



Public Health
England

Protecting and improving the nation's health

Paediatric TB Network Day October 2019

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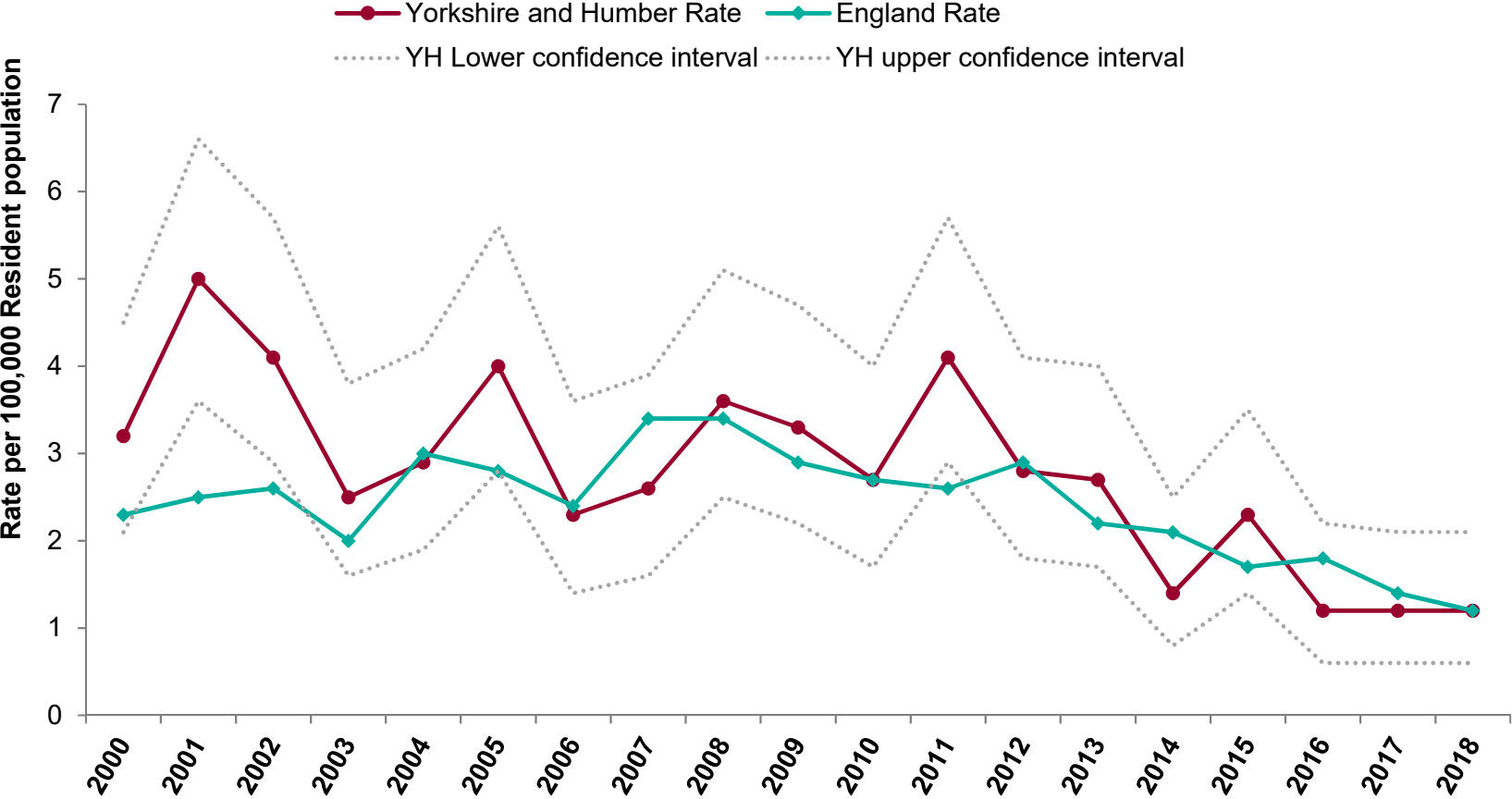
We have come a long way.....

