
1 April - 30 June 2019

Provisional data
About Public Health England

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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

© Crown copyright 2019
You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit OGL. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published July 2019
PHE publications gateway number: GW-572

PHE supports the UN Sustainable Development Goals

Corporate member of Plain English Campaign
Committed to clearer communication

339
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>4</td>
</tr>
<tr>
<td>Demographic and clinical characteristics</td>
<td>8</td>
</tr>
<tr>
<td>Culture confirmation</td>
<td>9</td>
</tr>
<tr>
<td>Multi-drug resistant/rifampicin resistant (MDR/RR) TB</td>
<td>11</td>
</tr>
<tr>
<td>Treatment delays</td>
<td>11</td>
</tr>
<tr>
<td>Treatment outcomes</td>
<td>13</td>
</tr>
<tr>
<td>Social risk factors</td>
<td>14</td>
</tr>
</tbody>
</table>
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.
Figure 2: Number of TB notifications by PHE Centre*, England, Q1 2017 – Q2 2019

London

* 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.

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

- East Midlands, North West and West Midlands was lower than in Q2 2018
- East of England and South West was higher than in Q2 2018
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

<table>
<thead>
<tr>
<th>PHEC(^a)</th>
<th>2017</th>
<th></th>
<th></th>
<th>2018</th>
<th></th>
<th></th>
<th>2019</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>London</td>
<td>506</td>
<td>480</td>
<td>473</td>
<td>448</td>
<td>419</td>
<td>460</td>
<td>408</td>
<td>404</td>
</tr>
<tr>
<td>West Midlands</td>
<td>162</td>
<td>164</td>
<td>167</td>
<td>168</td>
<td>148</td>
<td>170</td>
<td>156</td>
<td>139</td>
</tr>
<tr>
<td>South East</td>
<td>135</td>
<td>135</td>
<td>138</td>
<td>126</td>
<td>106</td>
<td>150</td>
<td>128</td>
<td>124</td>
</tr>
<tr>
<td>North West</td>
<td>124</td>
<td>149</td>
<td>120</td>
<td>136</td>
<td>112</td>
<td>150</td>
<td>107</td>
<td>110</td>
</tr>
<tr>
<td>East of England</td>
<td>106</td>
<td>107</td>
<td>103</td>
<td>91</td>
<td>82</td>
<td>87</td>
<td>98</td>
<td>94</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>74</td>
<td>89</td>
<td>91</td>
<td>91</td>
<td>90</td>
<td>109</td>
<td>76</td>
<td>77</td>
</tr>
<tr>
<td>East Midlands</td>
<td>91</td>
<td>84</td>
<td>83</td>
<td>91</td>
<td>69</td>
<td>112</td>
<td>86</td>
<td>71</td>
</tr>
<tr>
<td>South West</td>
<td>52</td>
<td>55</td>
<td>66</td>
<td>55</td>
<td>49</td>
<td>52</td>
<td>52</td>
<td>42</td>
</tr>
<tr>
<td>North East</td>
<td>38</td>
<td>27</td>
<td>26</td>
<td>19</td>
<td>24</td>
<td>31</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td><strong>England</strong></td>
<td>1,288</td>
<td>1,290</td>
<td>1,267</td>
<td>1,225</td>
<td>1,099</td>
<td>1,321</td>
<td>1,145</td>
<td>1,090</td>
</tr>
</tbody>
</table>

\(^a\) 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
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

![Bar chart showing number of TB notifications with MDR/RR-TB from Q2 2017 to 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

![Bar chart showing proportion of people with pulmonary TB starting treatment within 4 months from symptom onset to treatment start from Q2 2017 to 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

\(^b\) Not evaluated includes unknown and transferred out

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.
Social risk factors

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

![Diagram showing proportion of TB notifications with social risk factors over different quarters]

*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