

Reports of cases of tuberculosis to enhanced tuberculosis surveillance systems: UK, 2000 to 2020

Official statistics

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Notes

Tuberculosis definition

All new tuberculosis (TB) cases (including cases diagnosed post-mortem) that meet one of the 2 following case definitions are reported:

1. Culture confirmed case: culture confirmed disease, with speciation confirming *Mycobacterium tuberculosis* complex (*M. tuberculosis, M. bovis, M. africanum* or *M. microti*).

2. Clinically diagnosed case: in the absence of culture confirmation, a case that meets the following criteria:

- a clinician's judgement that the patient's clinical and/or radiological signs and/or symptoms are compatible with active TB, *and*
- a clinician's decision to treat the patient with a full course of anti-TB therapy for active TB

Enhanced surveillance of tuberculosis

Enhanced Tuberculosis Surveillance (ETS) was introduced in January 1999 in England and Wales and the following year in Northern Ireland. The equivalent scheme in Scotland, Enhanced Surveillance of Mycobacterial Infections (ESMI), was introduced in 2000. Data from the 2 systems is compiled for the purpose of UK reporting.

Clinical teams provide information on TB cases either directly through the web-based ETS system entered at the clinic, or on a case report form entered onto the system at the Health Protection Team level. Data includes notification details, demographic information, clinical and microbiological information.

Data from all TB isolates identified in UK Mycobacteria Reference Laboratories (excluding Scotland) is routinely imported into ETS and matched to case notifications using patient identifiers common to both the laboratory isolate and the case notification. In addition, external to the system, an annual probabilistic matching process based on the patient identifiers is undertaken to identify additional matches. TB isolates in Scotland are identified by the Scottish Mycobacteria Reference Laboratory and this data is not matched using this method.

Data sources

The TB data for England, Wales and Northern Ireland presented in this report is from ETS, other than in London where cases are reported to the London TB Register (LTBR). Data for Scotland is from ESMI.

The population data used is sourced from the Office for National Statistics (ONS), incorporating data from the National Records of Scotland and Northern Ireland Statistics and Research Agency.

Data was extracted from ETS at the beginning of March 2021 and cleaned and validated. Data for Scotland and Northern Ireland in this report is provisional and subject to further validation, and thus may differ slightly from data presented in Scottish and Irish reports.

PHE produces detailed public health reports with TB data for England.

Public Health Agency Northern Ireland produces TB data for Northern Ireland.

Public Health Wales produces TB data for Wales.

Health Protection Scotland produces TB data for Scotland.

Data type and methodology

TB cases were reported by area of residence and by calendar year.

Overall TB rates per 100,000 population, as well as those by area of reporting, were calculated using the mid-year population estimates provided by the ONS. Average annual rates per 100,000 for the 3-year period were calculated by dividing the numerator (the number of TB notifications in the 3-year period) by the denominator (the sum of the mid-year population estimates for the same 3-year period) and multiplying by 100,000. A 95% confidence interval for incidence was obtained assuming a Poisson distribution.

For the purposes of TB outcome reporting, the drug sensitive cohort is defined as all TB cases, excluding those with multi-drug resistant/rifampicin resistant TB (MDR/RR-TB) (initial or acquired), and those treated with a second line regimen for MDR/RR-TB. TB outcomes are reported at 12 months for drug sensitive cases with an expected duration of treatment of less than 12 months. This group excludes cases with CNS disease, who have an expected duration of treatment of 12 months. In addition, those with spinal, cryptic disseminated or miliary disease are excluded from this group, as CNS

involvement cannot be reliably ruled out for the purposes of reporting. The last recorded outcome is reported for the entire drug sensitive cohort.

Health Protection Scotland (HPS) aligned with the World Health Organization (WHO) treatment outcome definitions in 2015, and outcomes in this report may differ to those in the regional report.

Statistical analysis was carried out using Stata 15.

Glossary

| Term | Definition |
|-----------------------|--|
| Acquired resistance | Resistance identified on repeat culture after one month of the first specimen date. Cases with a change from a sensitive to resistant result following treatment start are reclassified as acquired resistance, even if this is within the one month period. |
| CNS | Central nervous system |
| CI | Confidence interval (95% confidence intervals used) |
| DR cohort | Drug-resistant cohort is defined as cases that are culture confirmed with initial and/or acquired multi-drug resistant/rifampicin resistant TB (MDR/RR-TB), as well as those treated with a second line regimen for MDR/RR-TB without phenotypic DST results or WGS resistance predictions |
| ESMI | Enhanced Surveillance of Mycobacterial Infections |
| ETS | Enhanced Tuberculosis Surveillance system |
| Initial resistance | A cultured isolate resistant to a particular drug within one month of the first specimen date |
| Last recorded outcome | Last known outcome, irrespective of when it occurred |
| LTBR | London TB Register |
| MDR-TB | Multi-drug resistant TB is defined as resistance to at least isoniazid and rifampicin, with or without resistance to other drugs |
| MDR/RR-TB | Multi-drug resistant or rifampicin-resistant TB is defined as resistance to rifampicin including MDR-TB cases |
| ONS | Office for National Statistics |
| XDR-TB | Extensively-drug resistant TB is defined as resistance to isoniazid and rifampicin (MDR-TB), at least one injectable agent (capreomycin, kanamycin or amikacin) and at least one fluoroquinolone (moxifloxacin, ofloxacin or ciprofloxacin) |

| | | Total | Annual | | |
|------|-----------------------|---|----------------------------------|------------------------------|--|
| Year | Number of cases | Rate per 100,000 (95% Cl ^a) | change in case numbers (%) | Annual change in rate (%) | |
| 2000 | 6,686 | 11.4 (11.1 - 11.6) | - | - | |
| 2001 | 6,760 | 11.4 (11.2 - 11.7) | 1.1% | 0.0% | |
| 2002 | 7,291 | 12.3 (12.0 - 12.6) | 7.9% | 7.9% | |
| 2003 | 7,219 | 12.1 (11.8 - 12.4) | -1.0% | -1.6% | |
| 2004 | 7,589 | 12.7 (12.4 - 12.9) | 5.1% | 5.0% | |
| 2005 | 8,283 | 13.7 (13.4 - 14.0) | 9.1% | 7.9% | |
| 2006 | 8,307 | 13.7 (13.4 - 14.0) | 0.3% | 0.0% | |
| 2007 | 8,259 | 13.5 (13.2 - 13.8) | -0.6% | -1.5% | |
| 2008 | 8,491 | 13.7 (13.4 - 14.0) | 2.8% | 1.5% | |
| 2009 | 8,870 | 14.2 (14.0 - 14.5) | 4.5% | 3.6% | |
| 2010 | 8,396 | 13.4 (13.1 - 13.7) | -5.3% | -5.6% | |
| 2011 | 8,919 | 14.1 (13.8 - 14.4) | 6.2% | 5.2% | |
| 2012 | 8,713 | 13.7 (13.4 - 14.0) | -2.3% | -2.8% | |
| 2013 | 7,870 | 12.3 (12.0 - 12.6) | -9.7% | -10.2% | |
| 2014 | 7,029 | 10.9 (10.6 - 11.1) | -10.7% | -11.4% | |
| 2015 | 6,228 | 9.6 (9.3 - 9.8) | -11.4% | -11.9% | |
| 2016 | 6,115 | 9.3 (9.1 - 9.6) | -1.8% | -3.1% | |
| 2017 | 5,532 | 8.4 (8.2 - 8.6) | -9.5% | -9.7% | |
| 2018 | 5,031 | 7.6 (7.4 - 7.8) | -9.1% | -9.5% | |
| 2019 | 5,117 | 7.7 (7.5 - 7.9) | 1.7% | 1.3% | |
| 2020 | 4,458 | 6.6 (6.5 - 6.8) | -12.9% | -14.3% | |

Table 1. Number of TB case notifications, rates and annual percentage change, UK, 2000to 2020

^a CI - confidence interval

A 42.5% reduction in TB case numbers was observed between 2011 and 2018. In 2019, the number of cases increased by 1.9% giving a rate of 7.7 per 100,000 (95% CI 7.5 to 7.9) (Table 1). A 12.9% reduction in TB case numbers was observed between 2019 and 2020. This is thought to be partly due to the effect of the coronavirus (COVID-19) pandemic with fewer people presenting for diagnosis than expected.

