9 per 100,000 population in Wirral, 72.5 in Cheshire and Merseyside, 61.8 in England. For hospital-onset E. coli bacteraemia, the corresponding rates are - 20.4 per 100,000 population in Wirral, 18.7 in Cheshire and Merseyside, and 14.7 in England

Data Source: UK Health Security Agency

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (3)

Figure 6: *C. difficile* 12- month rolling crude rates of community onset, total cases

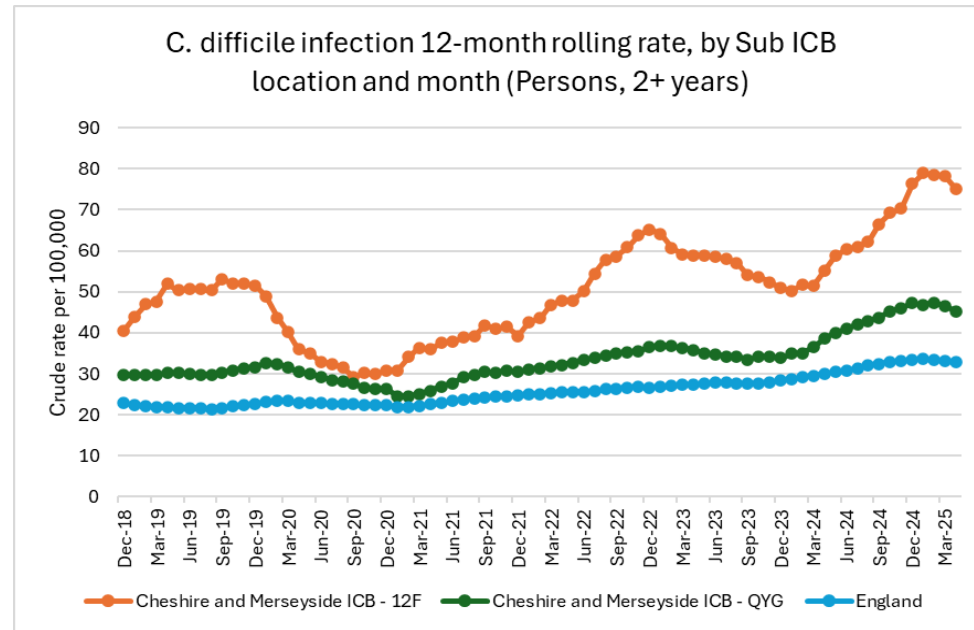
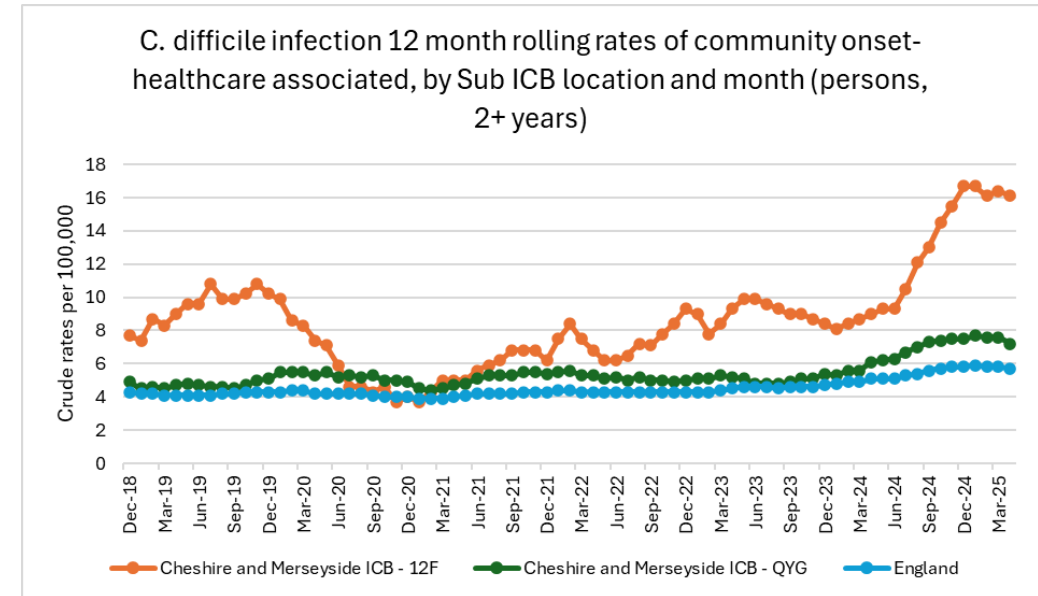


Figure 7: *C. difficile* infection 12-month rolling crude rates of community onset-healthcare associated

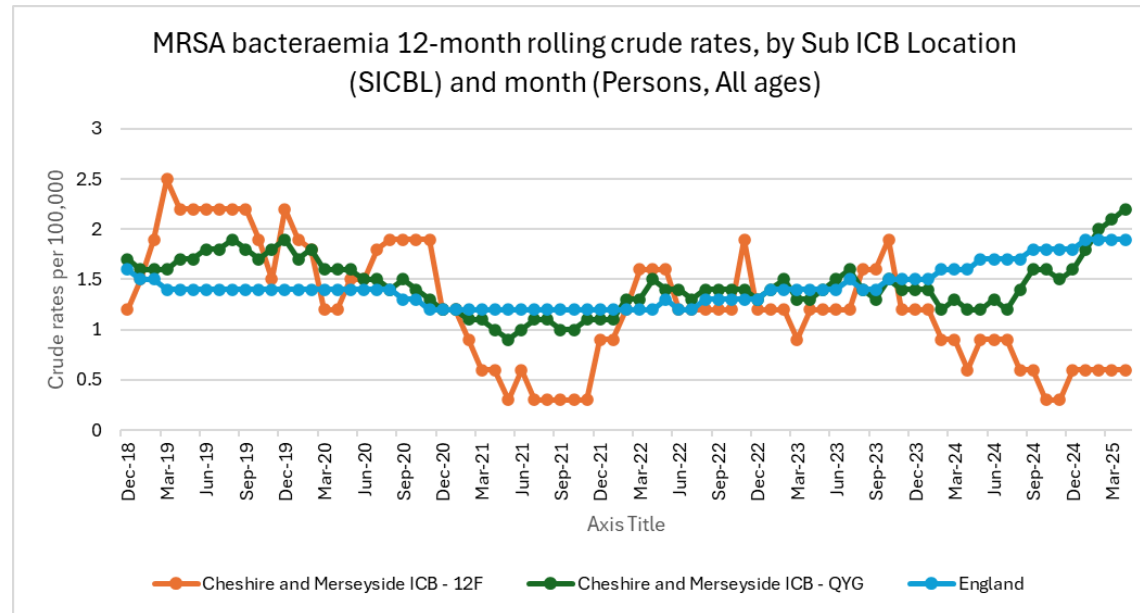


- Figure 6 displays the 12-month rolling crude rates per 100,000 population for total cases of *Clostridioides difficile* (*C. difficile*), while Figure 7 illustrates the corresponding rates for community-onset healthcare-associated cases. Both figures cover the same reporting period, from December 2018 to April 2025.
- As shown in the graphs, the trend in crude rates for total *C. difficile* cases closely aligns with that of community-onset healthcare-associated cases. Throughout the observed period, Wirral has consistently reported higher rates than both the regional and national averages. A gradual upward trend began in mid-2022, culminating in a peak in December 2024.
- As of April 2025, the 12-month rolling crude rate for community-onset healthcare-associated *C. difficile* is: 16.1 per 100,000 population in Wirral, 7.2 in Cheshire and Merseyside and 5.7 in England. For total *C. difficile* cases, the latest rates are - 75.2 per 100,000 population in Wirral, 45.2 in Cheshire and Merseyside and 33.0 in England

Data Source: UK Health Security Agency

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (4)

Figure 8: MRSA bacteraemia 12-month rolling crude rates, total cases



Source: UK Health Security Agency

The graph presents a 12-month rolling trend of MRSA bacteraemia total cases crude rates per 100,000 population from December 2018 to March 2025.

Key Observations:

- Fluctuations in infection rates are evident across Wirral, with less pronounced variation observed in both the Cheshire and Merseyside ICB region and England.
- Overall, Wirral's rates tend to remain lower than both the national average and the Cheshire and Merseyside ICB regional average. Since October 2023, Wirral's 12-month rolling average has shown a steady downward trend, with some intermittent fluctuations, yet it has consistently remained below both England and the regional average.
- The latest figures report a 12-month rolling rate of 0.6 per 100,000 population for Wirral, compared to 2.2 for the Cheshire and Merseyside region and 1.9 for the England average.