September 2015	Established TBCB Y&H and NE TB CB
November 2015	Mapping against 10 key areas of action in strategy
June 2016	First meeting of paediatric subgroup
November 2017	Paediatric TB mapping report circulated
November 2017	Re-audit of neonatal BCG immunisation policies and processes in NHS maternity units in YH
December 2017	Epidemiology of active Tuberculosis infections in 0-15 year olds in YH in 2012-2016
February 2018	TB Nurse forum education on paediatric TB
March 2018	TB in children and the factors associated with developing disease: Rapid review of the literature
April 2018	Five Nations Health Protection Conference poster 'Epidemiology and Root Causes of Active Tuberculosis Infections in 0-15 year olds in YH'
October 2019	Draft clinical guidance on paediatric TB

What impact has the last 4 years had?

Rate of TB in UK born children 0-14 Yorkshire and Humber and England 2000-2018

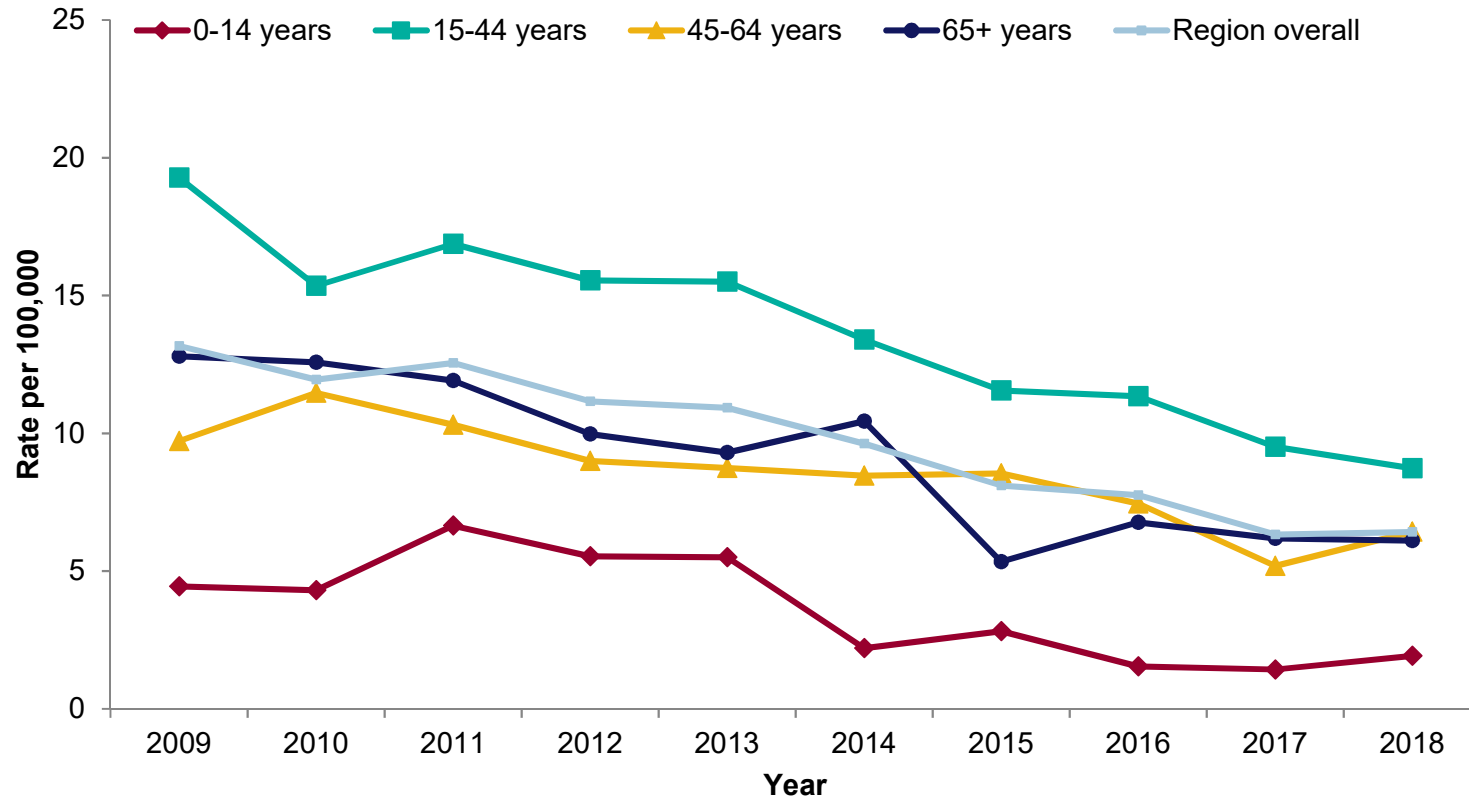
Data sources: ETS



TB case rates by age group 2009-2018

Yorkshire and Humber

Data sources: ETS

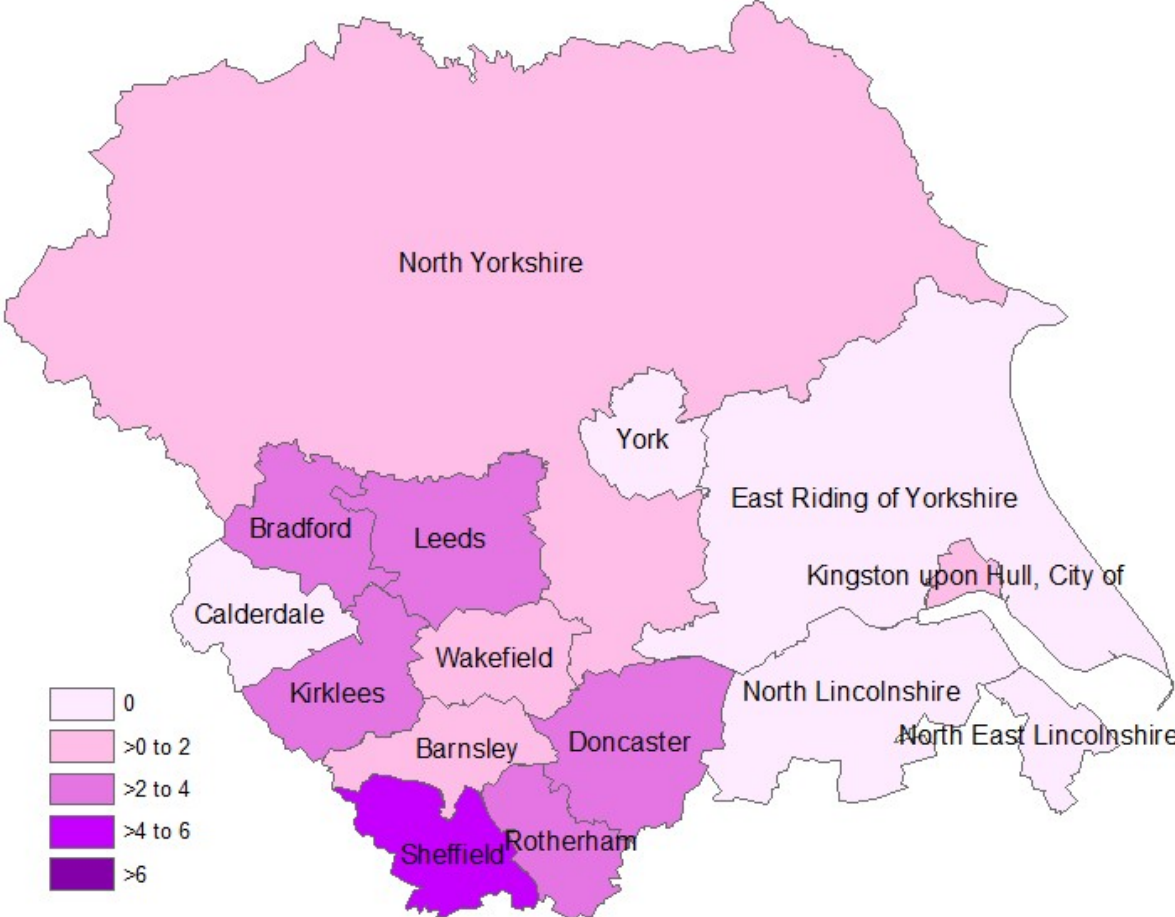


Rates of TB in Children have fallen in Y&H

- In 2017, the rate of TB in UK born children under 15 years of age within England was 1.4 per 100,000 (95% CI 1.2-1.7).