| | | England | | Scotland | | Wales | Nor | thern Ireland | | UK |
|------|-----------------------|--|-----------------------|--|-----------------------|---|-----------------------|--|-----------------|--|
| Year | Number of cases | Rate per 100,000 (95% Cl ^b) | Number of cases | Rate per 100,000 (95% Cl ^b) | Number of cases | Rate per 100,000 (95% Cl ^b) | Number of cases | Rate per 100,000 (95% Cl ^b) | Number of cases | Rate per 100,000 (95% CI ^b) |
| 2000 | 6,044 | 12.3 (12.0 - 12.6) | 403 | 8.0 (7.2 - 8.8) | 182 | 6.3 (5.4 - 7.2) | 57 | 3.4 (2.6 - 4.4) | 6,686 | 11.4 (11.1 - 11.6) |
| 2001 | 6,169 | 12.5 (12.2 - 12.8) | 351 | 6.9 (6.2 - 7.7) | 183 | 6.3 (5.4 - 7.3) | 57 | 3.4 (2.6 - 4.4) | 6,760 | 11.4 (11.2 - 11.7) |
| 2002 | 6,675 | 13.4 (13.1 - 13.8) | 394 | 7.8 (7.0 - 8.6) | 155 | 5.3 (4.5 - 6.2) | 67 | 3.9 (3.1 - 5.0) | 7,291 | 12.3 (12.0 - 12.6) |
| 2003 | 6,631 | 13.3 (13.0 - 13.6) | 367 | 7.2 (6.5 - 8.0) | 164 | 5.6 (4.8 - 6.5) | 57 | 3.3 (2.5 - 4.3) | 7,219 | 12.1 (11.8 - 12.4) |
| 2004 | 6,929 | 13.8 (13.5 - 14.1) | 392 | 7.7 (7.0 - 8.5) | 187 | 6.3 (5.4 - 7.3) | 81 | 4.7 (3.8 - 5.9) | 7,589 | 12.7 (12.4 - 12.9) |
| 2005 | 7,658 | 15.1 (14.8 - 15.5) | 365 | 7.1 (6.4 - 7.9) | 185 | 6.2 (5.4 - 7.2) | 75 | 4.3 (3.4 - 5.4) | 8,283 | 13.7 (13.4 - 14.0) |
| 2006 | 7,682 | 15.1 (14.7 - 15.4) | 381 | 7.4 (6.7 - 8.2) | 183 | 6.1 (5.3 - 7.1) | 61 | 3.5 (2.7 - 4.5) | 8,307 | 13.7 (13.4 - 14.0) |
| 2007 | 7,577 | 14.7 (14.4 - 15.1) | 409 | 7.9 (7.2 - 8.7) | 204 | 6.8 (5.9 - 7.8) | 69 | 3.9 (3.0 - 5.0) | 8,259 | 13.5 (13.2 - 13.8) |
| 2008 | 7,809 | 15.1 (14.7 - 15.4) | 447 | 8.6 (7.8 - 9.4) | 169 | 5.6 (4.8 - 6.5) | 66 | 3.7 (2.9 - 4.7) | 8,491 | 13.7 (13.4 - 14.0) |
| 2009 | 8,112 | 15.5 (15.2 - 15.9) | 486 | 9.3 (8.5 - 10.2) | 213 | 7.0 (6.1 - 8.0) | 59 | 3.3 (2.5 - 4.2) | 8,870 | 14.2 (14.0 - 14.5) |
| 2010 | 7,675 | 14.6 (14.3 - 14.9) | 503 | 9.6 (8.7 - 10.4) | 152 | 5.0 (4.2 - 5.8) | 66 | 3.7 (2.8 - 4.7) | 8,396 | 13.4 (13.1 - 13.7) |
| 2011 | 8,280 | 15.6 (15.3 - 15.9) | 447 | 8.4 (7.7 - 9.3) | 131 | 4.3 (3.6 - 5.1) | 61 | 3.4 (2.6 - 4.3) | 8,919 | 14.1 (13.8 - 14.4) |
| 2012 | 8,086 | 15.1 (14.8 - 15.4) | 404 | 7.6 (6.9 - 8.4) | 136 | 4.4 (3.7 - 5.2) | 87 | 4.8 (3.8 - 5.9) | 8,713 | 13.7 (13.4 - 14.0) |
| 2013 | 7,265 | 13.5 (13.2 - 13.8) | 390 | 7.3 (6.6 - 8.1) | 142 | 4.6 (3.9 - 5.4) | 73 | 4.0 (3.1 - 5.0) | 7,870 | 12.3 (12.0 - 12.6) |
| 2014 | 6,472 | 11.9 (11.6 - 12.2) | 348 | 6.5 (5.8 - 7.2) | 114 | 3.7 (3.0 - 4.4) | 95 | 5.2 (4.2 - 6.3) | 7,029 | 10.9 (10.6 - 11.1) |
| 2015 | 5,735 | 10.5 (10.2 - 10.7) | 316 | 5.9 (5.3 - 6.6) | 116 | 3.7 (3.1 - 4.5) | 61 | 3.3 (2.5 - 4.2) | 6,228 | 9.6 (9.3 - 9.8) |
| 2016 | 5,618 | 10.2 (9.9 - 10.4) | 307 | 5.7 (5.1 - 6.4) | 104 | 3.3 (2.7 - 4.0) | 86 | 4.6 (3.7 - 5.7) | 6,115 | 9.3 (9.1 - 9.6) |
| 2017 | 5,067 | 9.1 (8.9 - 9.4) | 291 | 5.4 (4.8 - 6.0) | 104 | 3.3 (2.7 - 4.0) | 70 | 3.7 (2.9 - 4.7) | 5,532 | 8.4 (8.2 - 8.6) |
| 2018 | 4,611 | 8.2 (8.0 - 8.5) | 271 | 5.0 (4.4 - 5.6) | 96 | 3.1 (2.5 - 3.7) | 53 | 2.8 (2.1 - 3.7) | 5,031 | 7.6 (7.4 - 7.8) |
| 2019 | 4,702 | 8.4 (8.1 - 8.6) | 242 | 4.4 (3.9 - 5.0) | 102 | 3.2 (2.6 - 3.9) | 71 | 3.7 (2.9 - 4.7) | 5,117 | 7.7 (7.5 - 7.9) |
| 2020 | 4,125 | 7.3 (7.1 - 7.5) | 200 | 3.7 (3.2 - 4.2) | 79 | 2.5 (2.0 - 3.1) | 54 | 2.8 (2.1 - 3.7) | 4,458 | 6.6 (6.5 - 6.8) |

Table 2. Number of TB case notifications and rates by country, UK, 2000 to 2020

^b CI - confidence interval

Most TB cases in the UK were in England and the rate of TB was higher than the devolved administrations. In 2020, there were 4,125 cases in England giving a rate of TB of 7.3 per 100,000 (Table 2); the lowest rate in England since 2011. Scotland continued an annual decline in both numbers and rate of TB with 200 cases in 2020 (3.7 per 100,000). There was a small decrease in the number and rate of TB In Wales during 2020 giving a rate of 2.5 per 100,000. Northern Ireland has both a small number of cases and low rate of TB, with annual fluctuations. The rate in 2020 was the same as the lowest recorded TB rate of 2.8 per 100,000 in 2018 following a 23.9% and 24.3% decrease in the number of cases and rate in 2020 compared to 2019, respectively.

Table 3. Number of TB case notifications and rates by PHE centre, England, 2020

The centres are ordered by decreasing total number of cases in 2020. CI stands for confidence interval.

| PHE Centre | Number of cases | Rate per 100,000 (95%CI) |
|--------------------------|-----------------|--------------------------|
| London | 1,464 | 16.3 (15.4 - 17.1) |
| West Midlands | 548 | 9.2 (8.4 - 10.0) |
| South East | 456 | 5.1 (4.6 - 5.6) |
| North West | 455 | 6.2 (5.6 - 6.8) |
| East of England | 371 | 5.7 (5.1 - 6.3) |
| East Midlands | 310 | 6.4 (5.7 - 7.1) |
| Yorkshire and the Humber | 270 | 4.9 (4.3 - 5.5) |
| South West | 167 | 3.0 (2.5 - 3.4) |
| North East | 84 | 3.1 (2.5 - 3.9) |

As in previous years, the highest number of TB cases in England during 2020 was in London followed by the West Midlands PHEC. Decreases in the number of TB case notifications were observed in all the PHECs between 2019 and 2020.