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (5)

Figure 9: MRSA bacteraemia 12-month rolling crude rates, community-onset

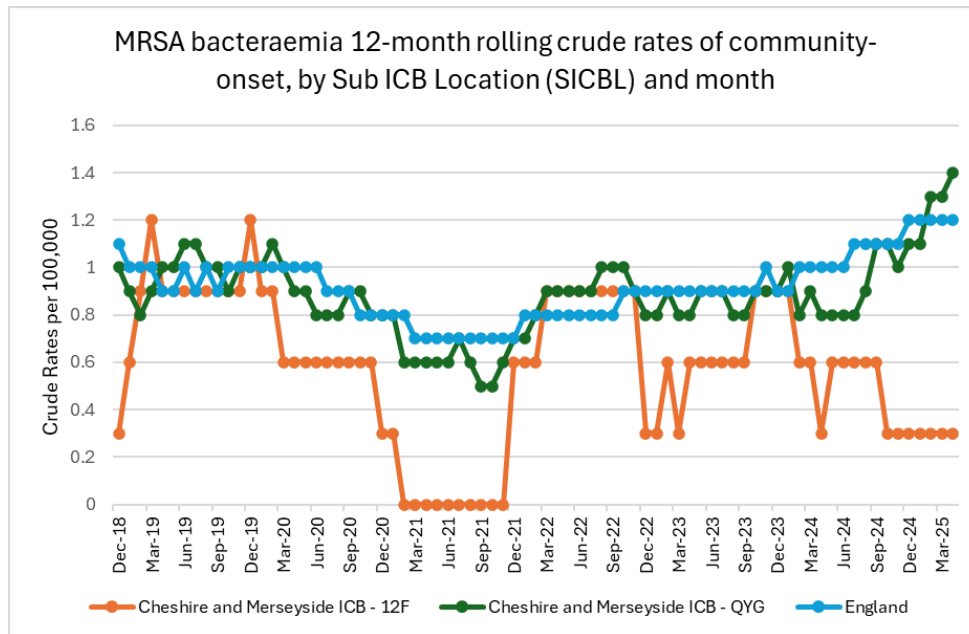
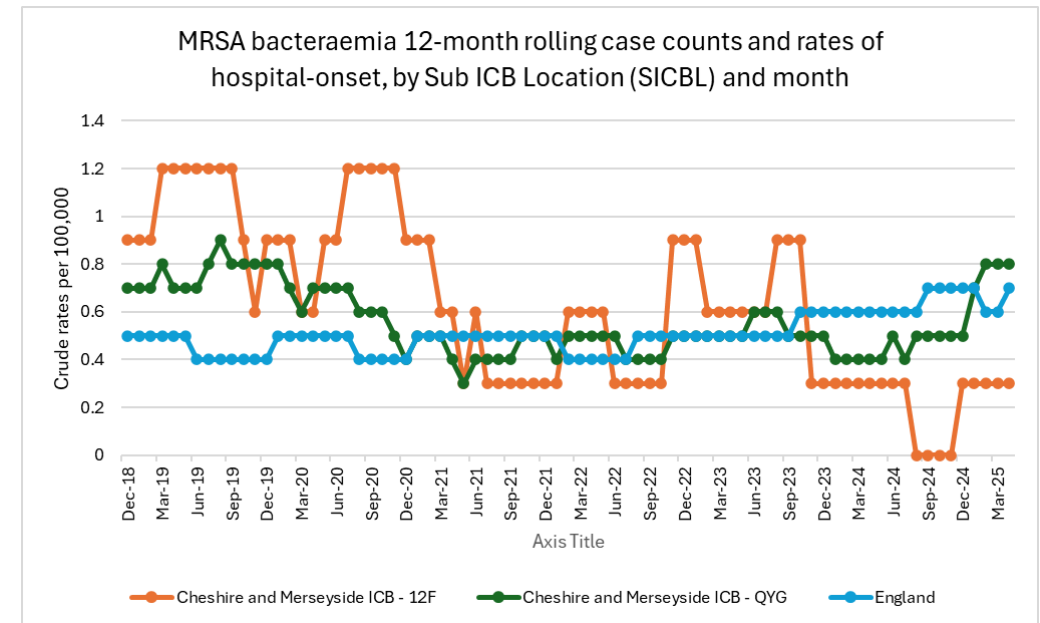


Figure 10: MRSA bacteraemia 12-month rolling rates of hospital-onset



- Figure 9 illustrates the 12-month rolling crude rates per 100,000 population of community-onset MRSA bacteraemia, while Figure 10 presents the corresponding rates for hospital-onset MRSA bacteraemia. Both figures cover the same reporting period, from December 2018 to April 2025.
- As shown in the graphs, over the past year, Wirral has reported significantly lower 12-month rolling rates of MRSA cases compared to both the Cheshire and Merseyside ICB region and the national average.
- Throughout the reporting period, the incidence of MRSA bacteraemia in Wirral has remained generally low, with fewer than five cases recorded in any 12-month rolling period. As illustrated in the graphs, some periods recorded zero cases.

Data Source: UK Health Security Agency

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (7)

Figure 11: *Klebsiella* spp. bacteraemia 12-month rolling crude rates, total cases

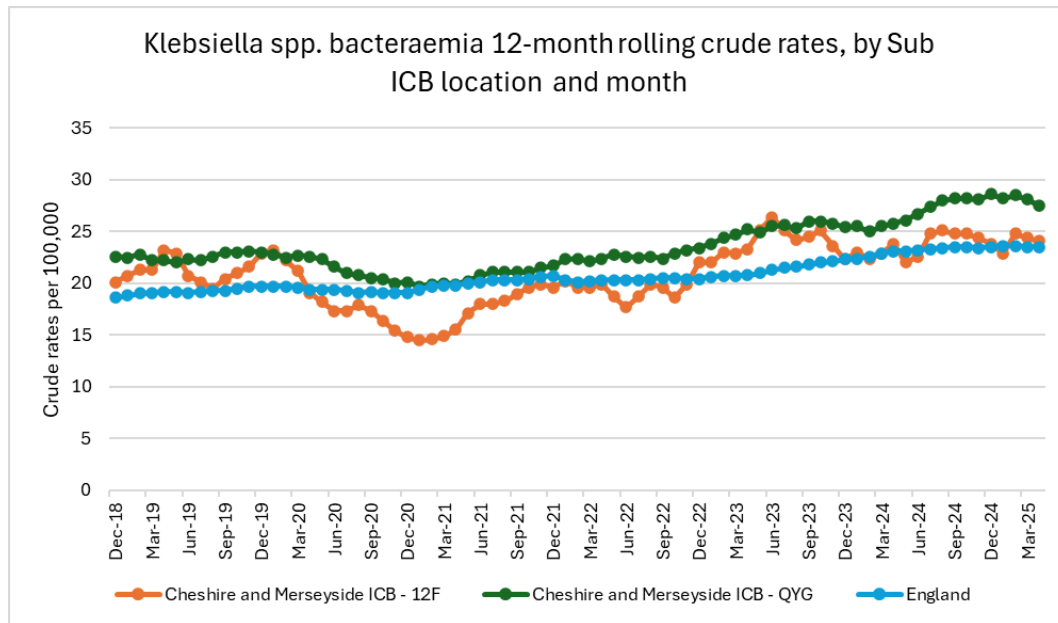
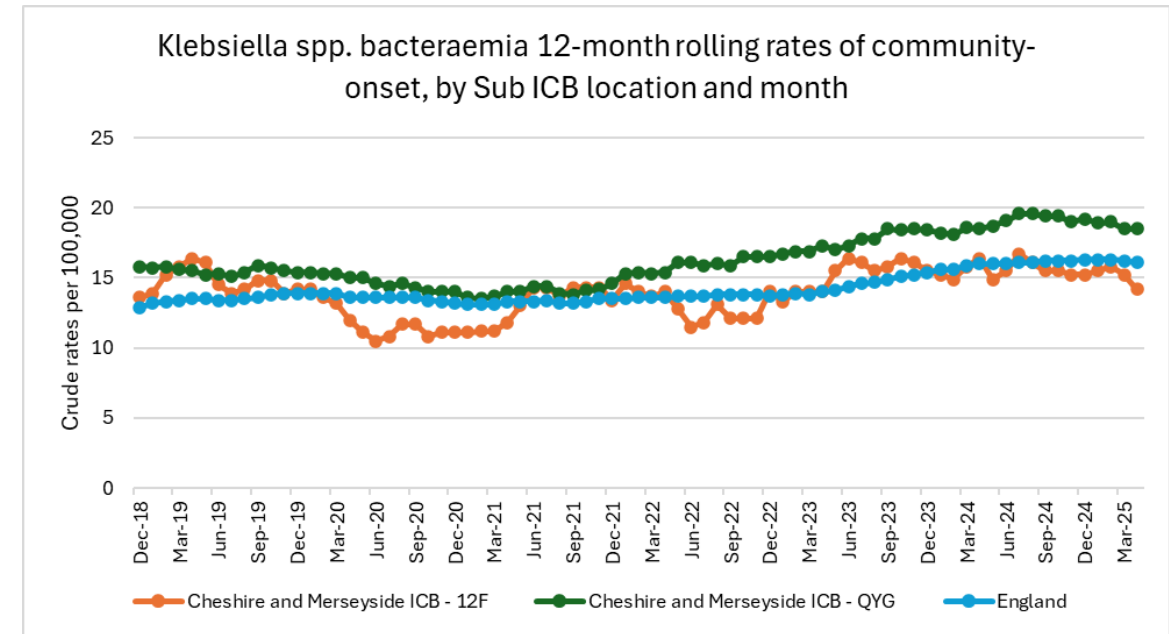