- This is an overall reduction since the peak in 2007-2008 of 3.4 per 100,000 (95%CI 3.0 -3.8).
- In Yorkshire and Humber, the rate of TB in UK born children under 15 in 2017 was 1.3 per 100,000 similar to 2016 (1.2 per 100,000)
- Remains geographical variation in rates of TB which is also reflected in paediatric cases.
- Paediatric case remain important as a marker of overall TB transmission in the community

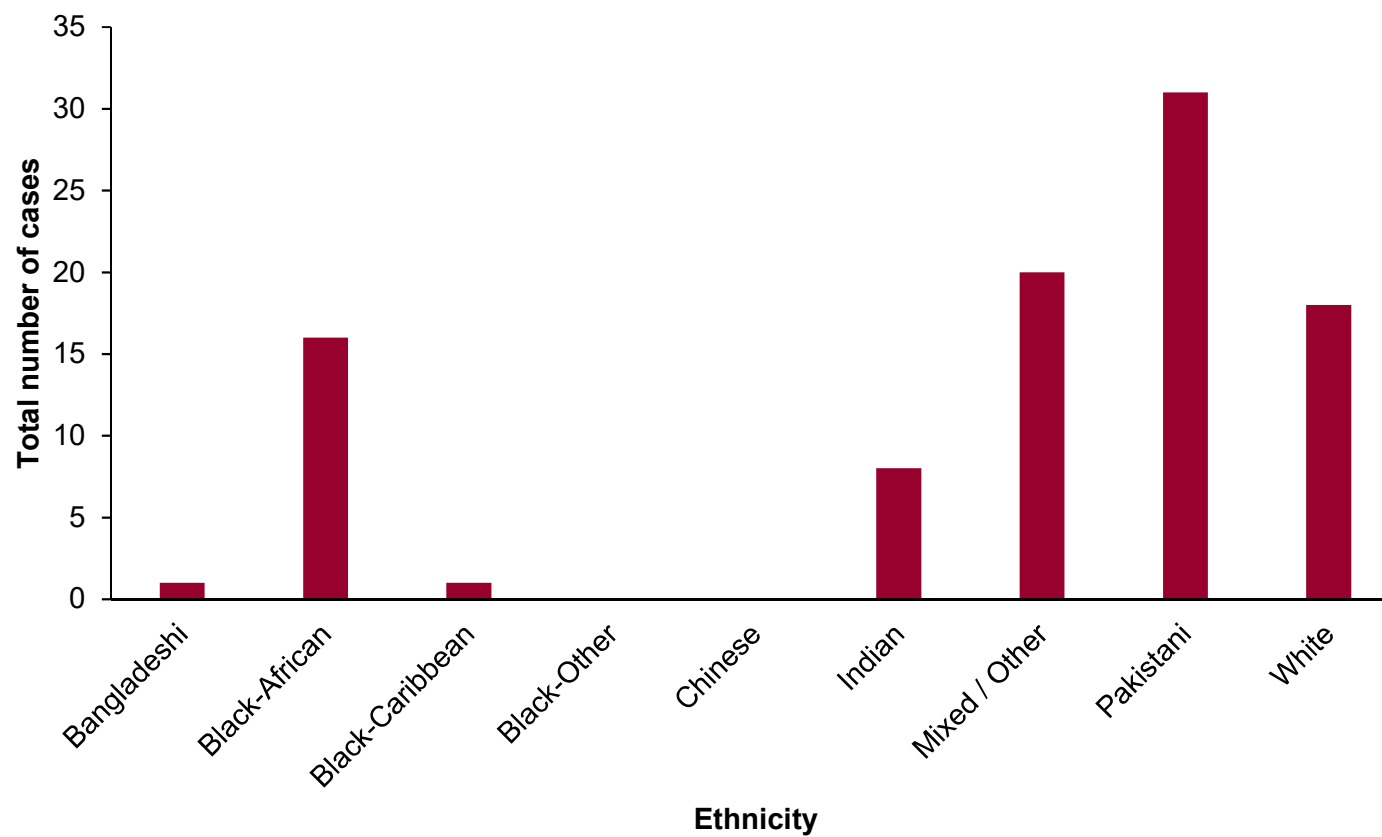
Geographical distribution of case notifications 0-14 years 5-year average rate per 100,000 (2014-2018)