Three-year average numbers of TB case notifications and rates by upper tier local authority and local authority district, England, 2018 to 2020

In the following tables the authorities are ordered by decreasing total number of cases in 2020.

Authorities highlighted in bold are upper-tier local authority districts only, those indented are local authority districts only, and those neither highlighted nor indented are both an upper-tier local authority and a local authority district.

In column 2 average number of cases in a local authority district may not be the same as the sum of the average number of cases in the corresponding upper tier local authority due to rounding.

The figures in round brackets give the confidence interval.

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| London | 1,611 | 18.0 (17.5 - 18.5) |
| Barking and Dagenham | 44 | 20.5 (17.1 - 24.3) |
| Barnet | 52 | 13.2 (11.2 - 15.5) |
| Bexley | 22 | 8.9 (6.9 - 11.3) |
| Brent | 107 | 32.6 (29.1 - 36.3) |
| Bromley | 17 | 5.2 (3.9 - 6.8) |
| Camden | 34 | 12.7 (10.4 - 15.4) |
| City of London | 1 | 13.6 (3.7 - 34.9) |
| Croydon | 70 | 18.0 (15.6 - 20.6) |
| Ealing | 117 | 34.3 (30.8 - 38.1) |
| Enfield | 49 | 14.6 (12.3 - 17.1) |
| Greenwich | 60 | 20.9 (17.9 - 24.1) |
| Hackney | 42 | 15.1 (12.6 - 18.0) |
| Hammersmith and Fulham | 19 | 10.5 (7.9 - 13.5) |
| Haringey | 42 | 15.5 (12.9 - 18.5) |
| Harrow | 73 | 28.9 (25.2 - 33.0) |
| Havering | 17 | 6.6 (4.9 - 8.6) |

Table 4a. London

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| Hillingdon | 69 | 22.4 (19.4 - 25.6) |
| Hounslow | 87 | 31.9 (28.2 - 36.1) |
| Islington | 27 | 11.2 (8.9 - 13.9) |
| Kensington and Chelsea | 18 | 11.7 (8.8 - 15.3) |
| Kingston upon Thames | 16 | 8.8 (6.5 - 11.7) |
| Lambeth | 49 | 15.1 (12.8 - 17.7) |
| Lewisham | 47 | 15.5 (13.1 - 18.3) |
| Merton | 28 | 13.7 (11.0 - 17.0) |
| Newham | 151 | 42.8 (39.0 - 46.9) |
| Redbridge | 85 | 27.8 (24.5 - 31.4) |
| Richmond upon Thames | 11 | 5.4 (3.7 - 7.6) |
| Southwark | 45 | 14.2 (11.9 - 16.8) |
| Sutton | 24 | 11.6 (9.1 - 14.7) |
| Tower Hamlets | 61 | 18.8 (16.2 - 21.7) |
| Waltham Forest | 48 | 17.2 (14.5 - 20.3) |
| Wandsworth | 38 | 11.7 (9.6 - 14.0) |
| Westminster | 28 | 10.8 (8.6 - 13.4) |

Table 4b. West Midlands

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| West Midlands | 572 | 9.6 (9.2 - 10.1) |
| Birmingham | 210 | 18.4 (17.0 - 19.9) |
| Coventry | 72 | 19.3 (16.8 - 22.1) |
| Dudley | 20 | 6.2 (4.7 - 8.0) |
| Herefordshire, County of | 4 | 2.1 (1.1 - 3.6) |
| Sandwell | 60 | 18.4 (15.8 - 21.3) |
| Shropshire | 6 | 2.0 (1.2 - 3.1) |
| Solihull | 8 | 3.7 (2.4 - 5.5) |
| Staffordshire | 33 | 3.7 (3.0 - 4.5) |
| Cannock Chase | 3 | 2.6 (1.1 - 5.2) |
| East Staffordshire | 7 | 5.8 (3.6 - 8.9) |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| Lichfield | 1 | 1.0 (0.2 - 2.8) |
| Newcastle-under-Lyme | 6 | 4.9 (2.9 - 7.6) |
| South Staffordshire | 3 | 2.7 (1.2 - 5.1) |
| Stafford | 6 | 4.6 (2.8 - 7.2) |
| Staffordshire Moorlands | 3 | 3.0 (1.4 - 5.8) |
| Tamworth | 3 | 4.3 (2.1 - 8.0) |
| Stoke-on-Trent | 25 | 9.9 (7.8 - 12.4) |
| Telford and Wrekin | 8 | 4.5 (2.9 - 6.6) |
| Walsall | 36 | 12.6 (10.4 - 15.2) |
| Warwickshire | 28 | 4.8 (3.8 - 5.9) |
| North Warwickshire | 1 | 1.0 (0.1 - 3.7) |
| Nuneaton and Bedworth | 12 | 9.3 (6.5 - 12.8) |
| Rugby | 6 | 5.8 (3.5 - 9.1) |
| Stratford-on-Avon | 2 | 1.3 (0.4 - 3.0) |
| Warwick | 7 | 4.9 (3.0 - 7.4) |
| Wolverhampton | 52 | 19.8 (16.8 - 23.1) |
| Worcestershire | 18 | 3.0 (2.3 - 3.9) |
| Bromsgrove | 5 | 4.7 (2.6 - 7.9) |
| Malvern Hills | 1 | 1.7 (0.5 - 4.3) |
| Redditch | 3 | 3.1 (1.4 - 6.2) |
| Worcester | 5 | 4.9 (2.8 - 8.2) |
| Wychavon | 4 | 2.8 (1.4 - 5.1) |
| Wyre Forest | 1 | 0.7 (0.1 - 2.4) |

