

Protecting and improving the nation's health

Tuberculosis in England: National Quarterly Report: Q2 2019

1 April - 30 June 2019

Provisional data

About Public Health England

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Public Health England Wellington House 133-155 Waterloo Road London SE1 8UG

Tel: 020 7654 8000 www.gov.uk/phe Twitter: @PHE_uk

Facebook: www.facebook.com/PublicHealthEngland

Prepared by: TB Unit, TARGET, National Infection Service, PHE

For queries relating to this document, please contact: tbsection@phe.gov.uk



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Background

This report presents quarterly data on tuberculosis (TB) case notifications in England.

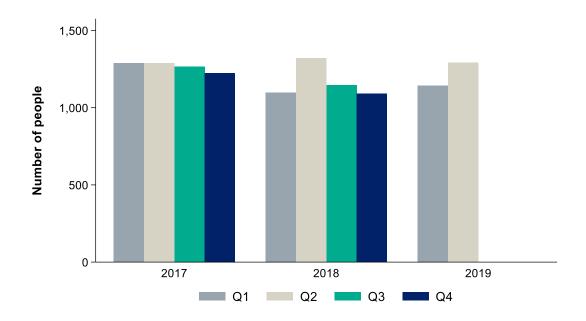
Detailed results for 2018 will be published in the annual report 'Tuberculosis in England' in July 2019. The most recent annual report with data up to the end of 2017 is available here.

Please note data for 2019 is provisional and subject to validation and should be interpreted with caution.

This report aims to provide timely and up-to-date figures of key epidemiological indicators to inform ongoing TB control efforts in England.

Overall numbers and geographical distribution

Figure 1: Number of TB notifications in England, Q1 2017 - Q2 2019



In the second quarter of 2019 (Q2, 1 April to 30 June), 1,293 people were notified with TB in England. This is a 2.1% decrease in numbers compared to Q2 2018. Exact numbers are shown in Table 1.

Please note: due to the reported seasonality in TB notifications the most recent quarter is being compared to the same quarter in the previous year rather than to the previous quarter.

London

600 500 400 300 100 -

Figure 2: Number of TB notifications by PHE Centre^a, England, Q1 2017 – Q2 2019

Q2

2018

Q3

2019

Q4

In Q2 2019, the number of people notified with TB in:

2017

0

East Midlands, North West and West Midlands was lower than in Q2 2018

Q1

East of England and South West was higher than in Q2 2018

^a Note the axes on the London figure are different to that of the other PHECs due to the higher number of TB notifications in London.

Figure 2: Number of TB notifications by PHE Centre, England, Q1 2017 – Q2 2019 continued

