



Public Health
England

Protecting and improving the nation's health

Tuberculosis in England

National quarterly report: Q3 2020

1 July to 30 September 2020

Provisional data

About Public Health England

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Published October 2020

PHE publications

gateway number: GW-1665

PHE supports the UN

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Contents

Background	4
Overall numbers and geographical distribution	5
Demographic and clinical characteristics	9
Culture confirmation	9
Multi-drug resistant/rifampicin resistant (MDR/RR) TB	12
Treatment delays	13
Treatment outcomes	15
Social risk factors	16

Background

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

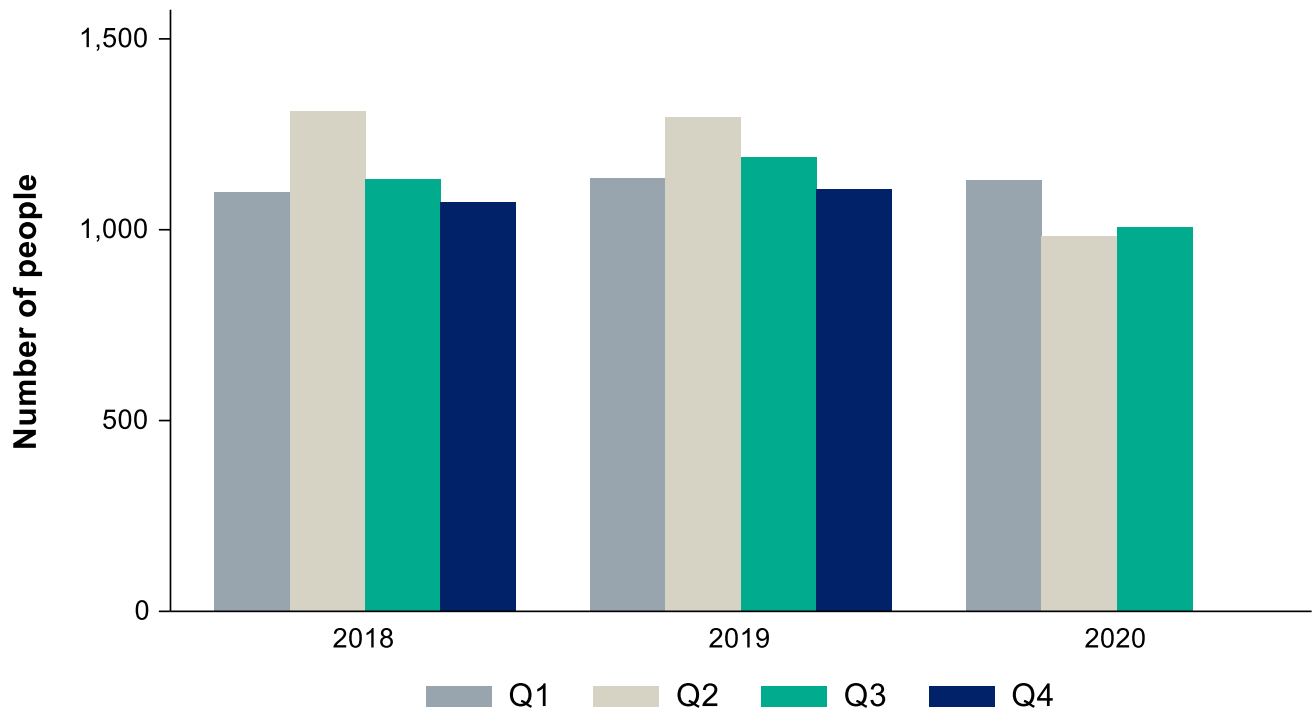
Detailed results for 2019 will be published in the annual report 'Tuberculosis in England: 2019 report' in 2020. The **most recent annual report** with data up to the end of 2018 is available.

Please note: data for 2019 and 2020 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

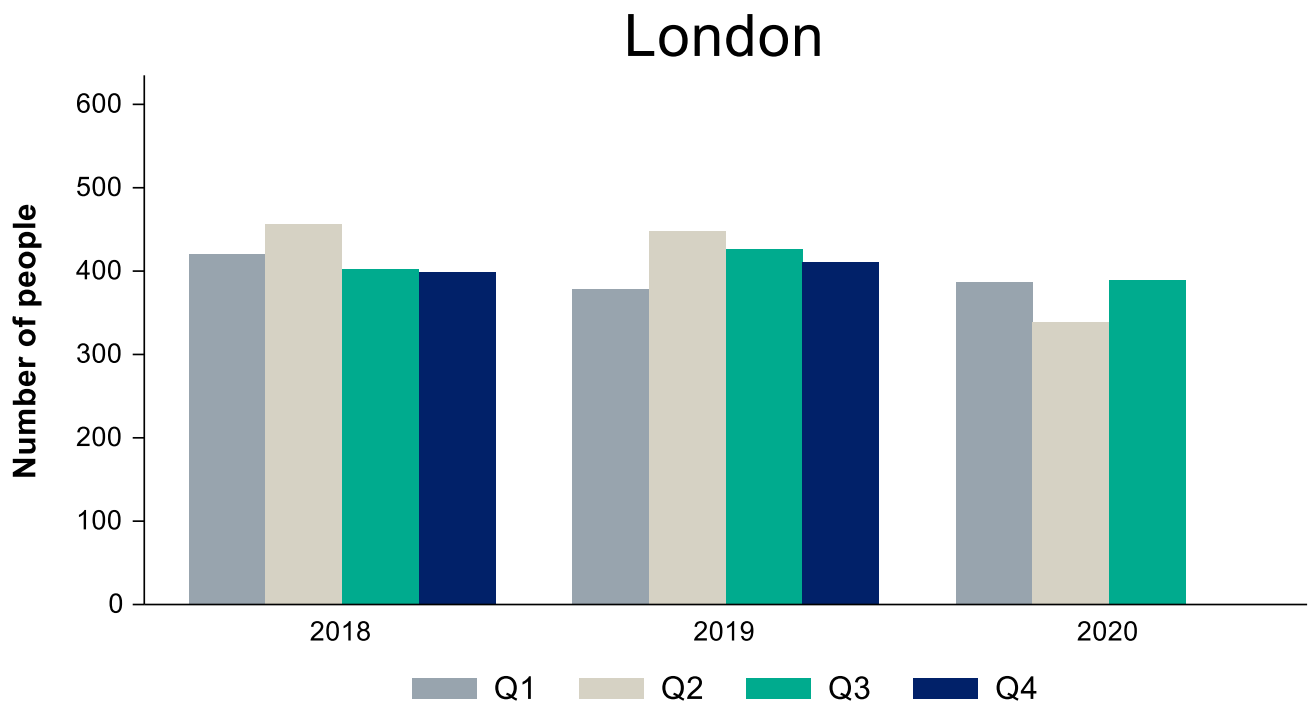
Figure 1: Number of TB notifications in England, Q1 2018 to Q3 2020