Figure 12: *Klebsiella* spp. bacteraemia 12-month rolling rates of community-onset

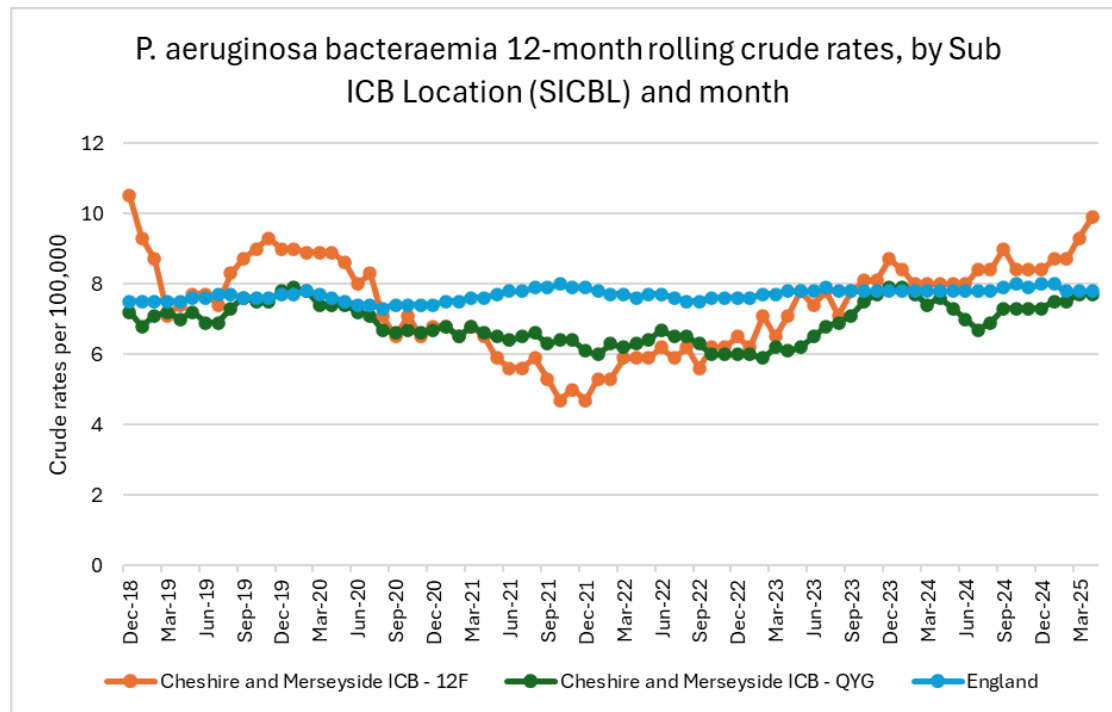


- Figure 11 illustrates the 12-month rolling crude rates per 100,000 population of *Klebsiella* spp. bacteraemia, while Figure 12 presents the corresponding rates for *Klebsiella* spp. Bacteraemia community onset. Both figures cover the same reporting period, from December 2018 to April 2025.
- Fluctuations are more pronounced in Wirral across both graphs, suggesting localised variability in infection control or case detection.
- England and Cheshire and Merseyside ICB region show more stable trends in both graphs, with community-onset rates forming a significant portion of the total..

Data Source: UK Health Security Agency

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (8)

Figure 13: P. aeruginosa bacteraemia 12-month rolling crude rates, total cases



Source: UK Health Security Agency

The graph presents a 12-month rolling trend of P. aeruginosa bacteraemia total cases crude rates per 100,000 population from December 2018 to March 2025.

Key Observations:

- Fluctuations in infection rates are evident across Wirral, with less pronounced variation observed in both the Cheshire and Merseyside ICB region and England.
- Between June 2020 and September 2023, Wirral's rates were lower than England, before a steady upward trend in line with England's rate.
- The latest figures report a 12-month rolling rate of 9.9 per 100,000 population for Wirral, compared to 7.7 for the Cheshire and Merseyside region and 7.8 for the England average.
- For Wirral this equates to 32 cases for year-to-date.

Priority area: Strengthen infection prevention and control: Reducing Healthcare Associated Infections (9)

Figure 14: *P. aeruginosa* bacteraemia 12-month rolling crude rates, community-onset

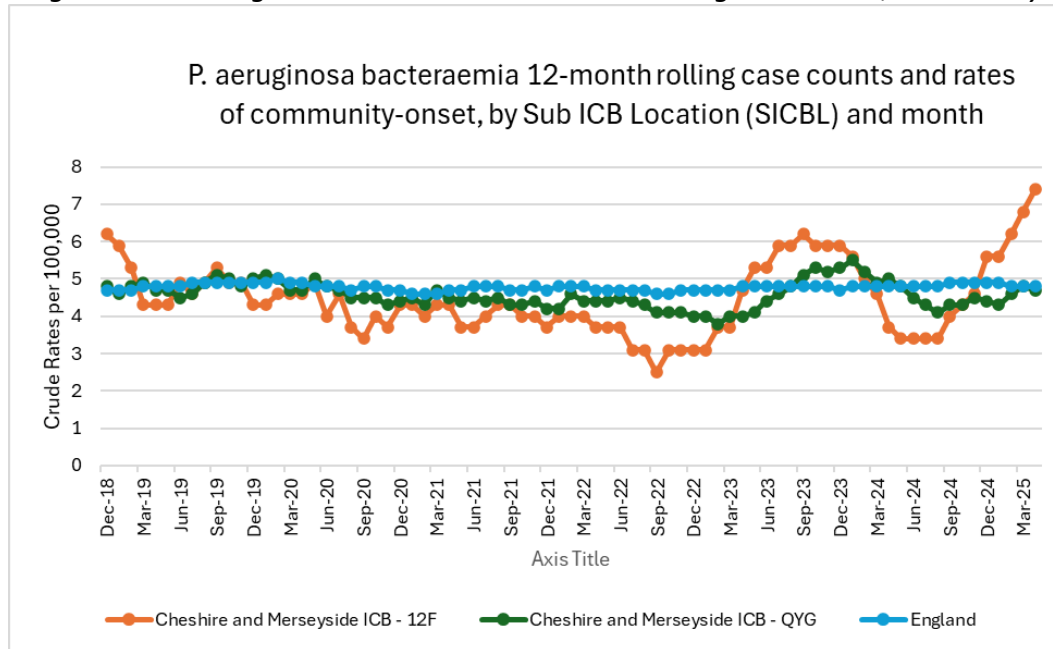
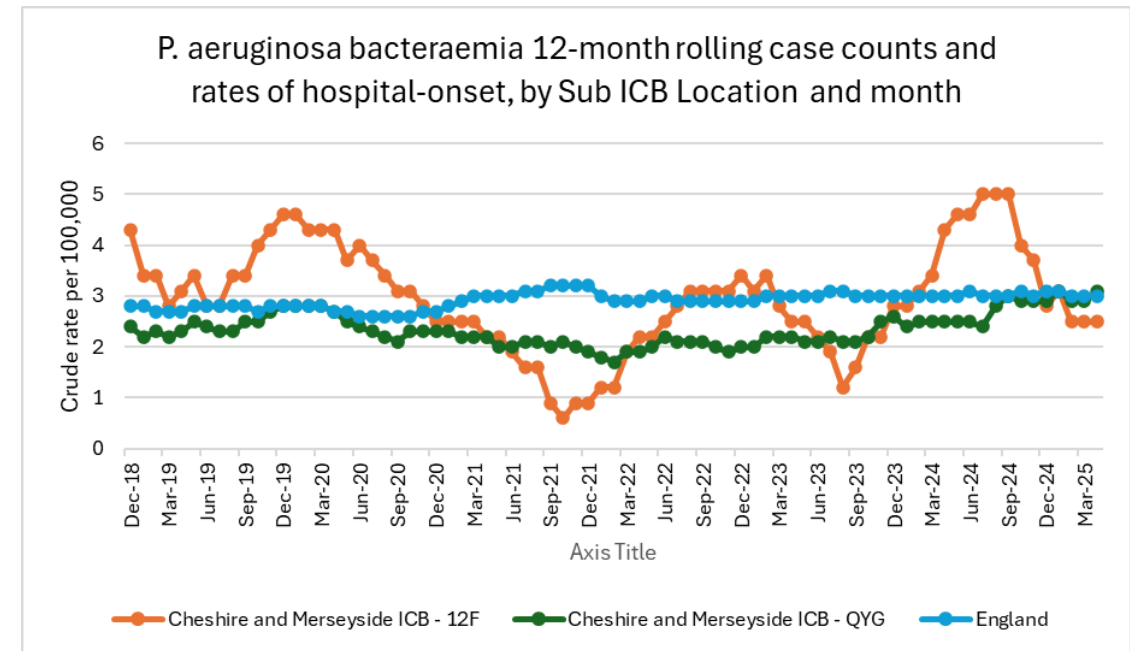