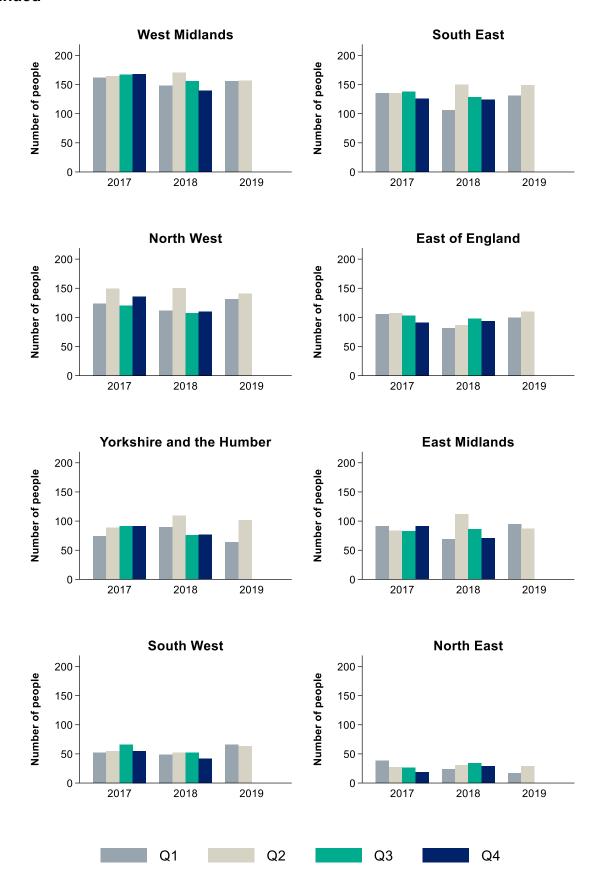


Table 1: Number of TB notifications by PHE Centre, England, Q1 2017 - Q2 2019

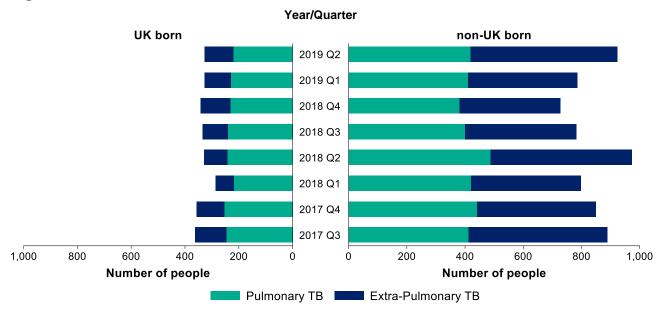
PHECa	2017			2018				2019		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2 ^b
London	506	480	473	448	419	460	408	404	384	455 ↓
West Midlands	162	164	167	168	148	170	156	139	156	157 ↓
South East	135	135	138	126	106	150	128	124	131	149 🗸
North West	124	149	120	136	112	150	107	110	131	141 🔱
East of England	106	107	103	91	82	87	98	94	100	110 🛧
Yorkshire and the Humber	74	89	91	91	90	109	76	77	64	102 ↓
East Midlands	91	84	83	91	69	112	86	71	95	87 ↓
South West	52	55	66	55	49	52	52	42	66	63 ↑
North East	38	27	26	19	24	31	34	29	17	29 ↓
England	1,288	1,290	1,267	1,225	1,099	1,321	1,145	1,090	1,144	1,293 ↓

^a Ordered by decreasing total number of people with TB in Q2 2019

^b Arrows show whether there has been a decrease (↓), an increase (↑) or no change (¬) in the number of people notified with TB in each PHEC in Q2 2019 compared to Q2 2018

Demographic and clinical characteristics

Figure 3: Number of TB notifications by place of birth and site of disease, England, Q3 2017 – Q2 2019

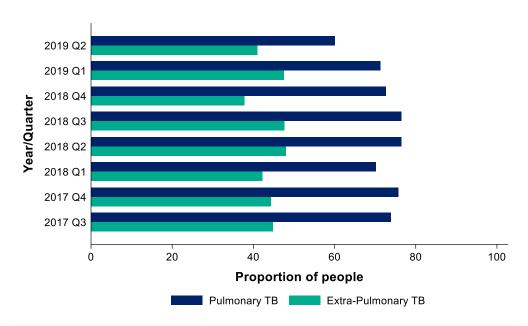


Compared with Q2 2018 (974), in Q2 2019 (925) there was a 5.0% decrease in the number of people notified with TB who were born outside the UK. Conversely, the number born in the UK remained stable in the same time period (Q2 2018: 330, Q2 2019: 332).

In Q2 2019, the number of people with pulmonary TB accounted for 51.5% (662/1,286) of all people with TB. For those born outside the UK, this proportion was 45.3% (419/924), whilst the proportion was much higher among people born in the UK (67.6%, 221/327).

Culture confirmation

Figure 4: Proportion of culture confirmation among TB notifications by site of disease, England, Q3 2017 – Q2 2019



Among people with pulmonary TB, the proportion who were culture confirmed increased from 70.2% in Q1 2018 to 71.2% in Q1 2019. The proportion with culture confirmed extra-pulmonary TB also increased in the same time period (Q1 2018: 42.2%, Q1 2019: 47.5%). Note Q1 2019 is being compared as the number for Q2 2019 will likely increase as final results for cultures may not yet be available.

In Q1 2019, the largest changes in the proportion of people with culture confirmation for:

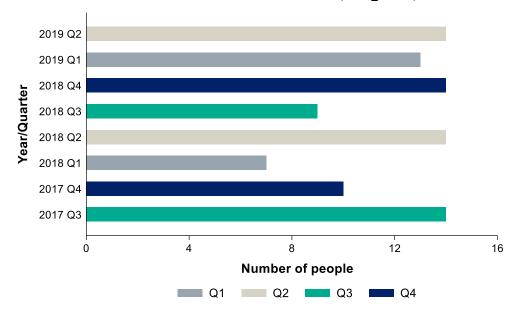
- pulmonary TB were seen in the East of England, London and North East, being higher than in Q1 2018
- pulmonary TB were seen in the North West, South West and West Midlands, being lower than in Q1 2018
- extra-pulmonary TB were seen in the East of England, South West, West Midlands,
 London and Yorkshire and the Humber, being higher than in Q1 2018
- extra-pulmonary TB were seen in the North East and North West, being lower than in Q1 2018