In the third quarter of 2020 (Q3 2020, 1 July to 30 September), 1,007 people were notified with TB in England. This is a 15.4% decrease compared to the same quarter in the previous year (Q3 2019: 1,190). Exact numbers are shown in Table 1.

Please note: due to the seasonality of 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^a, England, Q1 2018 to Q3 2020



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

In Q3 2020, the number of people notified with TB in:

- all PHE Centres was lower than in Q3 2019
- the South West had the largest decline (42.4%) whilst the South East had the smallest decline in numbers (4.0%) compared to Q3 2019

Figure 2: Number of TB notifications by PHE Centre, England, Q1 2018 to Q3 2020 continued

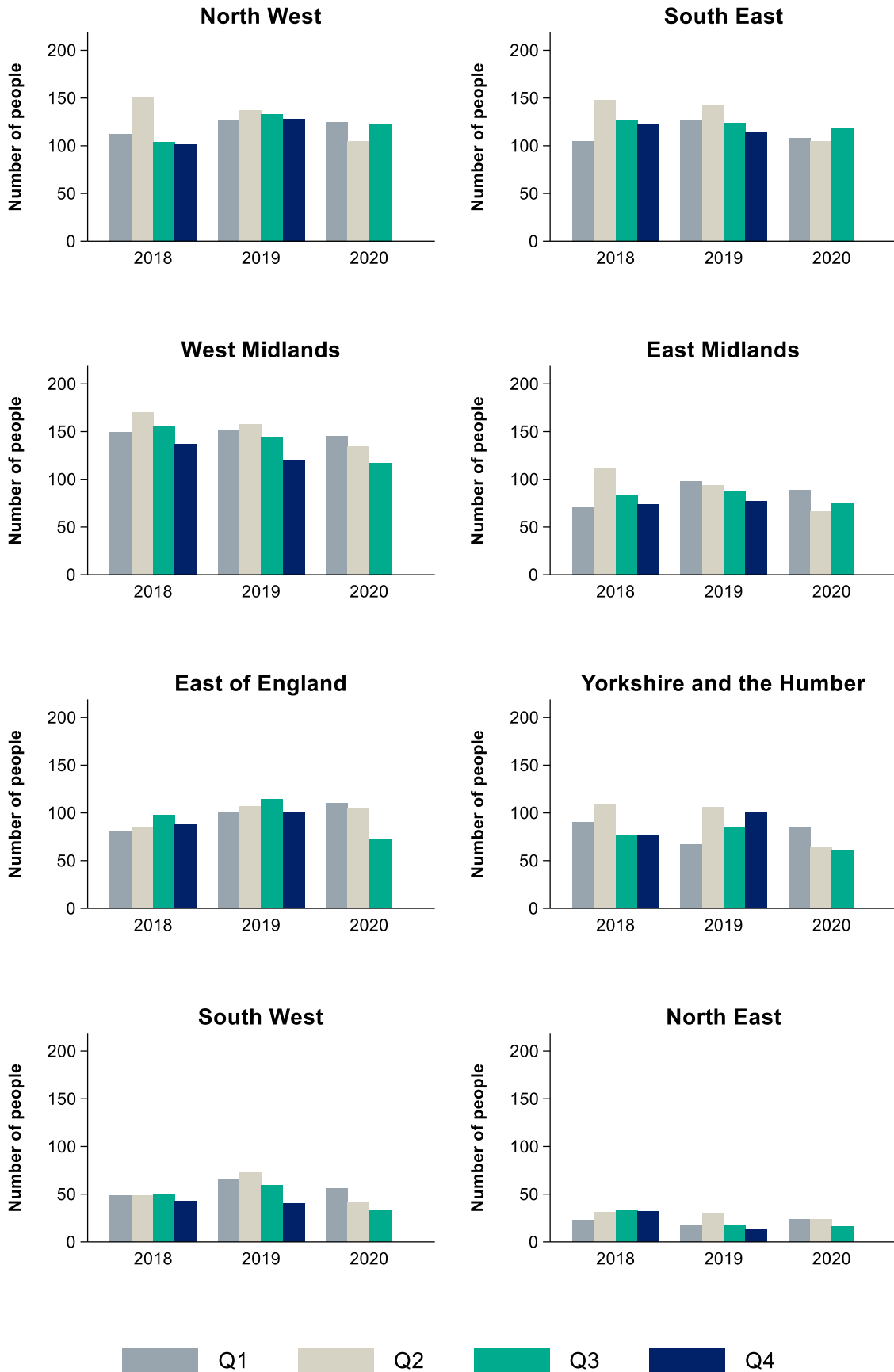


Table 1: Number of TB notifications by PHE Centre, England, Q1 2018 to Q3 2020

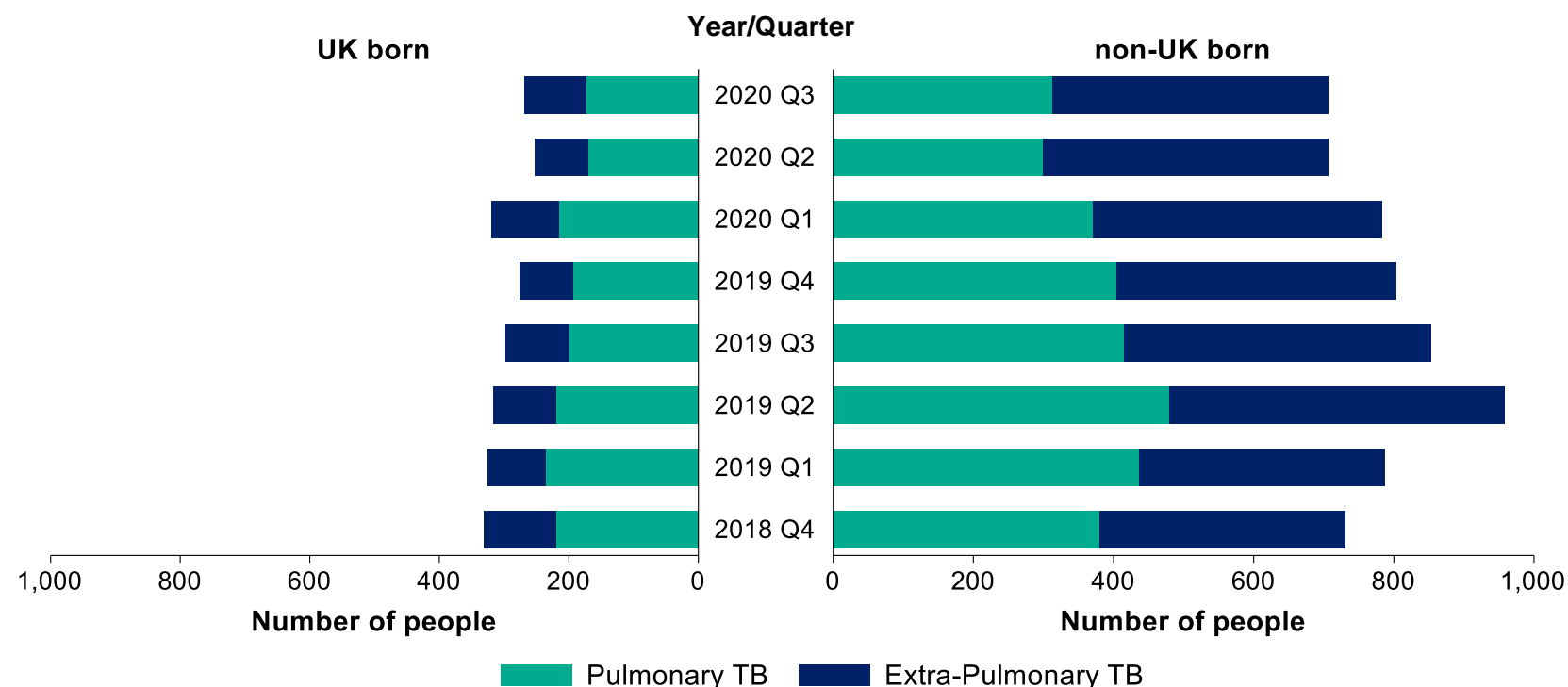
PHEC ^a	2018					2019					2020			
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3 ^b	Total