Figure 15: *P. aeruginosa* bacteraemia 12-month rolling rates of hospital-onset

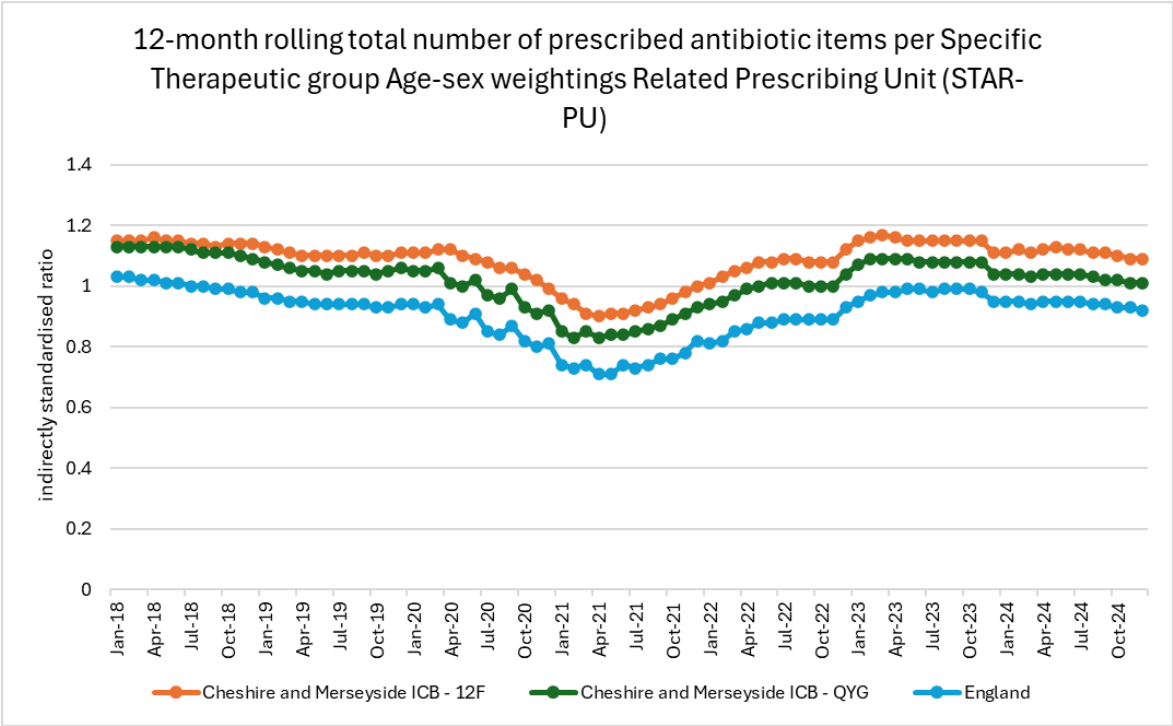


- Figure 14 illustrates the 12-month rolling crude rates per 100,000 population of *P. aeruginosa* bacteraemia community –onset, while figure 15 shows the corresponding rates hospital-onset.
- Similar to other infections, fluctuations in *P. aeruginosa* bacteraemia rates are more pronounced in Wirral across both graphs. In general, community-onset rates tend to be higher than hospital-onset rates. A noticeable pattern emerges in Wirral, where peaks in community-onset rates often coincide with lower hospital-onset rates. This trend, however, is not observed at the national or regional level, where fluctuations are less distinct and more stable across both settings.
- Wirral's rates for community-onset *P. aeruginosa* bacteraemia are generally lower than both the England and regional averages. However, for hospital-onset cases, the fluctuations are more pronounced, resulting in periods where Wirral's rates are significantly higher. Despite this variability, the number of cases has never exceeded 15 in any 12-month rolling period throughout the reporting timeframe.

Data Source: UK Health Security Agency

Priority area: Reduce the impact of antimicrobial resistance (AMR) (1)

Figure 16: 12-month rolling total number of prescribed antibiotic items per STAR-PU



Source: NHS Business Service Authority (epact2)

Outcome: Reduction in total antibiotic prescribing

Target: Wirral to meet or fall below the national average.

The graph illustrates 12-month rolling total number of prescribed antibiotic items per Specific Therapeutic group Age-sex weightings Related Prescribing Unit (STAR-PU), spanning from January 2018 to October 2024.

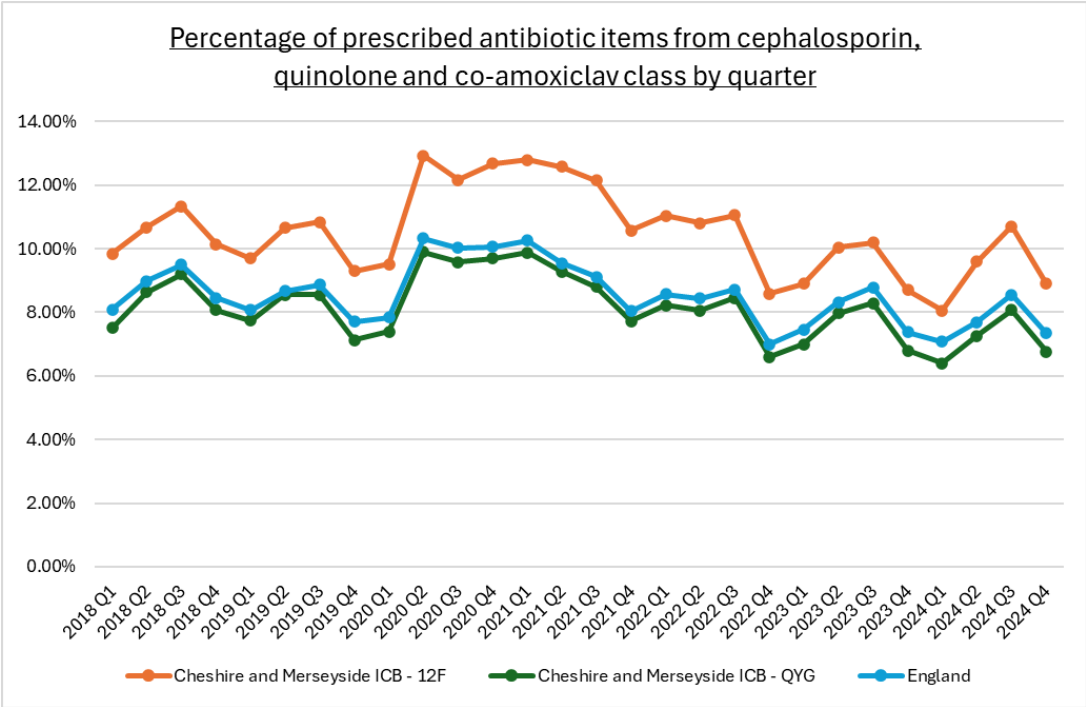
This is based on the total number of antibiotic items prescribed in primary care settings. The data for the indicator is based on four 3-month rolling figures that are used to generate a rolling 12-month data point.