Data sources: ETS



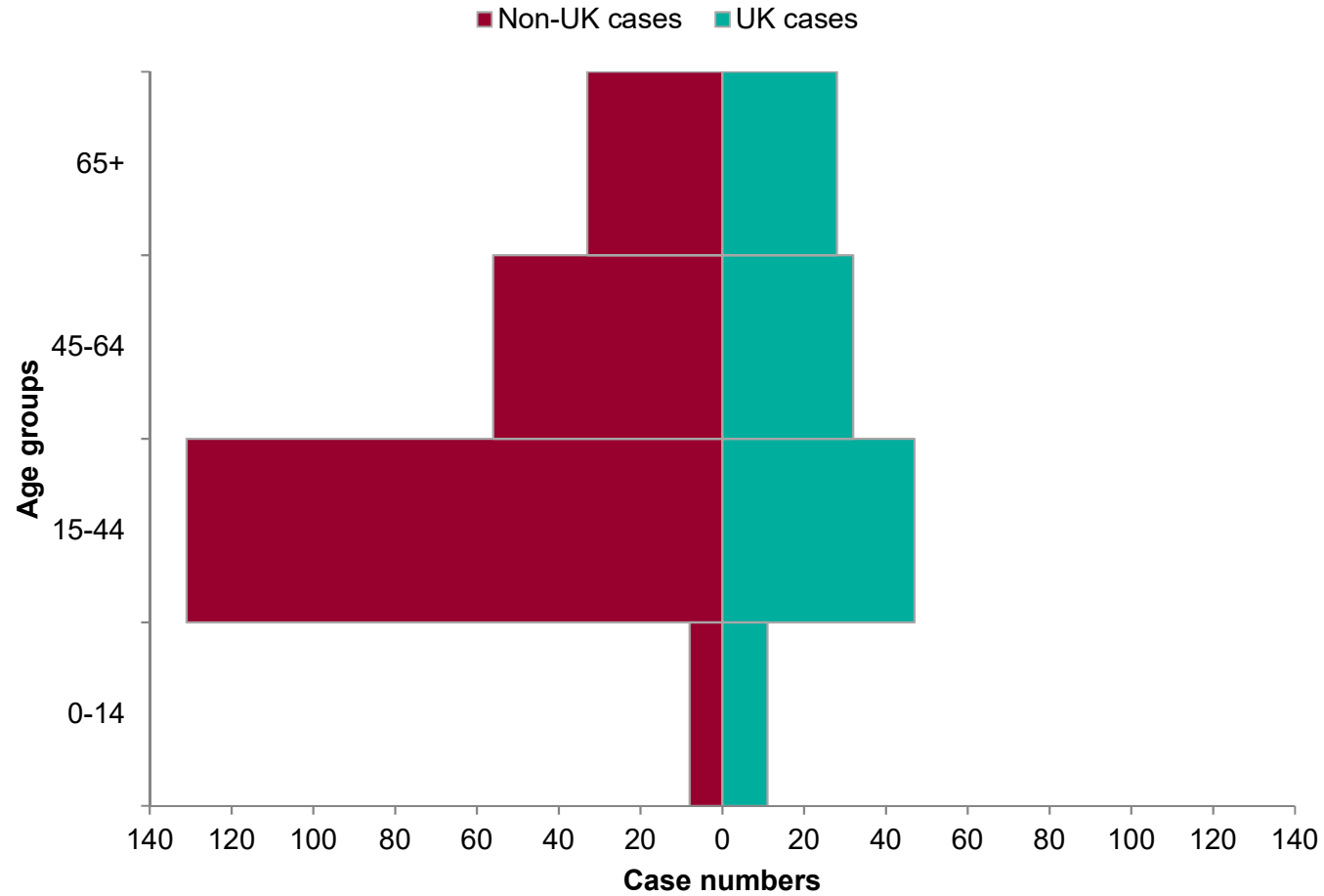
Tuberculosis case notifications by ethnicity 0-14 years Yorkshire and Humber 2014-2018