London	420	457	403	399	1,679	379	448	427	411	1,665	387	339	389↓	1,115
North West	112	150	104	101	467	127	137	133	128	525	125	105	123↓	353
South East	105	148	126	123	502	127	142	124	115	508	108	105	119↓	332
West Midlands	149	170	156	137	612	152	158	144	120	574	145	134	117↓	396
East Midlands	70	112	84	74	340	98	94	87	77	356	89	66	75↓	230
East of England	81	85	98	88	352	100	107	114	101	422	110	104	73↓	287
Yorkshire and the Humber	90	109	76	76	351	67	106	84	101	358	85	64	61↓	210
South West	49	49	50	43	191	66	73	59	40	238	56	41	34↓	131
North East	23	31	34	32	120	18	30	18	13	79	24	24	16↓	64
England	1,099	1,311	1,131	1,073	4,614	1,134	1,295	1,190	1,106	4,725	1,129	982	1,007↓	3,118

^a Ordered by decreasing total number of people with TB in Q3 2020

^b Arrows show whether there has been a decrease (↓), an increase (↑) or no change (–) in the number of people notified with TB in each PHE Centre in Q3 2020 compared to Q3 2019

Demographic and clinical characteristics

Figure 3: Number of TB notifications by place of birth and site of disease, England, Q4 2018 to Q3 2020