Key observations

- All three groups show a notable dip around early to mid-2021, likely reflecting the impact of COVID-19 on prescribing practices.
- Wirral shows the highest overall prescribing rates throughout the reporting period when compared to regional and national rates.
- As the STAR-PU for Wirral is greater than one (since December 2022), it shows that Wirral is higher than expected, and England's prescribing practice is lower than expected.
- Latest figures show a 12-month rolling STAR-PU of 1.09, compared to 1.01 for Cheshire and Merseyside and 0.92 for England.

Priority area: Reduce the impact of antimicrobial resistance (AMR) (2)

Figure 17: Percentage of prescribed antibiotic items from cephalosporin, quinolone and co-amoxiclav class by quarter (Q1 2018- Q4 2024)



Source: NHS Business Service Authority (epact2)

Outcome: Reduction in broad-spectrum antibiotic prescribing in primary care

Target: GP practices to meet the national target of 10% or less..

The graph illustrates Percentage of prescribed antibiotic items from cephalosporin, quinolone and co-amoxiclav class by quarter.

This indicator specifically shows broad-spectrum items prescribed by quarter, spanning Quarter 1 2018 to Quarter 4 2024. It is a target to reduce the proportion of broad-spectrum antibiotics consumed and monitor the trend of the proportion over time.

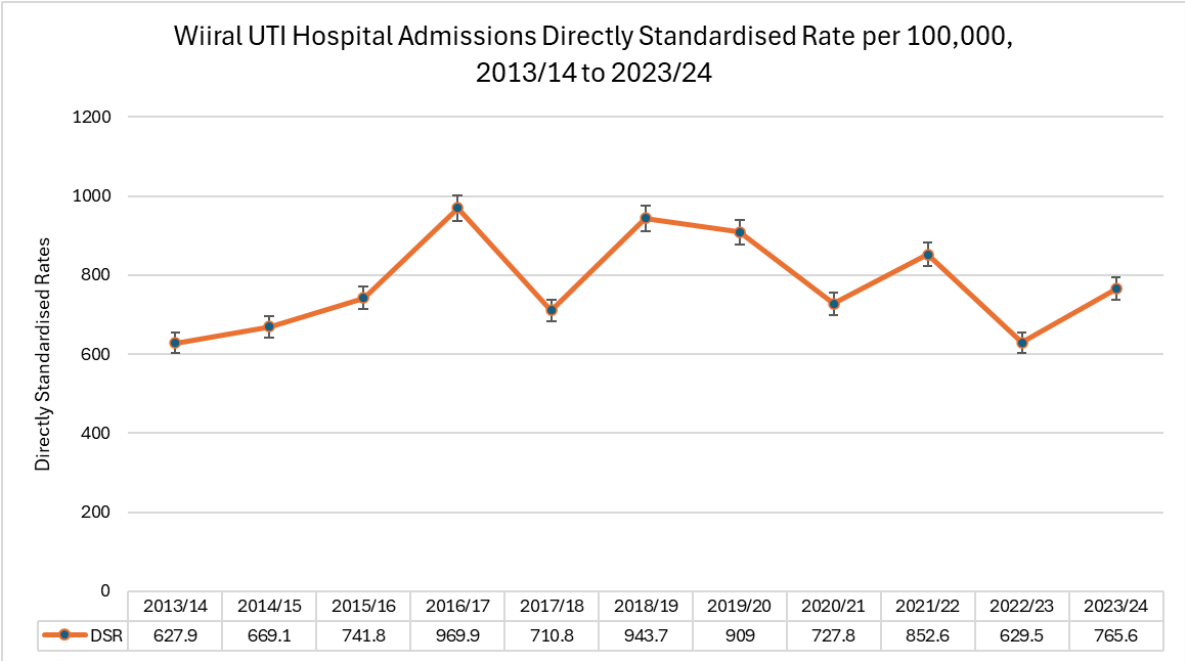
Key observations

Similar fluctuations are observed throughout the reporting period. Both the region and England consistently meet the national target of 10%, while Wirral's performance has varied, occasionally falling above or below the threshold.

The most recent data (December 2024) shows Wirral achieving a proportion of 8.90%, indicating that it met the national target during this period.

Priority area: Reduce the impact of antimicrobial resistance (AMR) (3)

Figure 18: Wirral Urinary Tract Infection(UTI) Hospital Admissions



Source: Hospital Episodes Statistics (HES)

Outcome: Reduction in admissions to hospital for UTI

Target: Reduction by 10% or more based on the 2019 admission rate.

- The graph illustrates the directly standardised rates of urinary tract infection (UTI) hospital admissions in Wirral. The underlying data includes all elective and non-elective admissions where the primary diagnosis was UTI (ICD-10 code N390).
- While the graph shows ongoing fluctuations in admission rates over time, there has been a general downward trend since 2016/17. As part of the health protection strategy, a target was set to reduce UTI-related hospital admissions by 10% or more, using 2019 as the baseline year. The latest figures indicate a 15% reduction, confirming that the target has been met.
- However, it is important to note a recent increase in admission rates between 2022/23 and 2023/24, based on the most up-to-date data available.

Priority Area: Reduce vaccine preventable diseases amongst adults and children (1)

Figure 19: Population vaccination coverage: Flu (at risk individuals 6months to 64years) (2010/11 to 2023/24)

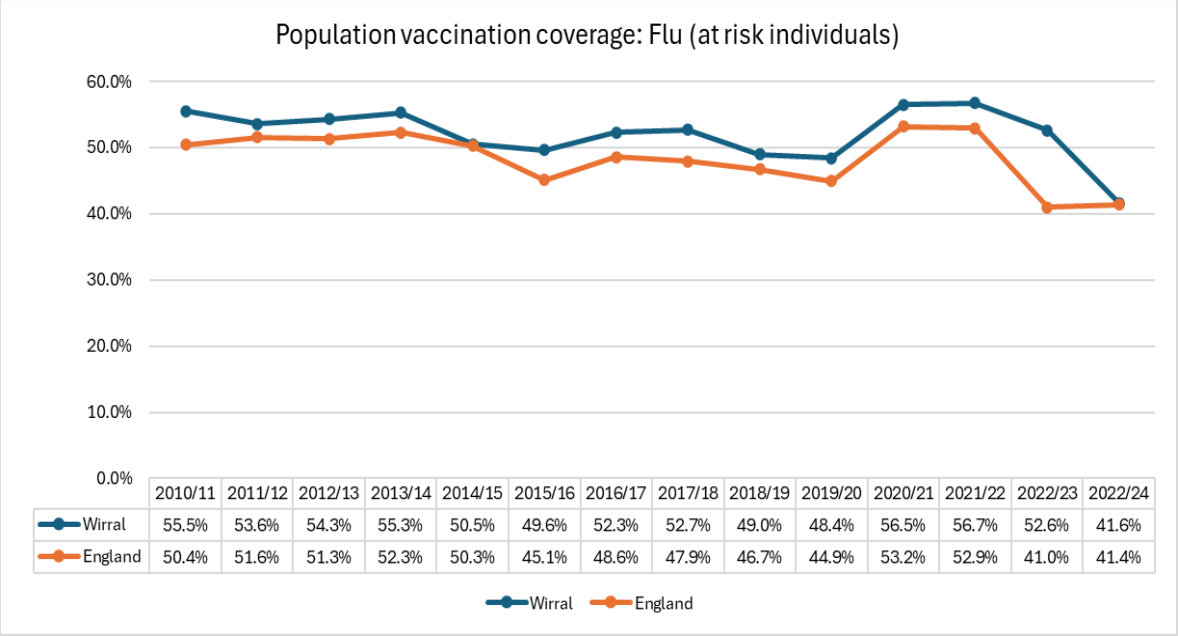
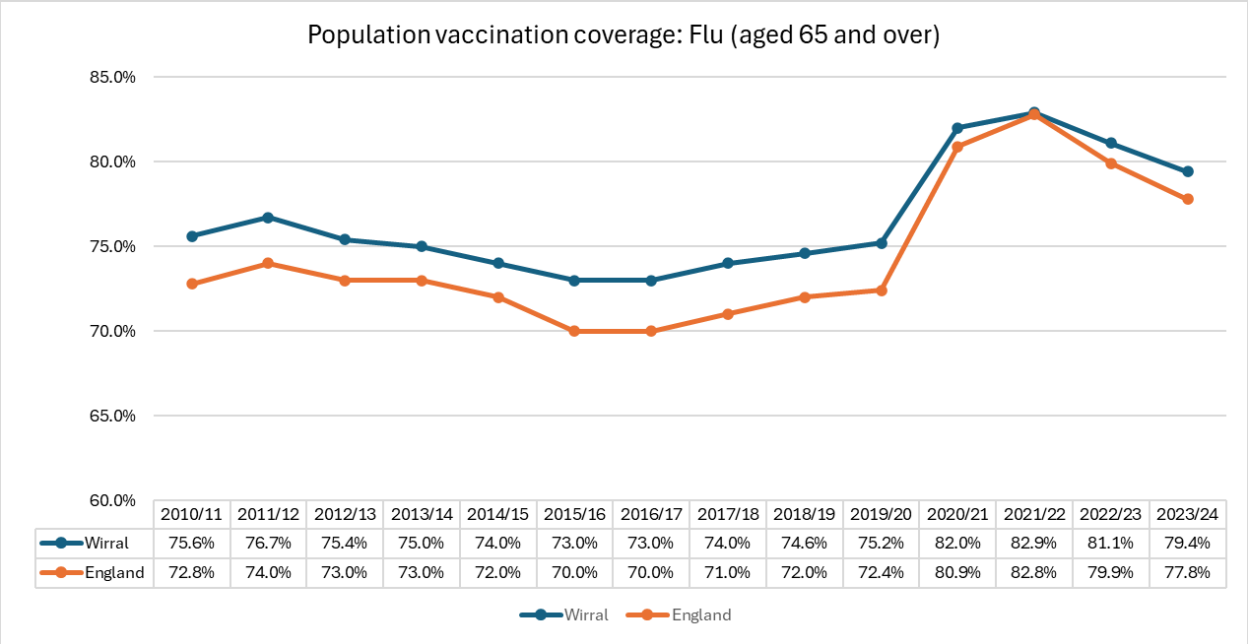