Table 4c. South East

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| South East | 489 | 5.5 (5.2 - 5.8) |
| Bracknell Forest | 6 | 5.2 (3.1 - 8.1) |
| Brighton and Hove | 14 | 4.8 (3.5 - 6.5) |
| Buckinghamshire | 45 | 8.2 (6.9 - 9.7) |
| East Sussex | 15 | 2.6 (1.9 - 3.5) |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| Eastbourne | 4 | 3.5 (1.8 - 6.3) |
| Hastings | 3 | 3.2 (1.5 - 6.1) |
| Lewes | 4 | 3.6 (1.8 - 6.4) |
| Rother | 1 | 1.0 (0.2 - 3.0) |
| Wealden | 3 | 2.1 (1.0 - 3.8) |
| Hampshire | 59 | 4.3 (3.7 - 5.0) |
| Basingstoke and Deane | 10 | 5.5 (3.7 - 7.9) |
| East Hampshire | 4 | 3.0 (1.5 - 5.4) |
| Eastleigh | 5 | 4.0 (2.3 - 6.5) |
| Fareham | 4 | 3.2 (1.6 - 5.6) |
| Gosport | 2 | 2.0 (0.6 - 4.6) |
| Hart | 2 | 2.1 (0.8 - 4.5) |
| Havant | 4 | 3.4 (1.8 - 5.9) |
| New Forest | 4 | 2.0 (1.0 - 3.6) |
| Rushmoor | 17 | 18.3 (13.7 - 24.0) |
| Test Valley | 5 | 3.7 (2.0 - 6.2) |
| Winchester | 3 | 2.7 (1.3 - 4.9) |
| Isle of Wight | 2 | 1.2 (0.4 - 2.7) |
| Kent | 78 | 5.0 (4.3 - 5.6) |
| Ashford | 7 | 5.1 (3.1 - 7.9) |
| Canterbury | 6 | 3.6 (2.1 - 5.7) |
| Dartford | 10 | 8.9 (6.0 - 12.7) |
| Dover | 3 | 2.8 (1.4 - 5.2) |
| Folkestone and Hythe | 6 | 5.6 (3.4 - 8.8) |
| Gravesham | 12 | 10.9 (7.6 - 15.2) |
| Maidstone | 16 | 9.1 (6.7 - 12.1) |
| Sevenoaks | 4 | 3.6 (1.9 - 6.1) |
| Swale | 5 | 3.6 (2.0 - 5.8) |
| Thanet | 6 | 4.5 (2.7 - 7.0) |
| Tonbridge and Malling | 1 | 1.0 (0.3 - 2.6) |
| Tunbridge Wells | 1 | 1.1 (0.3 - 2.9) |
| Medway | 21 | 7.5 (5.8 - 9.6) |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| Oxfordshire | 44 | 6.3 (5.3 - 7.5) |
| Cherwell | 12 | 8.0 (5.6 - 11.0) |
| Oxford | 23 | 15.1 (11.7 - 19.1) |
| South Oxfordshire | 3 | 1.9 (0.8 - 3.7) |
| Vale of White Horse | 5 | 3.4 (1.9 - 5.8) |
| West Oxfordshire | 1 | 1.2 (0.3 - 3.1) |
| Portsmouth | 12 | 5.7 (4.0 - 7.9) |
| Reading | 25 | 15.5 (12.2 - 19.4) |
| Slough | 44 | 29.7 (24.8 - 35.2) |
| Southampton | 25 | 9.8 (7.7 - 12.3) |
| Surrey | 45 | 3.8 (3.2 - 4.5) |
| Elmbridge | 5 | 3.4 (1.9 - 5.7) |
| Epsom and Ewell | 4 | 4.6 (2.3 - 8.1) |
| Guildford | 6 | 4.2 (2.6 - 6.6) |
| Mole Valley | 2 | 1.9 (0.6 - 4.5) |
| Reigate and Banstead | 8 | 5.2 (3.3 - 7.7) |
| Runnymede | 3 | 3.0 (1.3 - 5.9) |
| Spelthorne | 5 | 4.7 (2.6 - 7.9) |
| Surrey Heath | 3 | 3.4 (1.5 - 6.4) |
| Tandridge | 2 | 2.3 (0.8 - 4.9) |
| Waverley | 3 | 2.1 (0.9 - 4.2) |
| Woking | 6 | 6.0 (3.5 - 9.4) |
| West Berkshire | 7 | 4.4 (2.7 - 6.8) |
| West Sussex | 31 | 3.6 (2.9 - 4.4) |
| Adur | 2 | 2.6 (0.8 - 6.1) |
| Arun | 3 | 1.9 (0.9 - 3.5) |
| Chichester | 2 | 1.9 (0.8 - 4.0) |
| Crawley | 13 | 11.9 (8.5 - 16.1) |
| Horsham | 3 | 2.3 (1.1 - 4.3) |
| Mid Sussex | 3 | 2.0 (0.9 - 3.8) |
| Worthing | 5 | 4.2 (2.3 - 7.1) |
| Wokingham | 4 | 2.3 (1.2 - 4.1) |

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Table 4d. North West

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | |
|---|------------------------------------|---|--|--|--|--|
| North West | 486 | 6.6 (6.3 - 7.0) | | | | |
| Blackburn with Darwen | 28 | 18.9 (15.1 - 23.4) | | | | |
| Blackpool | 4 | 2.9 (1.5 - 5.0) | | | | |
| Bolton | 35 | 12.1 (9.9 - 14.6) | | | | |
| Bury | 15 | 7.9 (5.7 - 10.5) | | | | |
| Cheshire East | 7 | 1.9 (1.2 - 2.9) | | | | |
| Cheshire West and Chester | 9 | 2.5 (1.7 - 3.7) | | | | |
| Cumbria | 10 | 1.9 (1.3 - 2.8) | | | | |
| Allerdale | 2 | 2.0 (0.8 - 4.5) | | | | |
| Barrow-in-Furness | 1 | 2.0 (0.5 - 5.1) | | | | |
| Carlisle | 3 | 2.8 (1.3 - 5.2) | | | | |
| Copeland | 1 | 1.0 (0.1 - 3.5) | | | | |
| Eden | 0 | 0.6 (0.0 - 3.5) | | | | |
| South Lakeland | 2 | 2.2 (0.9 - 4.6) | | | | |
| Halton | 1 | 1.0 (0.3 - 2.6) | | | | |
| Knowsley | 2 | 1.1 (0.4 - 2.6) | | | | |
| Lancashire | 66 | 5.4 (4.7 - 6.2) | | | | |
| Burnley | 8 | 9.0 (5.8 - 13.4) | | | | |
| Chorley | 1 | 1.1 (0.3 - 2.9) | | | | |
| Fylde | 2 | 2.1 (0.7 - 4.8) | | | | |
| Hyndburn | 6 | 7.4 (4.4 - 11.7) | | | | |
| Lancaster | 4 | 3.0 (1.6 - 5.1) | | | | |
| Pendle | 16 | 17.4 (12.8 - 23.1) | | | | |
| Preston | 20 | 13.7 (10.5 - 17.7) | | | | |
| Ribble Valley | 1 | 1.1 (0.1 - 3.9) | | | | |
| Rossendale | 3 | 4.7 (2.2 - 8.6) | | | | |
| South Ribble | 2 | 2.1 (0.8 - 4.3) | | | | |
| West Lancashire | 1 | 0.6 (0.1 - 2.1) | | | | |
| Wyre | 2 | 1.8 (0.7 - 3.9) | | | | |
| Liverpool | 36 | 7.2 (5.9 - 8.7) | | | | |
| Manchester | 108 | 19.5 (17.4 - 21.7) | | | | |

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| Oldham | 40 | 16.8 (13.9 - 20.0) |
|------------|----|--------------------|
| Rochdale | 25 | 11.4 (9.0 - 14.3) |
| Salford | 20 | 7.9 (6.0 - 10.1) |
| Sefton | 7 | 2.7 (1.7 - 4.0) |
| St. Helens | 1 | 0.6 (0.1 - 1.6) |
| Stockport | 10 | 3.3 (2.2 - 4.7) |
| Tameside | 17 | 7.4 (5.5 - 9.7) |
| Trafford | 18 | 7.6 (5.7 - 9.9) |
| Warrington | 6 | 2.7 (1.6 - 4.3) |
| Wigan | 9 | 2.6 (1.7 - 3.9) |
| Wirral | 9 | 2.9 (1.9 - 4.2) |

Table 4e. East of England

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | | |
|---|------------------------------------|---|--|--|--|--|--|
| East of England | 382 | 5.9 (5.5 - 6.2) | | | | | |
| Bedford | 11 | 6.4 (4.4 - 8.9) | | | | | |
| Cambridgeshire | 46 | 7.1 (6.0 - 8.4) | | | | | |
| Cambridge | 24 | 19.2 (15.0 - 24.1) | | | | | |
| East Cambridgeshire | 3 | 3.0 (1.3 - 5.9) | | | | | |
| Fenland | 5 | 5.2 (3.0 - 8.5) | | | | | |
| Huntingdonshire | 8 | 4.3 (2.7 - 6.5) | | | | | |
| South Cambridgeshire | 7 | 4.2 (2.6 - 6.5) | | | | | |
| Central Bedfordshire | 5 | 1.8 (1.1 - 3.0) | | | | | |
| Essex | 51 | 3.4 (2.9 - 4.0) | | | | | |
| Basildon | 8 | 4.5 (2.9 - 6.6) | | | | | |
| Braintree | 4 | 2.4 (1.2 - 4.3) | | | | | |
| Brentwood | 3 | 4.3 (2.1 - 8.0) | | | | | |
| Castle Point | 5 | 5.5 (3.1 - 9.1) | | | | | |
| Chelmsford | 4 | 2.4 (1.3 - 4.2) | | | | | |
| Colchester | 5 | 2.7 (1.6 - 4.4) | | | | | |
| Epping Forest | 5 | 3.5 (1.9 - 5.9) | | | | | |
| Harlow | 6 | 6.5 (3.8 - 10.4) | | | | | |
| Maldon | 1 | 1.5 (0.3 - 4.5) | | | | | |
| Rochford | 1 | 1.1 (0.2 - 3.3) | | | | | |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | |
|---|------------------------------------|---|--|--|--|--|
| Tendring | 2 | 1.6 (0.6 - 3.3) | | | | |
| Uttlesford | 6 | 7.0 (4.2 - 10.9) | | | | |
| Hertfordshire | 71 | 5.9 (5.2 - 6.8) | | | | |
| Broxbourne | 5 | 5.1 (2.9 - 8.5) | | | | |
| Dacorum | 7 | 4.3 (2.6 - 6.6) | | | | |
| East Hertfordshire | 3 | 2.0 (0.9 - 3.8) | | | | |
| Hertsmere | 8 | 7.6 (4.9 - 11.4) | | | | |
| North Hertfordshire | 4 | 3.0 (1.5 - 5.2) | | | | |
| St Albans | 7 | 4.9 (3.1 - 7.5) | | | | |
| Stevenage | 7 | 8.0 (4.9 - 12.2) | | | | |
| Three Rivers | 6 | 6.1 (3.5 - 9.7) | | | | |
| Watford | 17 | 17.6 (13.1 - 23.1) | | | | |
| Welwyn Hatfield | 7 | 5.7 (3.5 - 8.7) | | | | |
| Luton | 49 | 23.1 (19.5 - 27.1) | | | | |
| Milton Keynes | 25 | 9.4 (7.4 - 11.8) | | | | |
| Norfolk | 40 | 4.4 (3.6 - 5.2) | | | | |
| Breckland | 5 | 3.8 (2.2 - 6.2) | | | | |
| Broadland | 2 | 1.5 (0.6 - 3.3) | | | | |
| Great Yarmouth | 13 | 12.8 (9.0 - 17.5) | | | | |
| King's Lynn and West Norfolk | 6 | 4.0 (2.3 - 6.3) | | | | |
| North Norfolk | 1 | 1.0 (0.2 - 2.8) | | | | |
| Norwich | 10 | 7.3 (5.0 - 10.4) | | | | |
| South Norfolk | 2 | 1.7 (0.7 - 3.4) | | | | |
| Peterborough | 35 | 17.2 (14.0 - 20.8) | | | | |
| Southend-on-Sea | 13 | 6.9 (4.9 - 9.5) | | | | |
| Suffolk | 22 | 2.9 (2.3 - 3.7) | | | | |
| Babergh | 1 | 1.4 (0.4 - 3.7) | | | | |
| East Suffolk | 7 | 2.7 (1.6 - 4.1) | | | | |
| Ipswich | 8 | 5.8 (3.7 - 8.7) | | | | |
| Mid Suffolk | 0 | 0.3 (0.0 - 1.8) | | | | |
| West Suffolk | 6 | 3.4 (2.0 - 5.3) | | | | |
| Thurrock | 10 | 5.9 (4.0 - 8.4) | | | | |