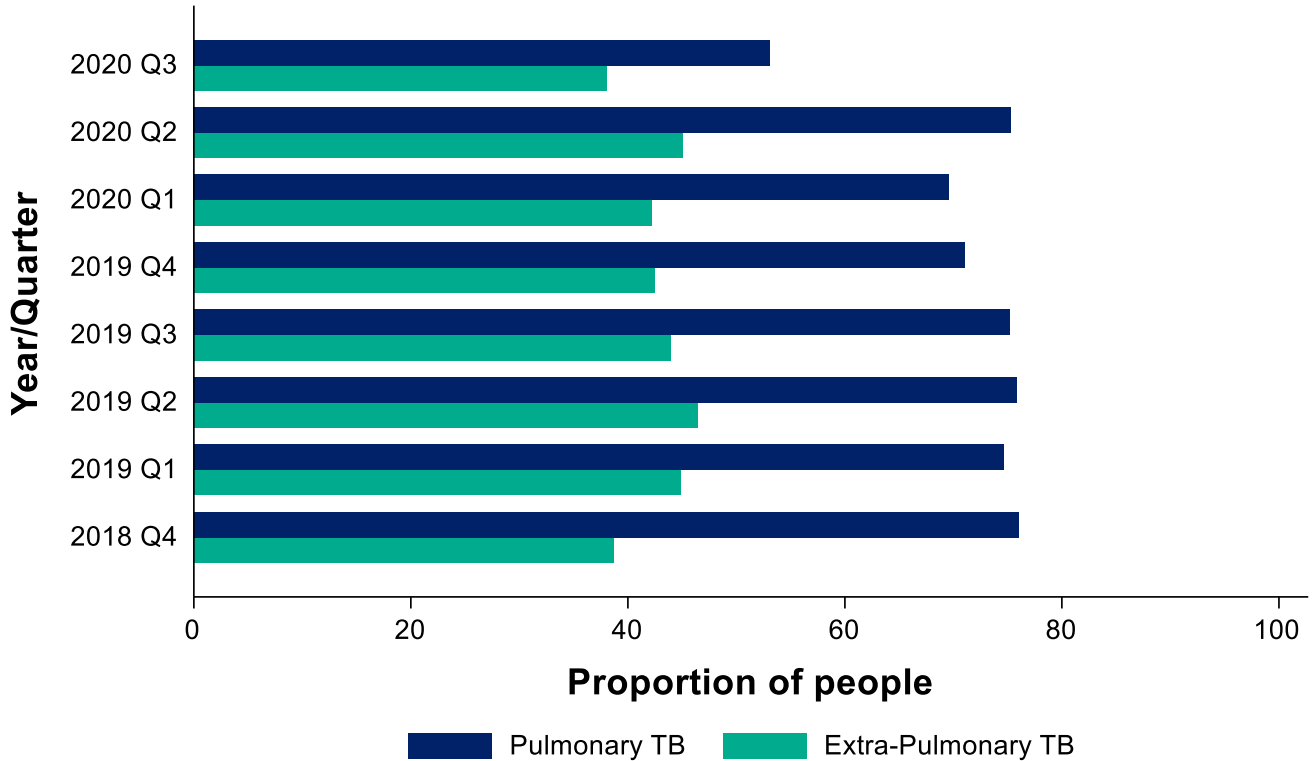


Compared with Q3 2019 (853), in Q3 2020 (707) there was a 17.1% decrease in the number of people notified with TB who were born outside the UK. Similarly, the number born in the UK decreased in the same time period (Q3 2019: 298, Q3 2020: 269, -9.7%).

In Q3 2020, the number of people with pulmonary TB accounted for 49.9% (487/976) of all people with TB, having decreased from 53.4% in Q3 2019 (615/1,151). For those born outside the UK, this proportion was 44.3% (313/707), whilst the proportion was much higher among people born in the UK (64.7%, 174/269).

Culture confirmation

Figure 4: Proportion of culture confirmation among TB notifications by site of disease, England, Q4 2018 to Q3 2020