Figure 20: Population vaccination coverage: Flu (aged 65 and over) (2010/11 to 2023/24)



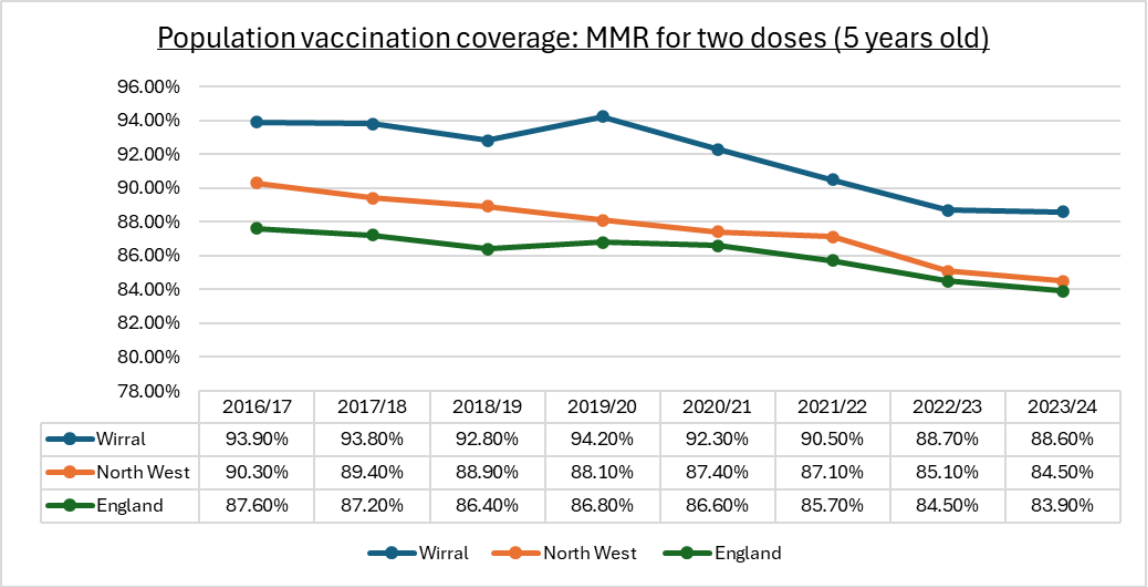
Outcome: Increase in uptake of seasonal influenza

Target: Wirral to meet or fall below the national average.

- Figure 21 illustrates flu vaccination coverage among at-risk individuals, while Figure 22 presents the corresponding coverage for individuals aged 65 and over. Both figures cover the same reporting period, from 2010/11 to 2023/24.
- Influenza (flu) is a highly infectious viral illness transmitted through droplet infection. The flu vaccine is offered to individuals at greater risk of developing serious complications if they contract the virus. Increasing vaccine uptake among these high-risk groups is also expected to help alleviate winter pressures on primary care services and hospital admissions. Vaccination coverage is closely linked to levels of disease.
- The graphs show that coverage rates in Wirral have consistently exceeded the national average for both groups. Over the past five years, Wirral has met the national vaccination target of 75% for individuals aged 65 and over. In contrast, coverage among at-risk individuals has declined, falling below the 55% target to 41.6% in 2023/24, the most recent reporting year.

Priority Area: Reduce vaccine preventable diseases amongst adults and children (2)

Figure 21: Population vaccination coverage: Measles Mumps and Rubella (MMR) for two doses 2016/17 to 2023/24



Source: NHS England

Outcome: Increase uptake of two doses of MMR vaccine in the routine childhood vaccination programme

Figure 23 illustrates population vaccination coverage for two doses of the measles, mumps, and rubella (MMR) vaccine from 2016/17 to 2023/24. MMR is a combined vaccine that protects against measles, mumps, and rubella—all of which are highly infectious diseases.

The indicator includes all children under the responsibility of the local authority who received two doses of the MMR vaccine on or after their first birthday and before their fifth birthday, expressed as a percentage of all children whose fifth birthday falls within the reporting period.

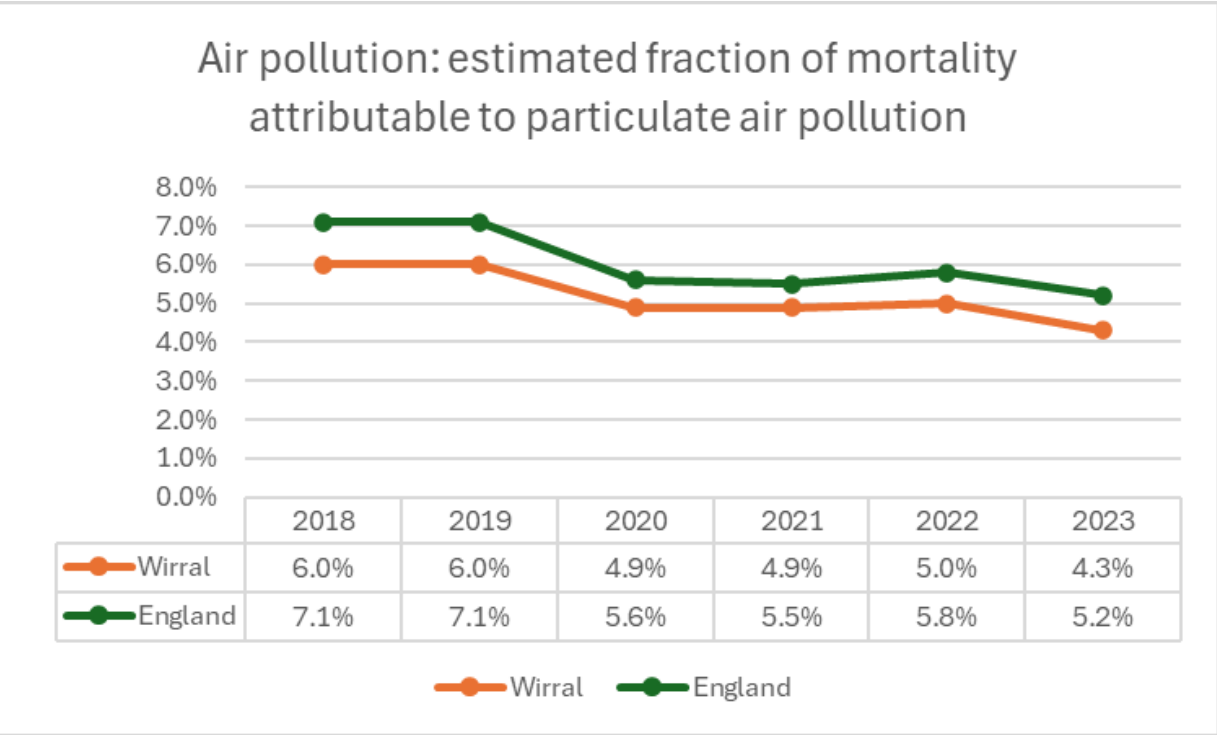
Vaccination coverage is the best indicator of the level of protection a population has against vaccine-preventable communicable diseases.