South East West Midlands London 2019 Q2 2019 Q2 2019 Q2 2019 Q1 2019 Q1 2019 Q1 Year/Quarter Year/Quarter Year/Quarter 2018 Q4 2018 Q4 2018 Q4 2018 Q3 2018 Q3 2018 Q3 2018 Q2 2018 Q2 2018 Q2 2018 Q1 2018 Q1 2018 Q1 2017 Q4 2017 Q4 2017 Q4 2017 Q3 2017 Q3 2017 Q3 0 20 40 60 80 100 0 20 40 60 80 100 0 20 40 60 80 100 Proportion of people Proportion of people Proportion of people **North West East of England** Yorkshire and the Humber 2019 Q2 2019 Q2 2019 Q2 2019 Q1 2019 Q1 2019 Q1 Year/Quarter Year/Quarter 2018 Q4 2018 Q4 2018 Q4 2018 Q3 2018 Q3 2018 Q3 2018 Q2 2018 Q2 2018 Q2 2018 Q1 2018 Q1 2018 Q1 2017 Q4 2017 Q4 2017 Q4 2017 Q3 2017 Q3 2017 Q3 0 20 40 60 80 100 0 20 40 60 80 100 0 20 40 60 80 100 Proportion of people Proportion of people Proportion of people **East Midlands South West North East** 2019 Q2 2019 Q2 2019 Q2 2019 Q1 2019 Q1 2019 Q1 Year/Quarter Year/Quarter Year/Quarter 2018 Q4 2018 Q4 2018 Q4 2018 Q3 2018 Q3 2018 Q3 2018 Q2 2018 Q2 2018 Q2 2018 Q1 2018 Q1 2018 Q1 2017 Q4 2017 Q4 2017 Q4 2017 Q3 2017 Q3 2017 Q3 20 40 60 80 100 20 40 60 80 100 20 40 60 80 100 0 0 Proportion of people Proportion of people Proportion of people Pulmonary TB Extra-Pulmonary TB

Figure 5: Proportion of culture confirmation among TB notifications by site of disease and PHE Centre, Q3 2017 - Q2 2019

Multi-drug resistant/rifampicin resistant (MDR/RR) TB

Figure 6: Number^a of TB notifications with MDR/RR-TB, England, Q3 2017 – Q2 2019

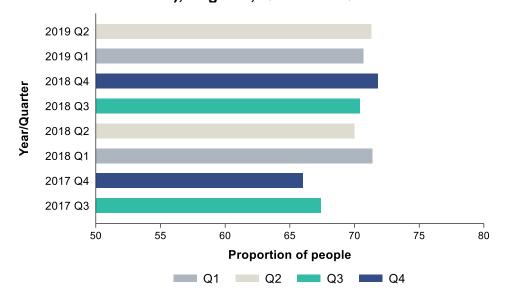


^a Note figure displays numbers rather than proportions due to low number of MDR/RR-TB notifications

There were 14 people notified in Q2 2019 who were confirmed to have MDR/RR-TB, the same number as were confirmed in Q2 2018. Numbers may increase as final results for cultures in the most recent quarters may not yet be available.

Treatment delays

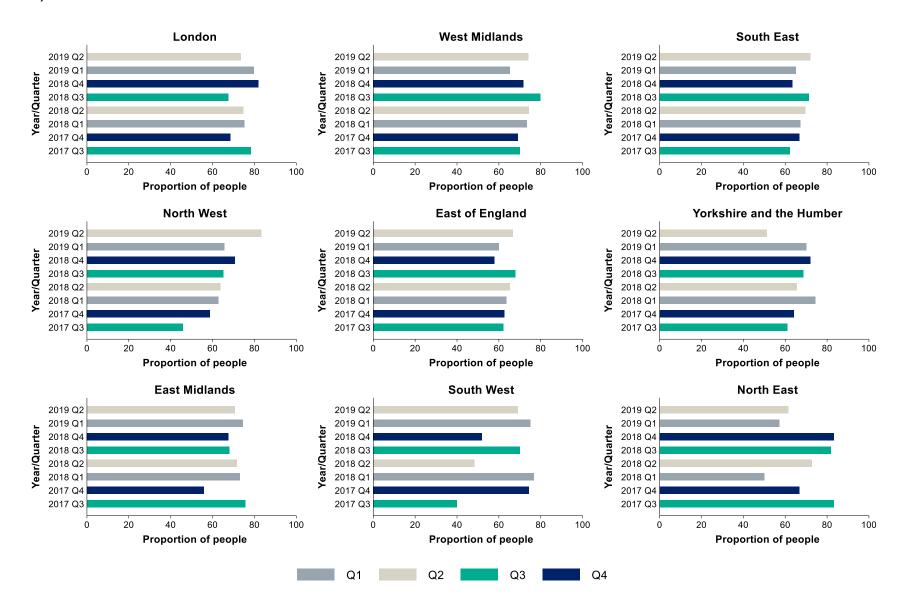
Figure 7: Proportion^a of pulmonary TB notifications starting treatment within 4 months (symptom onset to treatment start), England, Q3 2017 – Q2 2019