Data sources: ETS



Tuberculosis case reports by place of birth and age group Yorkshire and Humber 2018

Data sources: ETS

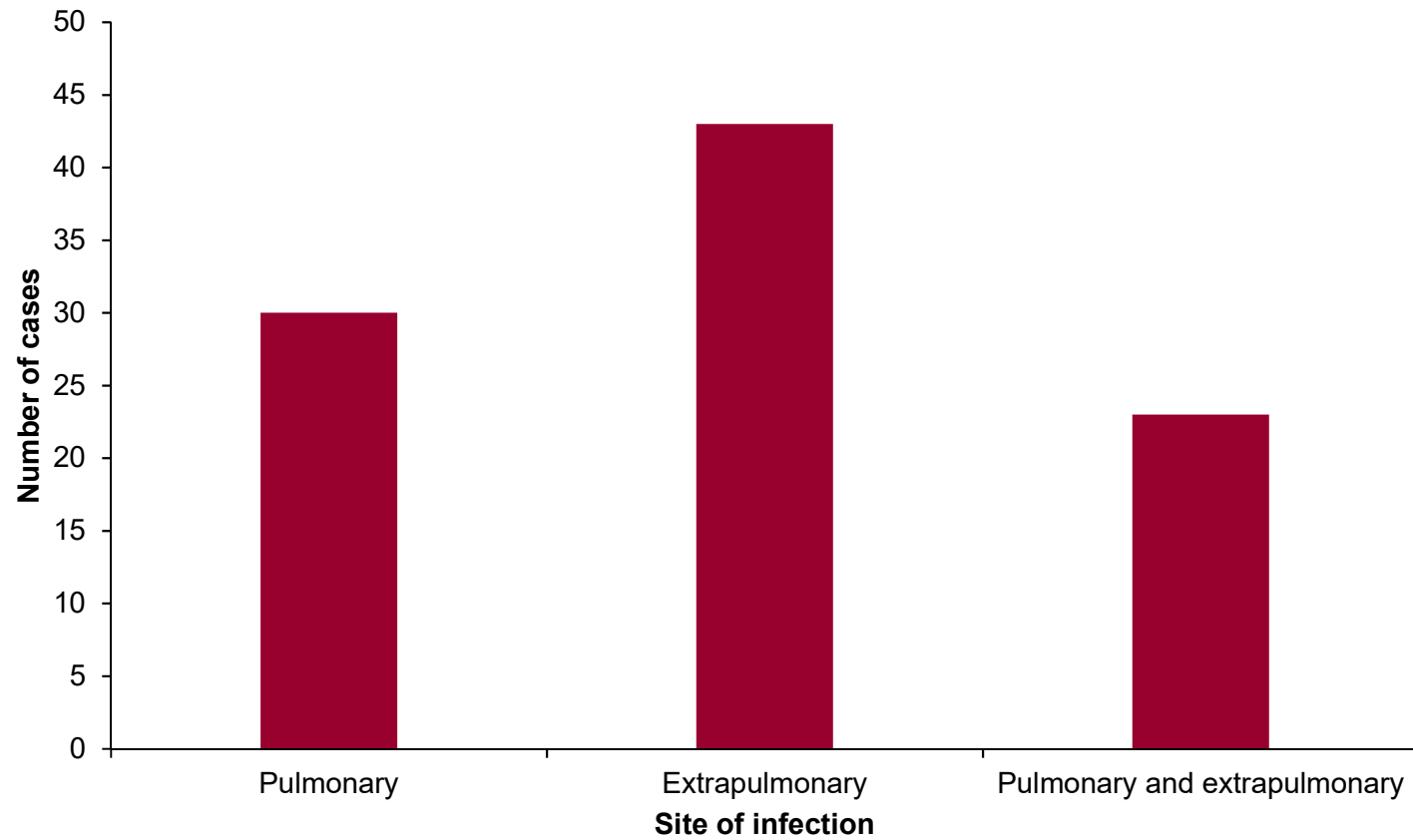


TB Cases in Children

- The proportion of TB cases in the region occurring in children aged 1 year and under in 2017 was 1.4% (5). Of the fifteen TB cases in all children under 15 years old in the region, 80% were UK born, as in 2016
- Cases in UK born children outnumber cases in children born outside of the UK. The relatively higher proportion of UK born among TB cases in children is of concern as it could indicate recent TB transmission potentially occurring in the UK.