Key Observations:

- The national target for MMR vaccination coverage is greater than 95%. Coverage between 90% and 95% is considered moderate, while coverage below 90% is regarded as poor performance.
- The graph shows that Wirral, the North West region, and England have not reached the 95% target at any point during the reporting period. While still below the ideal threshold, Wirral’s coverage rates have consistently been higher than both the regional and national averages.

Priority Area: Reduce health harms from climate and environmental hazards

Figure 22: Air pollution: estimated fraction of mortality attributable to particulate air pollution



Source: Department for Environment, Food and Rural Affairs

Outcomes:

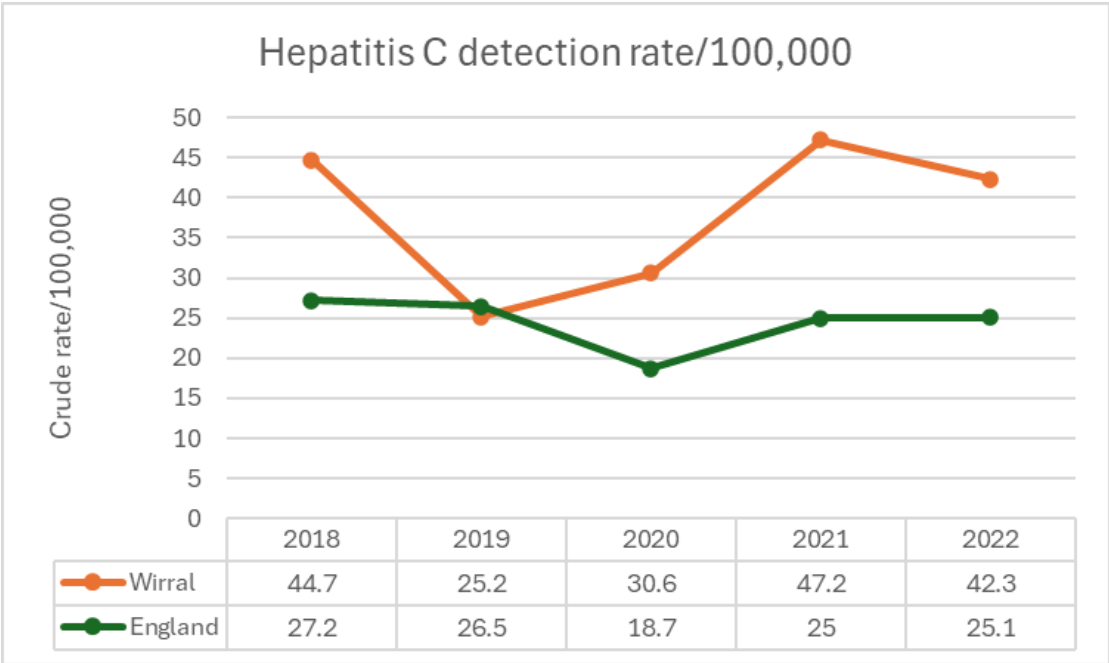
- Reduction in emissions of and achieved trajectories to achieve the ambition of being net carbon neutral by 2041
- Reduction in exposure to nitrogen dioxide and particulate matter

Figure 22 illustrates that Wirral has lower mortality burden associated with long term exposure to particulate air pollution at current levels, In 2023, 4.3% of annual deaths from all causes in those aged 30 and older was attributed to air pollution.

The graph shows a downward trend similar to national trend.

Priority area: Reduce the harmful impact to health of tuberculosis and blood-borne viruses, including Hepatitis B, Hepatitis C and HIV (1)

Figure 23: Hepatitis C detection rate per 100,000

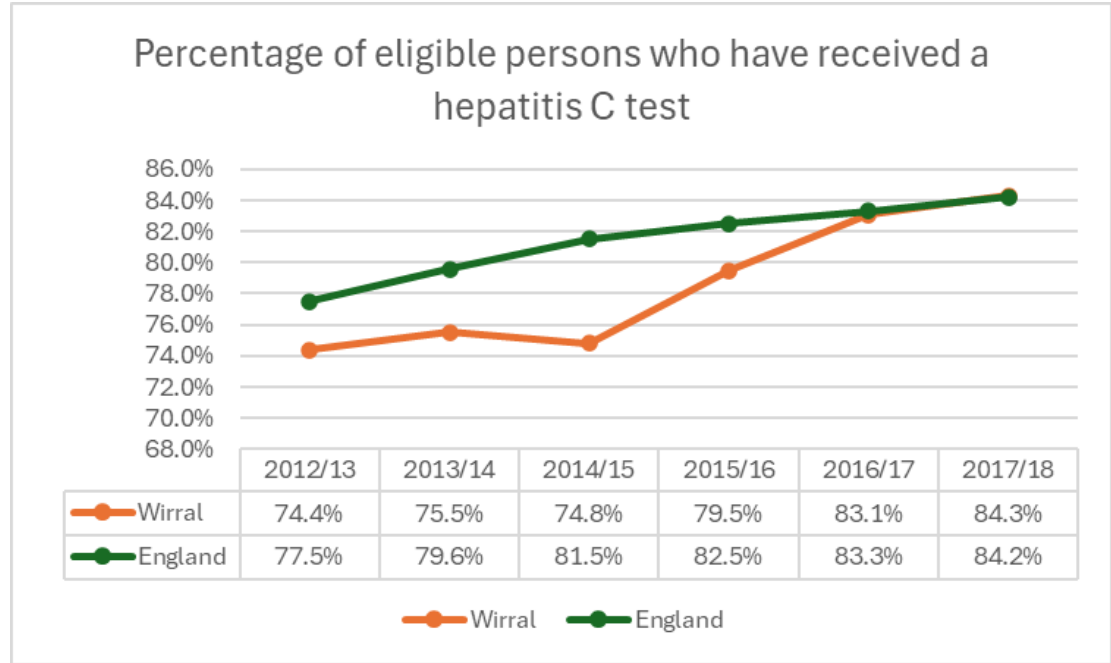


Data Source: UK Health Security Agency

Outcome: Achieve the micro-elimination of Hepatitis C in Wirral

Figure 23 shows hepatitis detection rates, defined as the rate of new diagnoses of confirmed chronic hepatitis C per 100,000 population. In 2019, the crude rate was similar to national rates, however, the rate took an upward turn with a rates of 42.3 per 100,000 population, significantly higher than England. Figure 24, shows the percentage of eligible persons who have received a hepatitis C test, since 2012/13 the proportion has been increasing and getting better. Unfortunately data is not available post 2017/18.

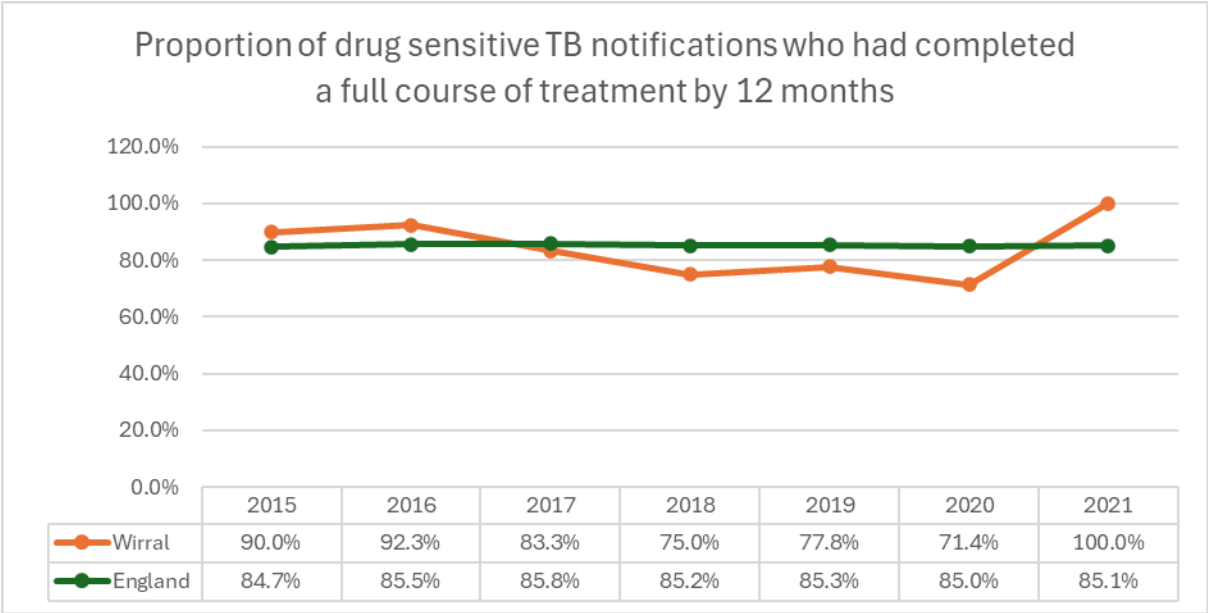
Figure 24: Percentage of eligible persons who received a hepatitis C