^a Note x-axis is not scaled to start at zero in order to more clearly visualise changes in proportions

The proportion of people with pulmonary TB who started treatment within 4 months of symptom onset was 71.3% in Q2 2019, an increase from 70.0% in Q2 2018. This proportion will likely increase as some people in the most recent quarter are yet to begin treatment.

Figure 8: Proportion of pulmonary TB notifications starting treatment within 4 months (symptom onset to treatment start) by PHE Centre, Q3 2017 – Q2 2019

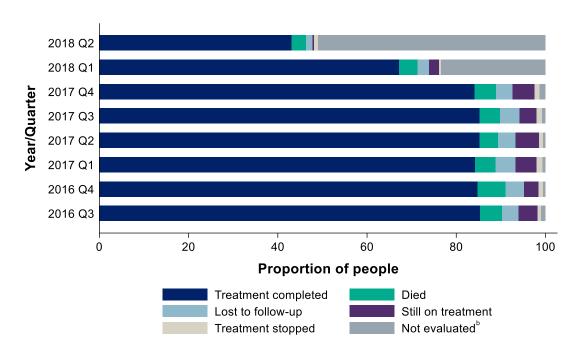


In Q2 2019, the proportion of people with TB who started treatment within 4 months of symptom onset in:

- the North West and South West was markedly higher than in Q2 2018
- the North East and Yorkshire and the Humber was markedly lower than in Q2 2018

Treatment outcomes

Figure 9: Outcomes at 12 months for people with drug sensitive TB with expected treatment duration <12 months^a, England, Q3 2016 – Q2 2018



^a Excludes people in the drug resistant cohort and those with CNS, spinal, miliary or cryptic disseminated TB

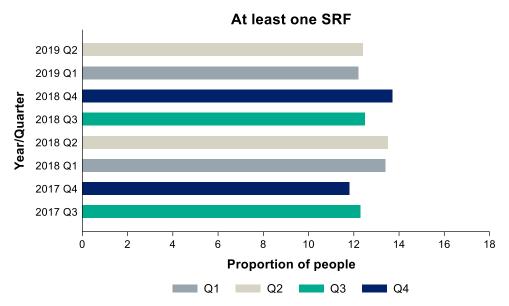
The proportion of people with drug sensitive TB (with an expected treatment duration of less than 12 months) who completed treatment at 12 months was 84.2% for people notified in Q4 2017, a similar proportion to those notified in Q4 2016 (84.8%).

Please note: the latest 2 quarters show a high proportion of people with treatment outcomes recorded as "not evaluated" despite having started at least 12 months previously. This reflects a delay in reporting the final outcome and this effect is no longer seen after a further 2 quarters, by when the data are complete. For a meaningful comparison of complete data, Q4 2017 should be compared to Q4 2016. The proportion not evaluated for the latest 2 quarters is expected to decrease with time.

^b Not evaluated includes unknown and transferred out

Social risk factors

Figure 10: Proportion of TB notifications (≥15 years) with social risk factors (SRF), England, Q3 2017 – Q2 2019



^a Note the axes on the figure for people with at least 1 SRF are different to that for individual SRFs due to the higher proportion of people with at least 1 SRF.

In Q2 2019, 12.4% of people with TB aged 15 years and older had at least 1 SRF, a decrease from 13.5% in Q2 2018.

In Q2 2019, the proportion of people with TB with:

- current or a history of drug misuse was lower than in Q2 2018
- alcohol misuse was lower than in Q2 2018
- current or a history of homelessness was higher than in Q2 2018
- imprisonment was slightly higher than in Q2 2018

Figure 10: Proportion of TB notifications (≥15 years) with social risk factors, England, Q3 2017 – Q2 2019 continued