Tuberculosis case reports by site of diagnosis in 0-14 Yorkshire and Humber 2014-2018

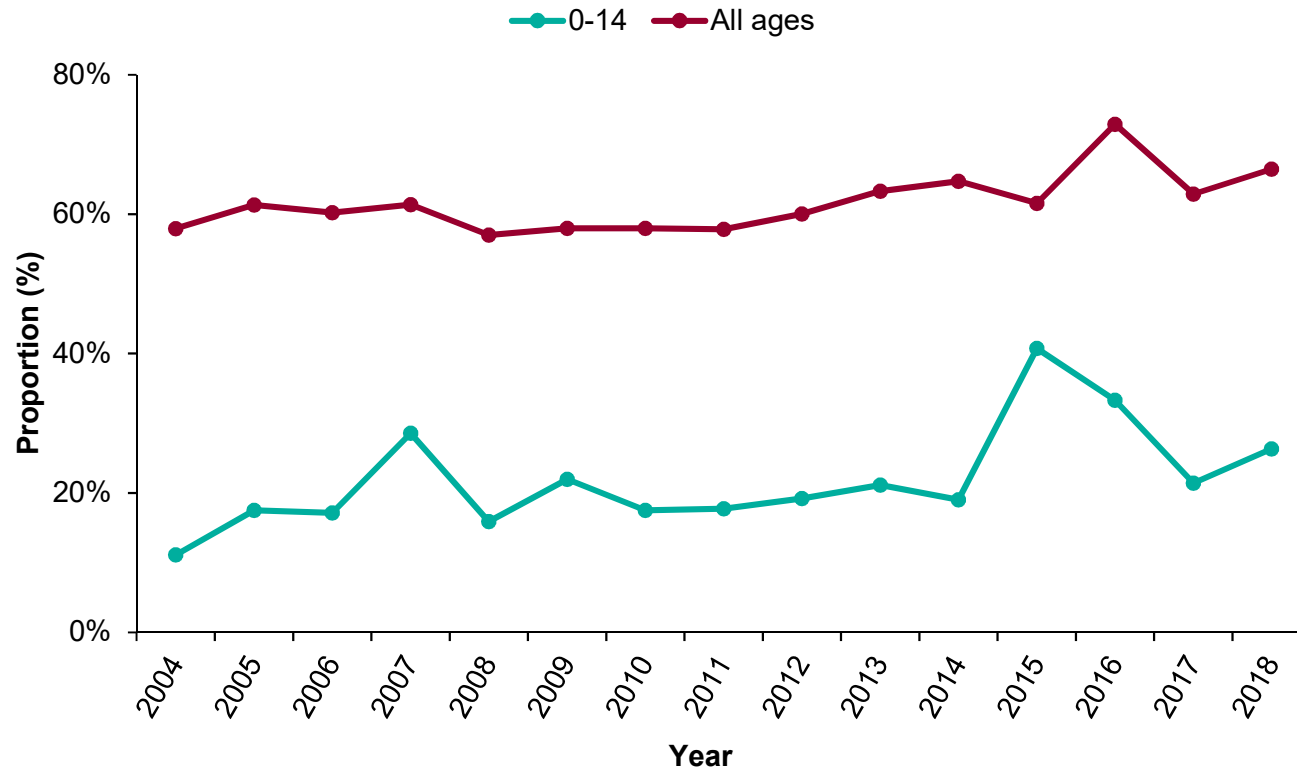
Data sources: ETS



Proportion of cases microbiologically confirmed through culture or PCR with 2004–2018