Source: Office for Health Improvement and Disparities, National Drug Treatment Monitoring System

Priority area: Reduce the harmful impact to health of tuberculosis and blood-borne viruses, including Hepatitis B, Hepatitis C and HIV (2)

Figure 25: Proportion of drug sensitive TB notifications who had completed a full course of treatment by 12 months



Data Source: UK Health Security Agency

Outcome: Achieve national treatment targets across and completion targets for TB, Hepatitis and HIV

- Figure 25 shows that in 2021, 100% of drug sensitive TB notifications who had completed a full course of treatment by 12 months, exceeding national target of 90%.
- To evaluate the effectiveness of HIV treatment, we assessed two key indicators: virological success among adults receiving HIV care, which reached 97.4% in Wirral, and antiretroviral therapy (ART) coverage among individuals accessing healthcare, which stood at an impressive 99.5%. Both figures surpass the national benchmark of 95%, reflecting strong local performance in HIV care. *(Please note: data for other years is currently unavailable. Data sourced from UK Health Security Agency).*

Priority area: Reduce the harmful impact to health of tuberculosis and blood-borne viruses, including Hepatitis B, Hepatitis C and HIV (3)

Figure 26: New HIV diagnosis rates

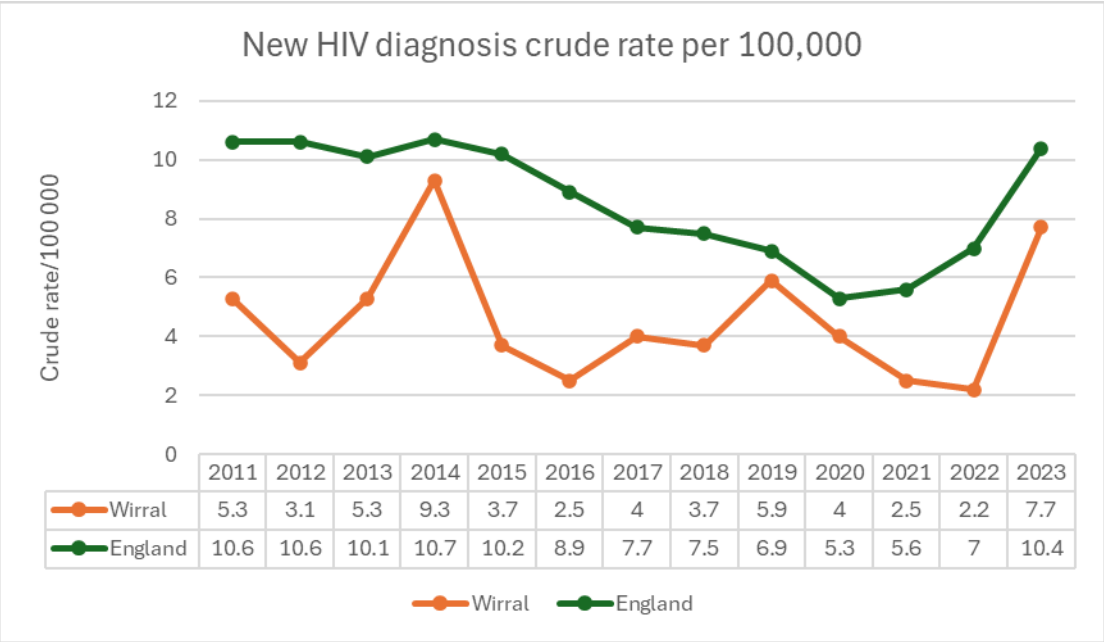
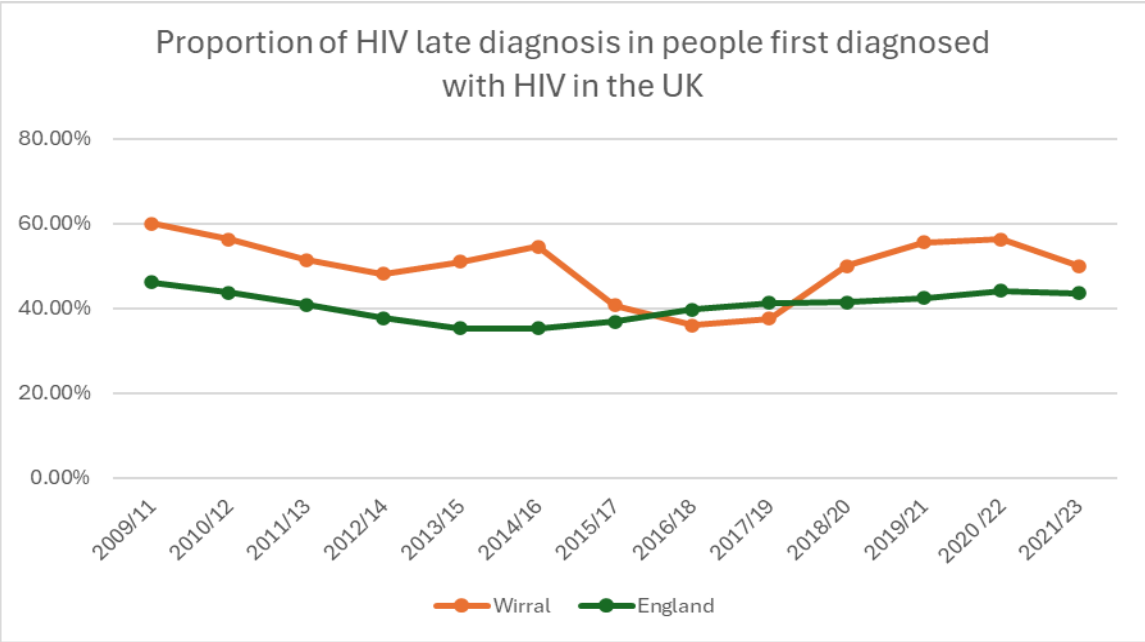


Figure 27: Proportion of HIV late diagnosis in people first diagnosed with HIV in the UK.



Outcome: Reduction in the number of people being diagnosed late with TB, Hepatitis and HIV

- Figure 26 illustrates the rates of new HIV diagnoses from 2011 to 2023. Throughout this period, Wirral consistently reported lower diagnosis rates compared to the national average for England. It is important to note that diagnosis rates are not equivalent to incidence; rather, this indicator offers insight into ongoing HIV transmission, helping to inform targeted prevention efforts.
- Figure 27 presents the proportion of late HIV diagnoses among individuals newly diagnosed in the UK. The most recent data show that in Wirral, 50% of new HIV diagnoses are classified as late—meaning the infection was identified at a more advanced stage. This figure is significantly higher than the national target of 25%, where a lower percentage indicates better outcomes.

Data Source: UK Health Security Agency

Where possible, we have presented 12 month rolling data because, the approach

- **Smooths out short term fluctuations**
 - for example: disease incidence can be noisy due to seasonality or one-off events.
 - A 12-month rolling view averages these effects, giving a more stable, reliable picture of underlying trends
- **Better Trend Detection**
 - It enables clearer trend analysis by removing month-to-month volatility.
 - can see if things are consistently improving, declining, or plateauing, rather than reacting to short-term changes.

Considerations:

While 12-month rolling data is powerful, it does have limitations:

- Slow to reflect sudden changes (e.g. a rapid outbreak or intervention impact) since it's averaged over a year.
- Not suitable for detecting short-term effects or acute responses (e.g., immediate post-intervention impacts).
- Can mask recent improvements or deteriorations due to lag from earlier months.

Crude rates

Some data is presented as crude rates – please note that these do not account for differences in age structures or sex distribution differences. For outcomes that are dependant of age, Wirral may have higher crude rates compared to England as Wirral have a bigger proportion of older people compare to England.