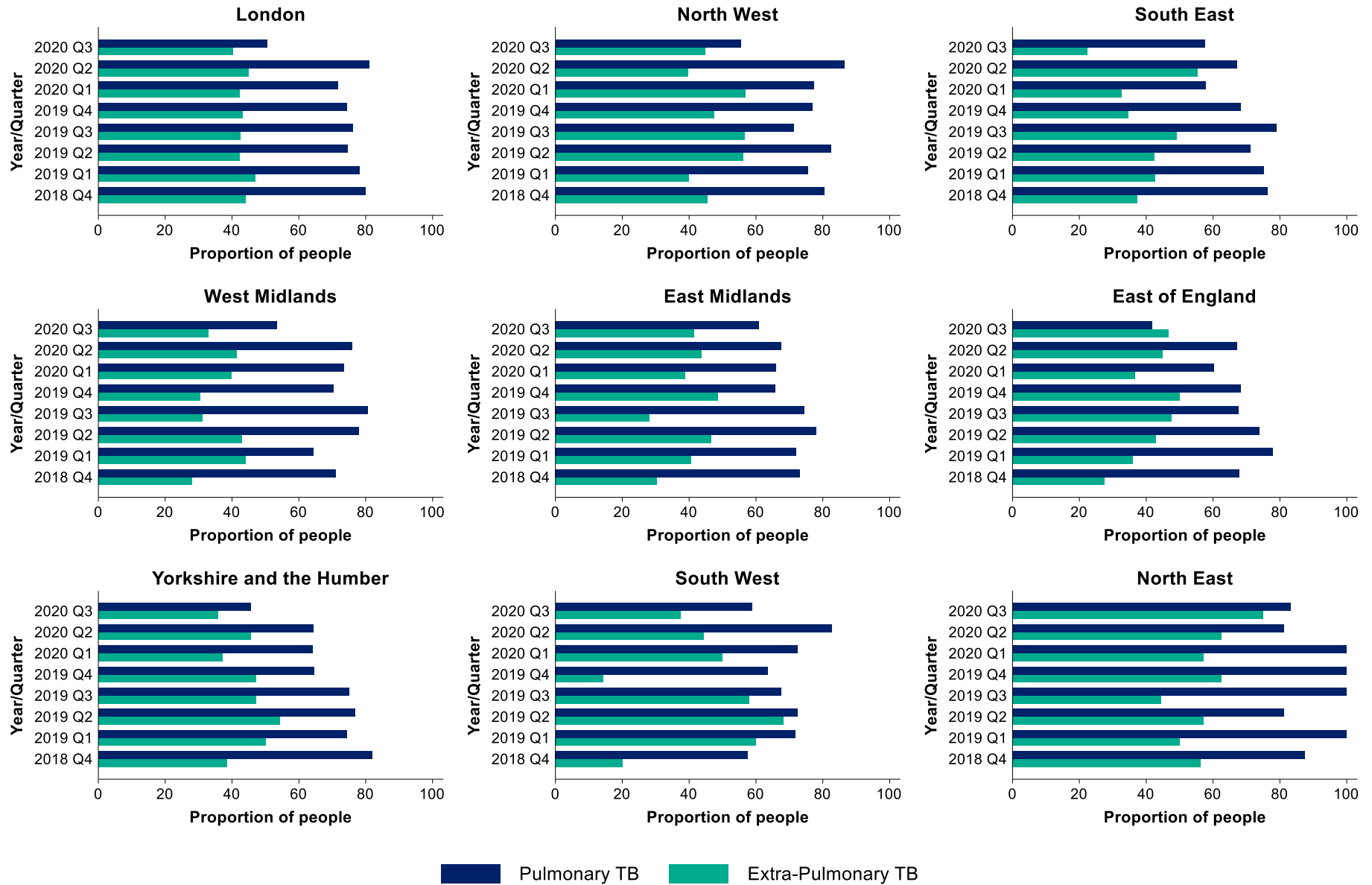
Among people with pulmonary TB, the proportion who were culture confirmed was comparable in Q2 of 2019 and 2020 (75.8% versus 75.3%, respectively). The proportion with culture confirmed extra-pulmonary TB slightly decreased in the same time period (Q2 2019: 46.4%, Q2 2020: 45.0%).

Please note: Q2 2020 is being compared as the number for Q3 2020 will likely increase as final results for cultures may not yet be available.

In Q2 2020, the largest changes in the proportion of people with culture confirmation were:

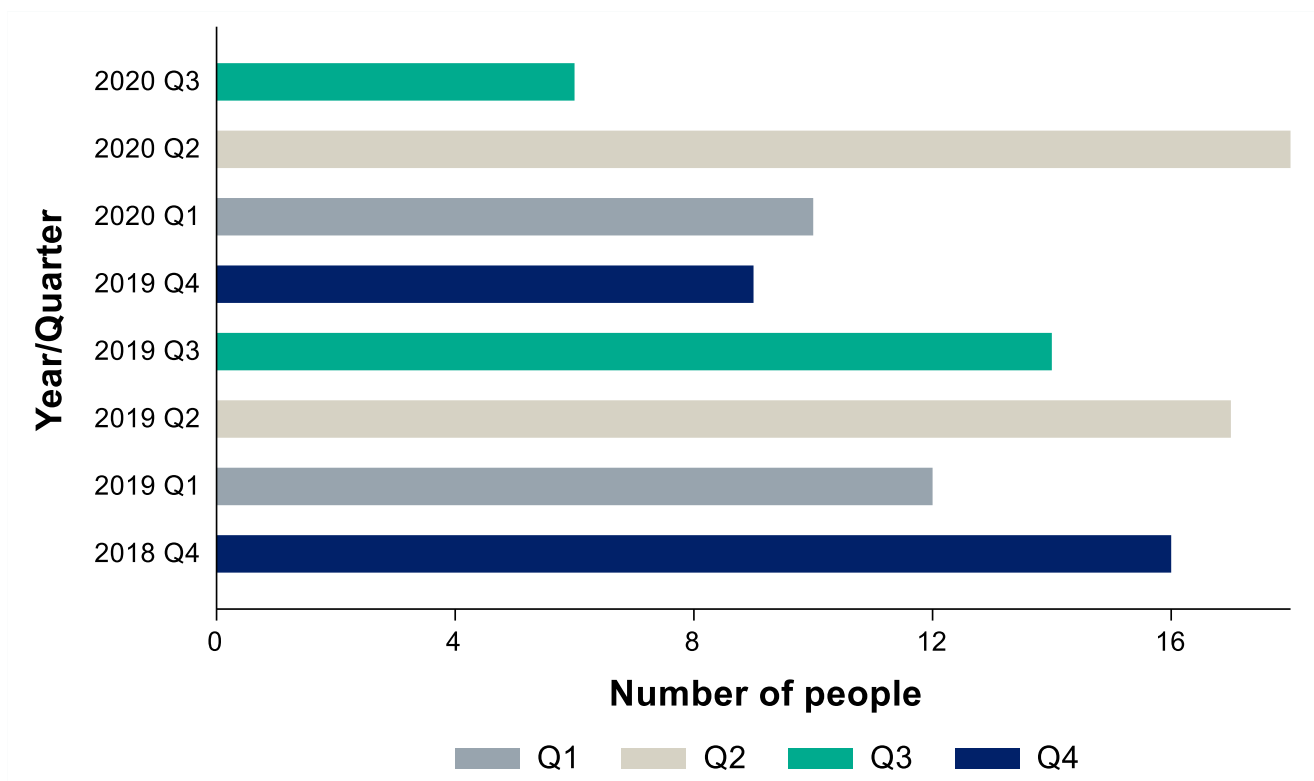
- pulmonary TB in the South West, being higher than in Q2 2019
- pulmonary TB in Yorkshire and the Humber, being lower than in Q2 2019
- extra-pulmonary TB in the South East, being higher than in Q2 2019
- extra-pulmonary TB in South West and North West, being lower than in Q2 2019