Yorkshire and Humber

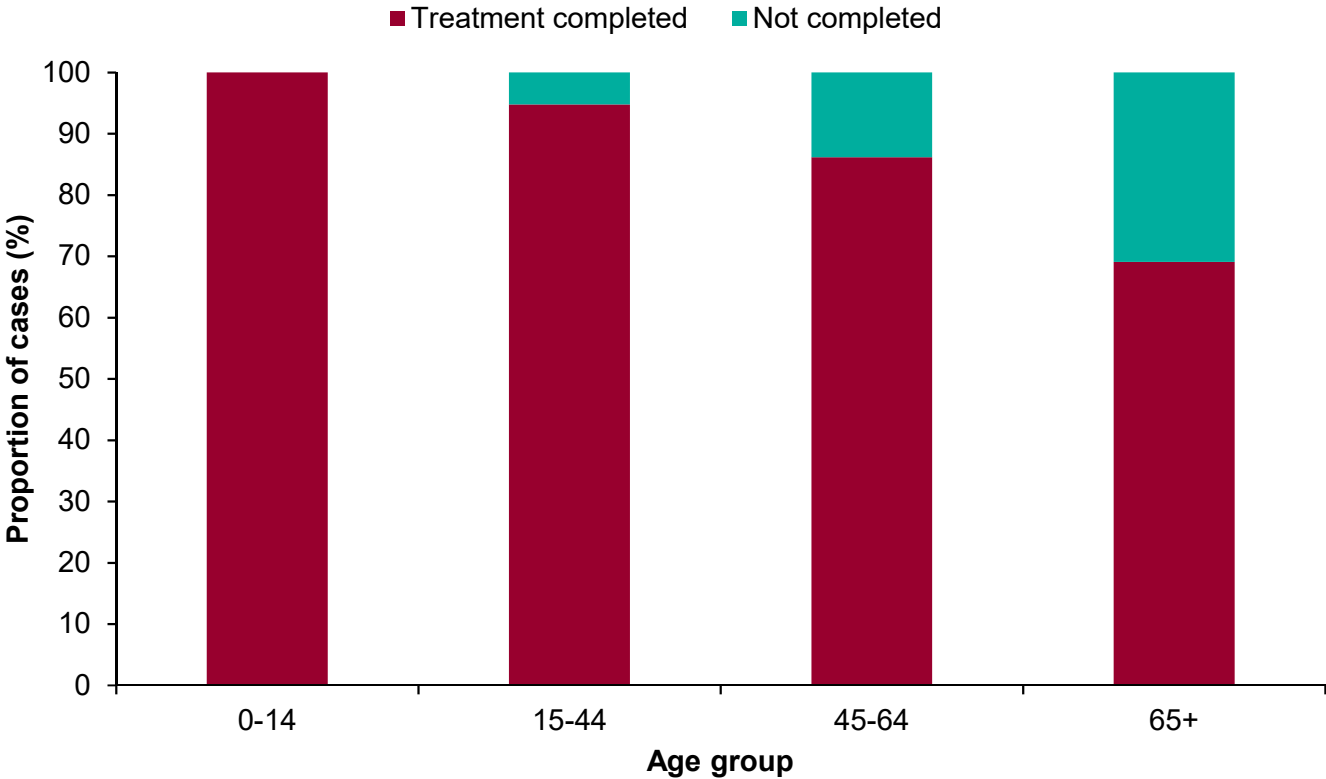
Data source: ETS



Proportion of tuberculosis cases diagnosed in 2017 by treatment outcome and age group

Yorkshire and Humber

Data source: ETS



BCG vaccination status of 0-14 children recorded to have developed TB 2014-2018

Yorkshire and the Humber

Data source: ETS

BCG	Number	Proportion (%)
Yes	66	68.8%
No	21	21.9%
Unknown	9	9.4%

Key points

- We are moving in the right direction – rates have come down and we are seeing an overall reduction in numbers
- Cases in UK born children outnumber cases in children born outside of the UK. The relatively higher proportion of UK born among TB cases in children is of concern as it could indicate recent TB transmission potentially occurring in the UK.
- Pulmonary TB accounts for approx. 30% of cases. Culture and PCR confirmation appears to be increasing
- Fewer children than adults experience diagnostic delay



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