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Table 4f. East Midlands

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | |
|---|------------------------------------|---|--|--|--|--|
| East Midlands | 332 | 6.9 (6.5 - 7.3) | | | | |
| Derby | 28 | 11.0 (8.8 - 13.6) | | | | |
| Derbyshire | 11 | 1.3 (0.9 - 1.9) | | | | |
| Amber Valley | 1 | 0.8 (0.2 - 2.3) | | | | |
| Bolsover | 2 | 2.1 (0.7 - 4.8) | | | | |
| Chesterfield | 2 | 2.2 (0.9 - 4.6) | | | | |
| Derbyshire Dales | 1 | 1.4 (0.3 - 4.0) | | | | |
| Erewash | 1 | 1.2 (0.3 - 3.0) | | | | |
| High Peak | 1 | 1.1 (0.2 - 3.2) | | | | |
| North East Derbyshire | 1 | 1.0 (0.2 - 2.9) | | | | |
| South Derbyshire | 1 | 1.2 (0.3 - 3.2) | | | | |
| Leicester | 140 | 39.5 (35.8 - 43.5) | | | | |
| Leicestershire | 30 | 4.3 (3.4 - 5.2) | | | | |
| Blaby | 6 | 6.3 (3.8 - 9.8) | | | | |
| Charnwood | 10 | 5.6 (3.8 - 7.9) | | | | |
| Harborough | 3 | 2.8 (1.2 - 5.6) | | | | |
| Hinckley and Bosworth | 3 | 2.4 (1.0 - 4.6) | | | | |
| Melton | 2 | 3.3 (1.1 - 7.6) | | | | |
| North West Leicestershire | 2 | 2.3 (0.9 - 4.6) | | | | |
| Oadby and Wigston | 4 | 7.0 (3.6 - 12.2) | | | | |
| Lincolnshire | 23 | 3.1 (2.4 - 3.9) | | | | |
| Boston | 8 | 11.9 (7.7 - 17.5) | | | | |
| East Lindsey | 3 | 2.1 (1.0 - 4.0) | | | | |
| Lincoln | 5 | 4.7 (2.6 - 7.9) | | | | |
| North Kesteven | 2 | 2.0 (0.8 - 4.1) | | | | |
| South Holland | 2 | 2.1 (0.8 - 4.6) | | | | |
| South Kesteven | 2 | 1.4 (0.5 - 3.1) | | | | |
| West Lindsey | 1 | 1.0 (0.2 - 3.1) | | | | |
| Northamptonshire | 48 | 0.0 (0.0 - 0.0) | | | | |
| Corby | 4 | 0.0 (0.0 - 0.0) | | | | |
| Daventry | 3 | 0.0 (0.0 - 0.0) | | | | |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | |
|---|------------------------------------|---|--|--|--|
| East Northamptonshire | 1 | 0.0 (0.0 - 0.0) | | | |
| Kettering | 4 | 0.0 (0.0 - 0.0) | | | |
| Northampton | 27 | 0.0 (0.0 - 0.0) | | | |
| South Northamptonshire | 3 | 0.0 (0.0 - 0.0) | | | |
| Wellingborough | 5 | 0.0 (0.0 - 0.0) | | | |
| Nottingham | 39 | 11.7 (9.7 - 14.0) | | | |
| Nottinghamshire | 15 | 1.8 (1.3 - 2.4) | | | |
| Ashfield | 2 | 1.6 (0.6 - 3.4) | | | |
| Bassetlaw | 1 | 0.9 (0.2 - 2.5) | | | |
| Broxtowe | 2 | 1.8 (0.6 - 3.8) | | | |
| Gedling | 2 | 1.7 (0.6 - 3.7) | | | |
| Mansfield | 2 | 1.5 (0.5 - 3.6) | | | |
| Newark and Sherwood | 2 | 1.4 (0.4 - 3.2) | | | |
| Rushcliffe | 5 | 3.9 (2.1 - 6.6) | | | |
| Rutland | 1 | 1.7 (0.2 - 6.0) | | | |

Table 4g. Yorkshire and the Humber

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | | |
|---|------------------------------------|---|--|--|--|--|--|
| Yorkshire and the Humber | 326 | 5.9 (5.6 - 6.3) | | | | | |
| Barnsley | 4 | 1.6 (0.8 - 2.8) | | | | | |
| Bradford | 71 | 13.2 (11.4 - 15.0) | | | | | |
| Calderdale | 11 | 5.4 (3.7 - 7.5) | | | | | |
| Doncaster | 14 | 4.5 (3.2 - 6.1) | | | | | |
| East Riding of Yorkshire | 8 | 2.2 (1.4 - 3.4) | | | | | |
| Kingston upon Hull, City of | 18 | 6.9 (5.2 - 9.0) | | | | | |
| Kirklees | 42 | 9.5 (8.0 - 11.4) | | | | | |
| Leeds | 62 | 7.8 (6.7 - 9.0) | | | | | |
| North East Lincolnshire | 3 | 1.7 (0.7 - 3.3) | | | | | |
| North Lincolnshire | 6 | 3.5 (2.1 - 5.5) | | | | | |
| North Yorkshire | 12 | 1.9 (1.3 - 2.6) | | | | | |
| Craven | 1 | 1.8 (0.4 - 5.1) | | | | | |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | |
|---|------------------------------------|---|--|--|--|--|
| Hambleton | 2 | 1.8 (0.6 - 4.2) | | | | |
| Harrogate | 2 | 1.0 (0.3 - 2.4) | | | | |
| Richmondshire | 4 | 6.8 (3.4 - 12.2) | | | | |
| Ryedale | 0 | 0.6 (0.0 - 3.4) | | | | |
| Scarborough | 1 | 1.2 (0.3 - 3.1) | | | | |
| Selby | 2 | 2.2 (0.8 - 4.8) | | | | |
| Rotherham | 12 | 4.5 (3.2 - 6.3) | | | | |
| Sheffield | 43 | 7.4 (6.2 - 8.8) | | | | |
| Wakefield | 12 | 3.5 (2.5 - 4.9) | | | | |
| York | 8 | 3.8 (2.4 - 5.7) | | | | |