Figure 5: Proportion of culture confirmation among TB notifications by site of disease and PHE Centre, Q4 2018 to Q3 2020



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

Figure 6: Number^a of TB notifications with MDR/RR-TB, England, Q4 2018 to Q3 2020

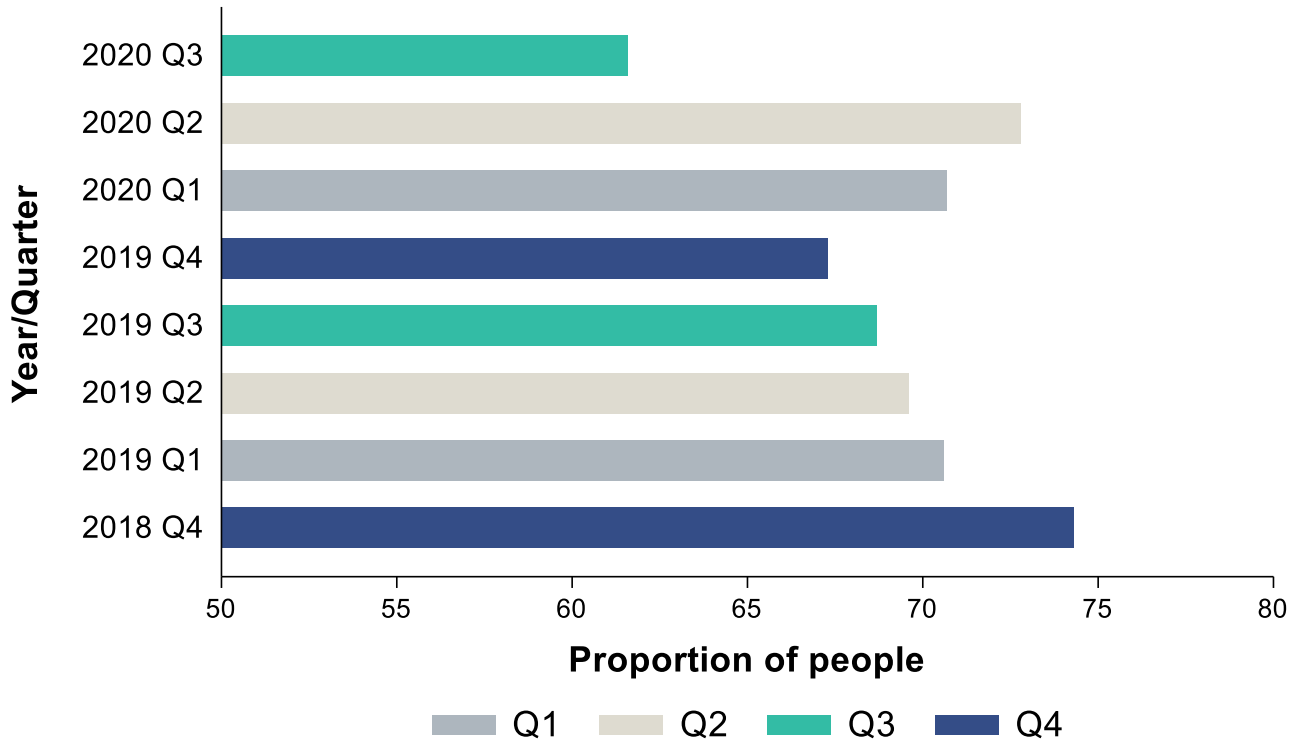


^a Note figure displays numbers rather than proportions due to low number of MDR/RR-TB notifications.

There were 6 people notified in Q3 2020 with confirmed MDR/RR-TB. Overall, 52 people were notified with MDR/RR-TB in 2019, compared to 46 in the previous year. Numbers may increase as final results for cultures in the most recent quarters may not yet be available.