Table 4h. South West

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | |
|---|------------------------------------|---|--|--|--|--|
| South West | 198 | 3.5 (3.2 - 3.8) | | | | |
| Bath and North East Somerset | 4 | 2.2 (1.2 - 3.8) | | | | |
| Bournemouth, Christchurch and Poole | 17 | 4.4 (3.3 - 5.7) | | | | |
| Bristol, City of | 47 | 10.1 (8.5 - 11.9) | | | | |
| Cornwall | 12 | 2.2 (1.5 - 3.0) | | | | |
| Devon | 19 | 2.3 (1.8 - 3.0) | | | | |
| East Devon | 4 | 3.0 (1.6 - 5.1) | | | | |
| Exeter | 5 | 4.0 (2.3 - 6.6) | | | | |
| Mid Devon | 2 | 2.4 (0.9 - 5.3) | | | | |
| North Devon | 1 | 1.0 (0.2 - 3.0) | | | | |
| South Hams | 1 | 1.1 (0.2 - 3.4) | | | | |
| Teignbridge | 3 | 2.2 (1.0 - 4.2) | | | | |
| Torridge | 1 | 1.5 (0.3 - 4.3) | | | | |
| West Devon | 1 | 1.8 (0.4 - 5.2) | | | | |
| Dorset | 5 | 1.2 (0.7 - 2.1) | | | | |
| Gloucestershire | 22 | 3.5 (2.7 - 4.4) | | | | |
| Cheltenham | 4 | 3.4 (1.8 - 6.0) | | | | |
| Cotswold | 2 | 2.2 (0.8 - 4.9) | | | | |

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) |
|---|------------------------------------|---|
| ForestofDean | 1 | 1.5 (0.4 - 3.9) |
| Gloucester | 7 | 5.2 (3.1 - 8.0) |
| Stroud | 4 | 3.3 (1.7 - 5.8) |
| Tewkesbury | 4 | 4.2 (2.2 - 7.4) |
| Isles of Scilly | 0 | 0.0 (0.0 - 0.0) |
| North Somerset | 6 | 2.8 (1.7 - 4.4) |
| Plymouth | 10 | 3.8 (2.6 - 5.4) |
| Somerset | 11 | 2.0 (1.3 - 2.7) |
| Mendip | 1 | 1.2 (0.3 - 3.0) |
| Sedgemoor | 3 | 2.4 (1.1 - 4.6) |
| Somerset West and Taunton | 5 | 3.0 (1.6 - 5.1) |
| South Somerset | 2 | 1.2 (0.4 - 2.6) |
| South Gloucestershire | 12 | 4.2 (2.9 - 5.8) |
| Swindon | 19 | 8.7 (6.6 - 11.2) |
| Torbay | 3 | 2.4 (1.2 - 4.5) |
| Wiltshire | 10 | 1.9 (1.3 - 2.8) |

Table 4i. North East

| Upper tier local authority and local authority district | Average annual number of people | Average annual rate per 100,000 (95% CI) | | | | | |
|---|------------------------------------|---|--|--|--|--|--|
| North East | 94 | 3.5 (3.1 - 4.0) | | | | | |
| County Durham | 10 | 1.9 (1.3 - 2.7) | | | | | |
| Darlington | 5 | 5.0 (2.9 - 8.1) | | | | | |
| Gateshead | 7 | 3.6 (2.3 - 5.5) | | | | | |
| Hartlepool | 3 | 3.6 (1.7 - 6.6) | | | | | |
| Middlesbrough | 13 | 9.5 (6.8 - 12.9) | | | | | |
| Newcastle upon Tyne | 27 | 8.9 (7.1 - 11.1) | | | | | |
| North Tyneside | 5 | 2.2 (1.2 - 3.8) | | | | | |
| Northumberland | 3 | 0.8 (0.4 - 1.6) | | | | | |
| Redcar and Cleveland | 2 | 1.7 (0.7 - 3.5) | | | | | |
| South Tyneside | 5 | 3.1 (1.7 - 5.2) | | | | | |
| Stockton-on-Tees | 6 | 3.0 (1.8 - 4.8) | | | | | |
| Sunderland | 7 | 2.6 (1.7 - 4.0) | | | | | |

Table 5. Number and proportion of culture confirmed TB cases and pulmonary TB cases by country, UK, 2011 to 2020

| | | Eng | land | | Scotland | | | | Wales | | | | Northern Ireland | | | | UK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|----------------------------------|------|--------------|------|---|------|---------------------------|------|---------------------------|------|---------------------------|------|---------------------------|------|---------------------------|------|---------------------------|------|---------------------------|------|---------------------------|--|---------------------------|--|---------------------------|--|---------------------------|--|---------------------------|--|--------|------------------------|---------------|-----------------------------------|--------|-------------------------|-------------|--|------|-----------------------------|-------------|--|--------------------------|-------|------------------------------------|---------------|
| Year | Culture confirmed TB cases | | confirmed TB | | Culture confirmed pulmonary TB cases | | confirmed pulmonary TB | | confirmed pulmonary TB | | confirmed pulmonary TB | | confirmed pulmonary TB | | confirmed pulmonary TB | | confir | lture med TB ses | conf pulmo | lture ïrmed nary TB ises | confir | lture med TB ises | coi pulm | ulture nfirmed onary TB cases | conf | ulture irmed TB cases | coı pulm | ulture nfirmed onary TB cases | Culto confirm case | ed TB | Culti confir pulmona case | med ary TB |
| | n | % | N | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011 | 5052 | 61.0 | 3140 | 72.0 | 295 | 66.0 | 195 | 68.9 | 94 | 71.8 | 57 | 79.2 | 47 | 77.0 | 38 | 80.9 | 5488 | 61.5 | 3430 | 72.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2012 | 4905 | 60.7 | 3015 | 70.7 | 275 | 68.1 | 165 | 75.0 | 105 | 77.2 | 63 | 79.7 | 53 | 60.9 | 36 | 76.6 | 5338 | 61.3 | 3279 | 71.1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013 | 4402 | 60.6 | 2774 | 73.4 | 241 | 61.8 | 156 | 71.9 | 87 | 61.3 | 65 | 74.7 | 45 | 61.6 | 29 | 69.0 | 4775 | 60.7 | 3024 | 73.3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014 | 3936 | 60.8 | 2522 | 73.2 | 236 | 67.8 | 162 | 70.7 | 81 | 71.1 | 55 | 85.9 | 64 | 67.4 | 47 | 70.1 | 4317 | 61.4 | 2786 | 73.2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015 | 3506 | 61.1 | 2296 | 74.4 | 209 | 66.1 | 130 | 78.3 | 80 | 69.0 | 61 | 91.0 | 39 | 63.9 | 33 | 82.5 | 3834 | 61.6 | 2520 | 75.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016 | 3587 | 63.8 | 2370 | 76.9 | 210 | 68.4 | 130 | 72.2 | 80 | 76.9 | 65 | 86.7 | 56 | 65.1 | 39 | 78.0 | 3933 | 64.3 | 2604 | 76.9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017 | 3174 | 62.6 | 2131 | 75.7 | 198 | 68.0 | 133 | 77.8 | 75 | 72.1 | 52 | 85.2 | 47 | 67.1 | 34 | 70.8 | 3494 | 63.2 | 2350 | 76.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018 | 2866 | 62.2 | 1980 | 75.4 | 187 | 69.0 | 135 | 79.9 | 77 | 80.2 | 66 | 88.0 | 35 | 66.0 | 27 | 69.2 | 3165 | 62.9 | 2208 | 75.9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019 | 2896 | 61.6 | 1967 | 75.1 | 176 | 72.7 | 128 | 83.1 | 82 | 80.4 | 63 | 84.0 | 55 | 77.5 | 44 | 86.3 | 3209 | 62.7 | 2202 | 75.9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 2505 | 60.7 | 1659 | 75.3 | 136 | 68.0 | 88 | 83.8 | 62 | 78.5 | 41 | 87.2 | 36 | 66.7 | 28 | 73.7 | 2739 | 61.4 | 1816 | 75.9 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Note that data for Scotland and Northern Ireland is provisional and subject to further validation.