Treatment delays

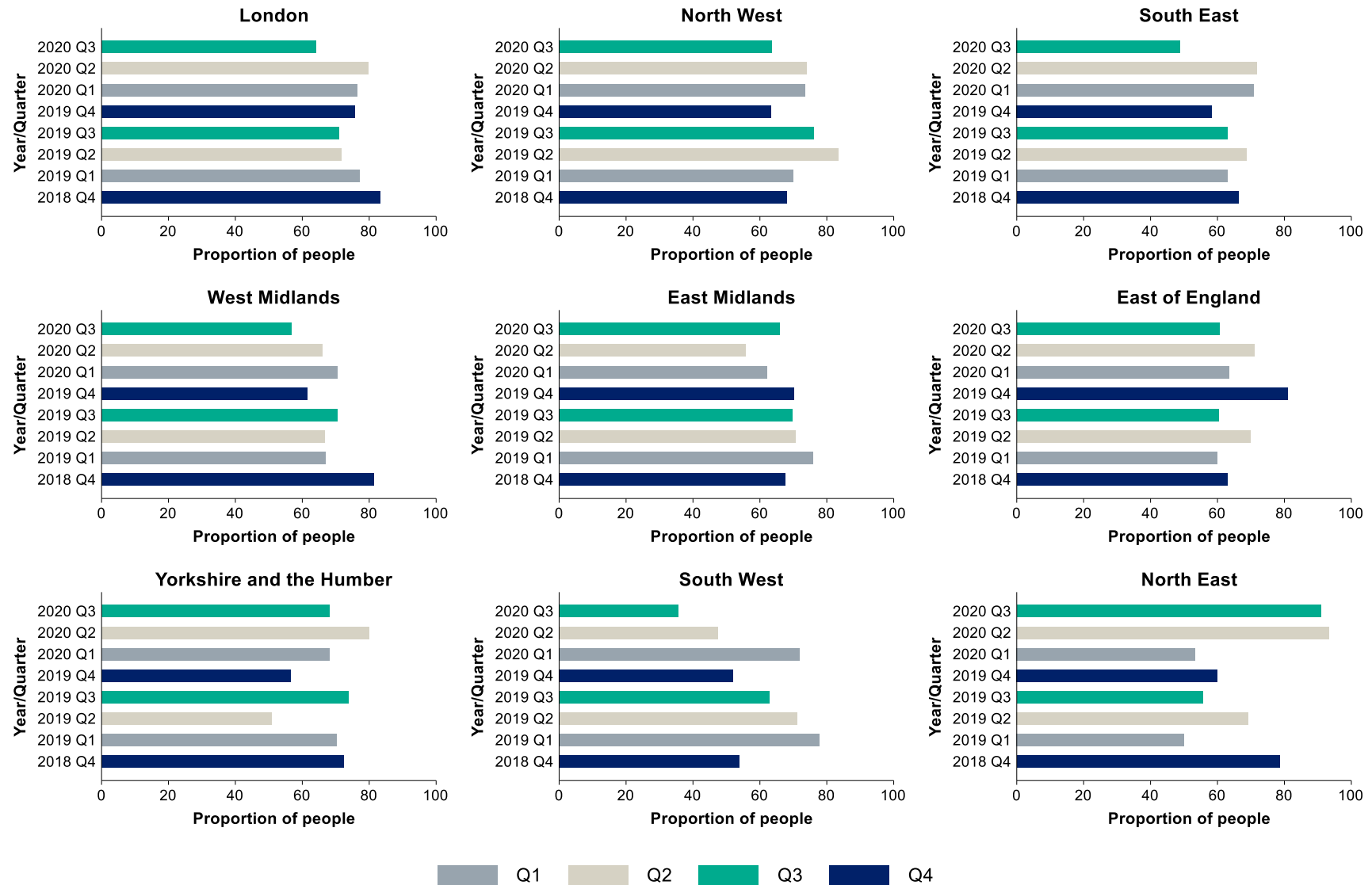
Figure 7: Proportion^a of pulmonary TB notifications starting treatment within 4 months (symptom onset to treatment start), England, Q4 2018 to Q3 2020



^a Note x-axis is not scaled to start at zero to improve data visualisation.

In Q3 2020, 61.6% of people with pulmonary TB started treatment within 4 months of symptom onset, compared to 68.7% in Q3 2019. 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, Q4 2018 to Q3 2020