Over the last 10 years, the proportion of TB cases that were culture confirmed in the UK has remained relatively stable at around 61.0%, with some annual fluctuations. Wales generally had the greatest proportion of culture confirmed TB cases, which increased from 71.8% to 80.4% between 2011 and 2019, respectively. There was a slight decrease in culture confirmation in Wales from 80.4% to 78.5% between 2019 and 2020. In Northern Ireland, the proportion has remained relatively high in recent years, increasing from 66.0% in 2018 to 77.5% in 2019. A decrease from 77.5% in 2019 to 66.7% in 2020 was observed. The proportion for Scotland (2020: 68.0%) and England (2020: 60.7%) has remained relatively consistent throughtout the 10 year period. Overall, culture confirmation was higher in pulmonary TB cases, with almost three-quarters of these being culture confirmed in the UK during 2020 (75.9%).

| | England | | | | Scotland ^b | | | | Wales | | | | | Norther | n Ireland | þ | UK | | | | | | | | | | | | | | | | | | | | | | | | |
|------|--------------------------------|-----|-----------|-----|-----------------------|-----|---|-----|-------|-----|---|-----|---|---------|-----------|-----|-----|-----|----|-----|----|------|-----|---------------------------|--|--|-------------------------------|--|--------------------|--|--|-----------------------------|--------------------|--|--------------------------------|--|--------------------|--|------------------------------|--|---------------------------|
| Year | INH-R TB cases ^c | | MDR/RR-TB | | MDR/RR-TB cases | | | | | | | | | | | | | | | | | | | -R TB ses ^c | | | B INH-R TB cases ^c | | MDR/RR-TB cases | | | I-R TB ases ^c | MDR/RR-TB cases | | INH-R TB cases ^c | | MDR/RR-TB cases | | XDR-TB cases ^d | | DR cohort ^e |
| | n | % | n | % | n | % | n | % | n | % | 0 | % | n | % | n | % | n | % | 0 | % | n | % | N | | | | | | | | | | | | | | | | | | |
| 2000 | 150 | 5.4 | 41 | 1.5 | 11 | 3.8 | 0 | 0.0 | 2 | 1.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 163 | 5.1 | 41 | 1.3 | 1 | 0.03 | 41 | | | | | | | | | | | | | | | | | | |
| 2001 | 187 | 5.9 | 33 | 1.0 | 7 | 2.8 | 2 | 0.8 | 2 | 2.6 | 3 | 3.8 | 0 | 0.0 | 1 | 2.7 | 196 | 5.6 | 39 | 1.1 | 0 | 0.00 | 44 | | | | | | | | | | | | | | | | | | |
| 2002 | 239 | 6.3 | 45 | 1.2 | 9 | 3.5 | 1 | 0.4 | 6 | 7.5 | 1 | 1.3 | 2 | 5.6 | 0 | 0.0 | 256 | 6.1 | 47 | 1.1 | 0 | 0.00 | 50 | | | | | | | | | | | | | | | | | | |
| 2003 | 232 | 6.1 | 68 | 1.8 | 8 | 3.0 | 1 | 0.4 | 6 | 5.5 | 3 | 2.8 | 1 | 3.2 | 0 | 0.0 | 247 | 5.8 | 72 | 1.7 | 1 | 0.02 | 74 | | | | | | | | | | | | | | | | | | |
| 2004 | 250 | 6.2 | 61 | 1.5 | 14 | 4.6 | 1 | 0.3 | 5 | 5.0 | 2 | 2.0 | 1 | 1.6 | 1 | 1.6 | 270 | 6.0 | 65 | 1.4 | 0 | 0.00 | 72 | | | | | | | | | | | | | | | | | | |
| 2005 | 281 | 6.2 | 56 | 1.2 | 11 | 4.1 | 0 | 0.0 | 1 | 0.8 | 2 | 1.7 | 0 | 0.0 | 1 | 2.2 | 293 | 5.9 | 59 | 1.2 | 0 | 0.00 | 62 | | | | | | | | | | | | | | | | | | |
| 2006 | 284 | 6.1 | 74 | 1.6 | 12 | 4.2 | 2 | 0.7 | 5 | 3.9 | 1 | 0.8 | 1 | 2.2 | 2 | 4.4 | 302 | 5.9 | 79 | 1.6 | 0 | 0.00 | 86 | | | | | | | | | | | | | | | | | | |
| 2007 | 254 | 5.8 | 63 | 1.4 | 8 | 2.8 | 5 | 1.7 | 10 | 7.9 | 4 | 3.2 | 2 | 3.5 | 3 | 5.3 | 274 | 5.6 | 75 | 1.5 | 0 | 0.00 | 83 | | | | | | | | | | | | | | | | | | |
| 2008 | 217 | 4.8 | 68 | 1.5 | 12 | 3.8 | 3 | 1.0 | 3 | 3.0 | 3 | 3.0 | 2 | 3.9 | 1 | 2.0 | 234 | 4.7 | 75 | 1.5 | 2 | 0.04 | 85 | | | | | | | | | | | | | | | | | | |
| 2009 | 268 | 5.8 | 70 | 1.5 | 18 | 5.6 | 2 | 0.6 | 6 | 5.1 | 1 | 0.8 | 0 | 0.0 | 0 | 0.0 | 292 | 5.7 | 73 | 1.4 | 2 | 0.04 | 80 | | | | | | | | | | | | | | | | | | |
| 2010 | 228 | 5.0 | 75 | 1.7 | 15 | 4.6 | 1 | 0.3 | 6 | 5.6 | 0 | 0.0 | 2 | 3.9 | 1 | 2.0 | 251 | 5.0 | 77 | 1.5 | 3 | 0.06 | 81 | | | | | | | | | | | | | | | | | | |
| 2011 | 296 | 6.0 | 89 | 1.8 | 18 | 6.1 | 2 | 0.7 | 1 | 1.1 | 2 | 2.1 | 1 | 2.3 | 2 | 4.5 | 316 | 5.9 | 95 | 1.8 | 6 | 0.11 | 101 | | | | | | | | | | | | | | | | | | |
| 2012 | 255 | 5.3 | 86 | 1.8 | 13 | 4.8 | 2 | 0.7 | 9 | 8.7 | 1 | 1.0 | 3 | 5.7 | 0 | 0.0 | 280 | 5.3 | 89 | 1.7 | 2 | 0.04 | 97 | | | | | | | | | | | | | | | | | | |
| 2013 | 232 | 5.4 | 78 | 1.8 | 11 | 4.7 | 5 | 2.1 | 6 | 6.9 | 2 | 2.3 | 6 | 13.3 | 0 | 0.0 | 255 | 5.5 | 85 | 1.8 | 3 | 0.06 | 93 | | | | | | | | | | | | | | | | | | |
| 2014 | 215 | 5.5 | 59 | 1.5 | 17 | 7.2 | 2 | 0.9 | 7 | 8.6 | 3 | 3.7 | 3 | 4.7 | 1 | 1.6 | 242 | 5.6 | 65 | 1.5 | 3 | 0.07 | 81 | | | | | | | | | | | | | | | | | | |
| 2015 | 192 | 5.5 | 54 | 1.5 | 9 | 4.3 | 2 | 1.0 | 6 | 7.5 | 1 | 1.3 | 3 | 7.7 | 0 | 0.0 | 210 | 5.5 | 57 | 1.5 | 10 | 0.26 | 70 | | | | | | | | | | | | | | | | | | |
| 2016 | 191 | 5.4 | 62 | 1.7 | 7 | 3.3 | 1 | 0.5 | 2 | 2.5 | 1 | 1.3 | 2 | 3.6 | 3 | 5.4 | 202 | 5.2 | 67 | 1.7 | 7 | 0.18 | 77 | | | | | | | | | | | | | | | | | | |
| 2017 | 181 | 5.8 | 57 | 1.8 | 12 | 6.1 | 3 | 1.5 | 7 | 9.6 | 3 | 4.1 | 1 | 2.1 | 0 | 0.0 | 201 | 5.8 | 63 | 1.8 | 3 | 0.09 | 71 | | | | | | | | | | | | | | | | | | |
| 2018 | 187 | 6.6 | 46 | 1.6 | 13 | 7.0 | 3 | 1.6 | 3 | 4.1 | 2 | 2.7 | 3 | 8.6 | 0 | 0.0 | 206 | 6.6 | 51 | 1.6 | 5 | 0.16 | 55 | | | | | | | | | | | | | | | | | | |
| 2019 | 186 | 6.5 | 53 | 1.8 | 9 | 5.2 | 1 | 0.6 | 2 | 2.7 | 1 | 1.3 | 4 | 7.3 | 1 | 1.8 | 201 | 6.3 | 56 | 1.8 | 4 | 0.13 | 56 | | | | | | | | | | | | | | | | | | |
| 2020 | 157 | 6.4 | 58 | 2.4 | 10 | 7.7 | 0 | 0.0 | 2 | 7.1 | 0 | 0.0 | 3 | 8.3 | 0 | 0.0 | 172 | 6.5 | 58 | 2.2 | 4 | 0.15 | 58 | | | | | | | | | | | | | | | | | | |

Table 6. Number and proportion of TB cases^a with drug resistance by country, UK, 2000 to 2020

^a Culture-confirmed TB cases with results for at least isoniazid and rifampicin. For all countries results are from phenotypic DSTs, with some cases in England having WGS resistance predictions.