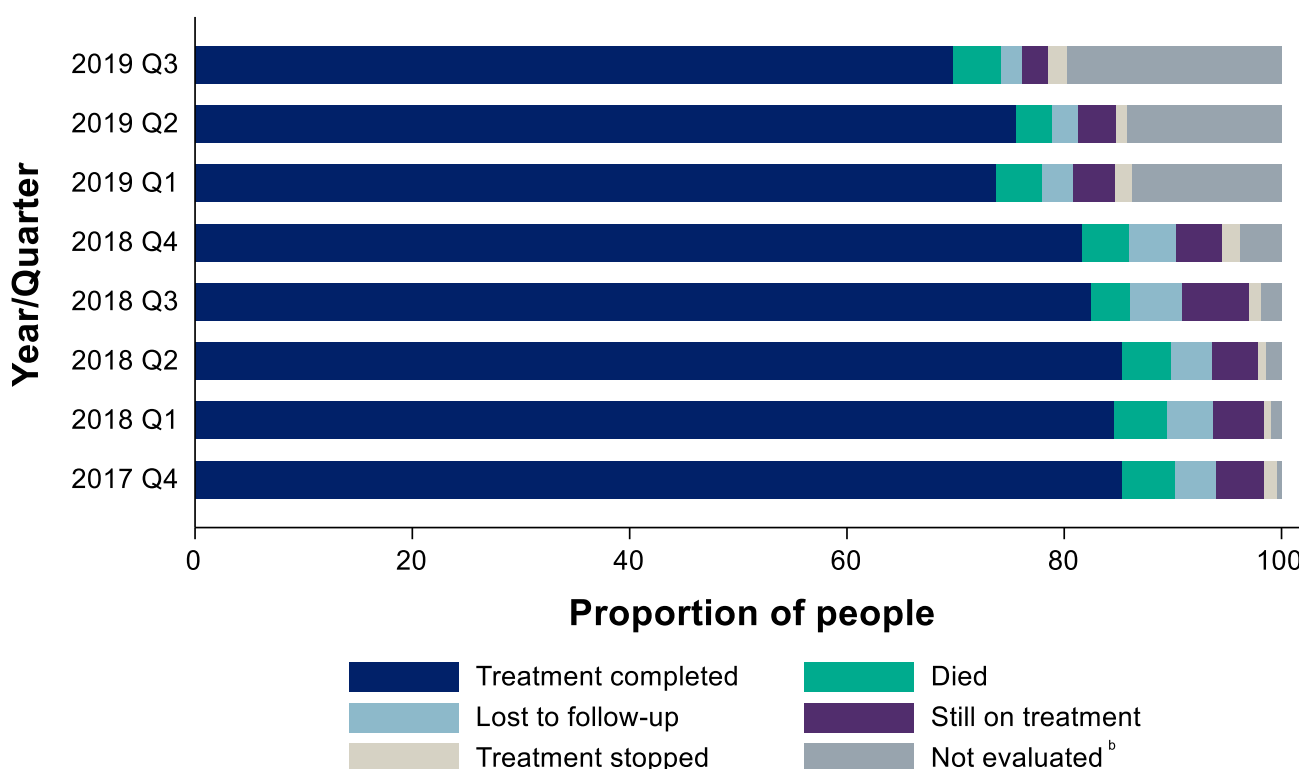


In Q3 2020, the proportion of people with TB who started treatment within 4 months of symptom onset in:

- the North East was substantially higher than in Q3 2019
- South West, South East and West Midlands was substantially lower than in Q3 2019

Treatment outcomes

Figure 9: Outcomes at 12 months for people with drug sensitive TB with expected treatment duration <12 months^a, England, Q4 2017 to Q3 2019



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

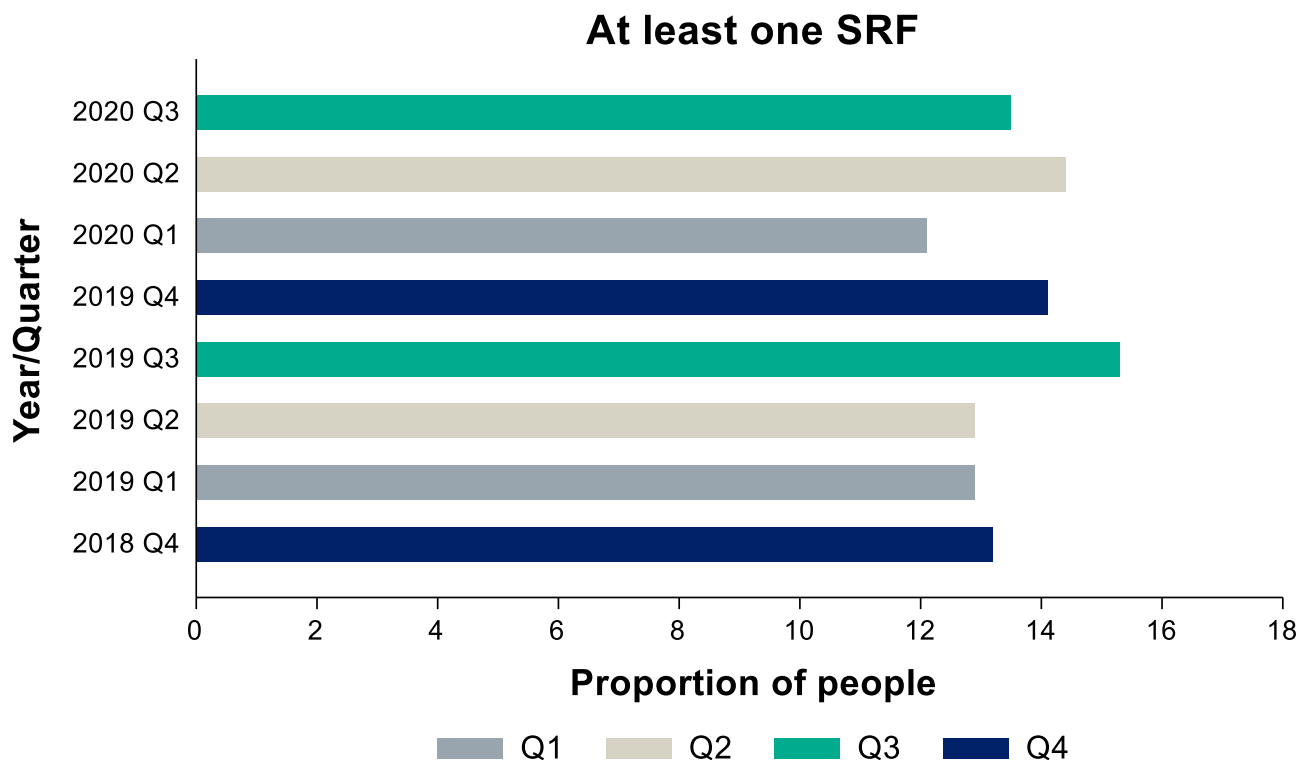
^b Not evaluated includes unknown and transferred out

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 82.5% for people notified in Q3 2018.

Please note: the latest three 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. The proportion not evaluated is expected to decrease with time.

Social risk factors

Figure 10: Proportion of TB notifications (≥15 years) with social risk factors (SRF), England, Q4 2018 to Q3 2020



^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 Q3 2020, 13.5% of people with TB aged 15 years and older had at least 1 SRF, a decrease from 15.3% in Q3 2019.

In Q3 2020, the proportion of people with TB with:

- current or a history of drug misuse was lower than in Q3 2019
- alcohol misuse was lower than in Q3 2019
- current or a history of homelessness was lower than in Q3 2019
- imprisonment was lower than in Q3 2019

Figure 10: Proportion of TB notifications (≥15 years) with social risk factors, England, Q4 2018 to Q3 2020 continued