^b Data for Scotland and Northern Ireland is provisional and subject to further validation.

^c Cases who are resistant to isoniazid without MDR-TB.

^d One of the XDR-TB cases was notified in Northern Ireland in 2010, all others were notified in England.

^e The drug resistant (DR) cohort includes cases with confirmed initial or acquired MDR/RR-TB, as well as those treated with a second line regimen for MDR/RR-TB (without phenotypic DST results or WGS resistance predictions).

Overall, the proportion of culture confirmed TB cases with isoniazid resistance without MDR-TB in the UK has slightly increased (2000: 5.4%, 2020: 6.4%), as has the proportion of cases with MDR/RR-TB since 2000 (2000:1.5%, 2020: 2.4%). In 2020, all the 58 MDR/RR-TB cases in the UK were from England. Four confirmed cases of XDR-TB were notified in the UK in 2020, all of which were in England.

Table 7. TB outcome at 12 months for drug sensitive TB cases with expected treatment duration of less than 12 months by country, UK, 2019

Data in this table excludes initial and acquired resistance to rifampicin and MDR-TB cases and those treated with an MDR-TB regimen. Also excludes those with CNS, spinal, miliary or cryptic disseminated TB. Figures in the 'not evaluated' columns include unknown and transferred out. Data for Scotland and Northern Ireland is provisional and subject to further validation.

| Country. | Com | oleted | Di | ed | Lost to f | ollow-up | Still on t | reatment | Sto | oped | Not ev | Total | |
|------------------|-------|--------|-----|-----|-----------|----------|------------|----------|-----|------|--------|-------|-------|
| Country | n | % | n | % | n | % | n | % | n | % | n | % | n |
| England | 3,425 | 82.0 | 177 | 4.2 | 143 | 3.4 | 217 | 5.2 | 54 | 1.3 | 161 | 3.9 | 4,177 |
| Scotland | 141 | 62.9 | 10 | 4.5 | 0 | 0.0 | 10 | 4.5 | 1 | 0.4 | 62 | 27.7 | 224 |
| Wales | 52 | 54.7 | 6 | 6.3 | 1 | 1.1 | 2 | 2.1 | 0 | 0.0 | 34 | 35.8 | 95 |
| Northern Ireland | 29 | 48.3 | 4 | 6.7 | 4 | 6.7 | 10 | 16.7 | 0 | 0.0 | 13 | 21.7 | 60 |
| UK | 3,647 | 80.0 | 197 | 4.3 | 148 | 3.2 | 239 | 5.2 | 55 | 1.2 | 270 | 5.9 | 4,556 |

.For drug-sensitive TB cases notified in 2019, with an expected treatment duration of less than 12 months, treatment completion at 12 months varied by country but the highest proportion was in England (82.0%). It should be noted that a high proportion of cases in Scotland and Northern Ireland did not have a reported outcome ('not evaluated' in Table 7) and likely accounts for the low proportion of cases reported as having completed treatment. Overall, 4.3% of TB cases died in the UK, and 3.2% were lost to follow up. The highest number of deaths was in England (177) although the greatest proportion of deaths was recorded in Northern Ireland (6.7%).

Table 8. Treatment completion at 12 months for drug sensitive TB cases with expected treatment duration of less than 12 months by country, UK, 2010 to 2019

Data in this table excludes initial and acquired resistance to rifampicin and MDR-TB cases and those treated with an MDR-TB regimen. It also excludes those with CNS, spinal, miliary or cryptic disseminated TB. Data for Scotland and Northern Ireland is provisional and subject to further validation.

| Country | 201 | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 17 | 2018 | | 2019 | |
|-------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| Country | n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| England | 5,655 | 83.0 | 6,024 | 82.1 | 6,015 | 83.7 | 5,504 | 85.7 | 4,847 | 84.9 | 4,205 | 84.0 | 4,230 | 85.2 | 3,817 | 85.3 | 3,506 | 84.8 | 3,425 | 82.0 |
| Scotland ^b | 362 | 77.0 | 322 | 75.9 | 302 | 79.3 | 287 | 81.5 | 258 | 80.4 | 225 | 80.6 | 212 | 74.9 | 218 | 80.4 | 165 | 67.1 | 141 | 62.9 |
| Wales | 107 | 77.5 | 90 | 76.3 | 90 | 75.0 | 101 | 83.5 | 76 | 82.6 | 87 | 86.1 | 78 | 83.0 | 67 | 70.5 | 73 | 85.9 | 52 | 54.7 |
| Northern Ireland ^b | 39 | 67.2 | 42 | 79.2 | 55 | 70.5 | 43 | 74.1 | 74 | 85.1 | 42 | 87.5 | 60 | 78.9 | 54 | 85.7 | 35 | 72.9 | 29 | 48.3 |
| UK | 6,163 | 82.4 | 6,478 | 81.7 | 6,462 | 83.3 | 5,935 | 85.3 | 5,255 | 84.7 | 4,559 | 83.9 | 4,580 | 84.5 | 4,156 | 84.7 | 3,779 | 83.7 | 3,647 | 80.0 |

In the UK, the proportion of drug sensitive TB cases, with an expected treatment duration of less than 12 months, who completed treatment by 12 months improved between 2010 and 2013, with some annual fluctuations. Since 2013 (85.3%), there has been a slight decline in this proportion (2019: 80.0%). Due to small numbers of cases in Northern Ireland, Scotland and Wales, there are larger annual fluctuations in the proportion of cases completing treatment. It should be noted that in 2019 the low proportions of cases completing treatment may be due to missing outcomes (see explanation in text below Table 7).

Table 9. Last recorded TB outcome for the entire drug-sensitive TB cohort by country, UK, 2019

Data in this table excludes initial and acquired resistance to rifampicin and MDR-TB cases and those treated with an MDR-TB regimen. Data in the 'Not evaluated' columns includes unknown and transferred out. Data for Scotland and Northern Ireland is provisional and subject to further validation.

| Country | Comp | pleted | Di | ed | Lost to | follow-up | | l on ment | Stop | oped | Not eva | Total | |
|---------------------|-------|--------|-----|-----|---------|-----------|----|--------------|------|------|---------|-------|-------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n |
| England | 3,927 | 84.5 | 229 | 4.9 | 162 | 3.5 | 90 | 1.9 | 59 | 1.3 | 182 | 3.9 | 4,649 |
| Scotland | 156 | 64.7 | 12 | 5.0 | 0 | 0.0 | 3 | 1.2 | 2 | 0.8 | 68 | 28.2 | 241 |
| Wales | 59 | 58.4 | 6 | 5.9 | 1 | 1.0 | 1 | 1.0 | 0 | 0.0 | 34 | 33.7 | 101 |
| Northern Ireland | 41 | 58.6 | 4 | 5.7 | 5 | 7.1 | 3 | 4.3 | 0 | 0.0 | 17 | 24.3 | 70 |
| UK | 4,183 | 82.7 | 251 | 5.0 | 168 | 3.3 | 97 | 1.9 | 61 | 1.2 | 301 | 5.9 | 5,061 |

Almost 83.0% of drug sensitive TB cases notified in the UK in 2019 completed treatment at their last recorded outcome, with 1.9% reported as still being on treatment. Overall, 251 (5.0%) cases had died, and 168 (3.3).

About the UK Health Security Agency

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