



## Infection reports

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### Enteric

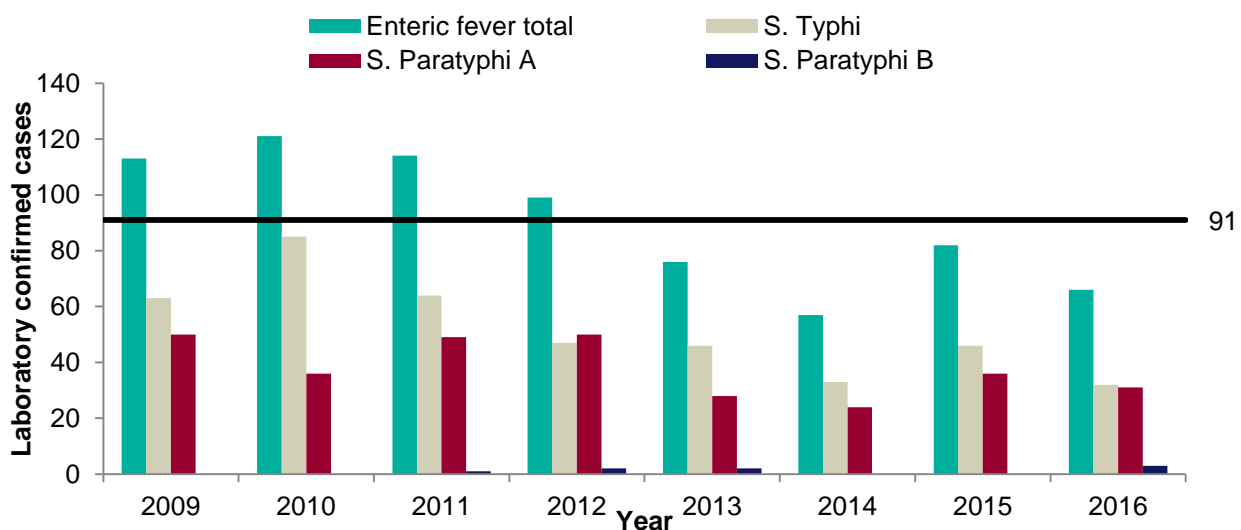
## Enteric fever surveillance quarterly report (England, Wales and Northern Ireland): first quarter 2016

*This quarterly report summarises the epidemiology of laboratory confirmed cases of typhoid and paratyphoid reported in England, Wales and Northern Ireland (EWNI) between January and March 2016. It includes both reference laboratory and enhanced enteric fever surveillance data. All data for 2016 presented below are provisional; more detailed reports will be produced on an annual basis. More information about enteric fever surveillance, including previous reports, is available on the PHE website [1].*

### National summary

In the first quarter (Q1) of 2016, 66 laboratory confirmed cases of enteric fever were reported in England, Wales and Northern Ireland (table 1), 20% lower than Q1 2015 (82 cases) and 27% below the rolling mean (91 cases) for Q1 2009 to 2016 (figure 1).

**Figure 1. Laboratory confirmed cases of enteric fever by organism, England, Wales and Northern Ireland: Q1 2009 – 2016**



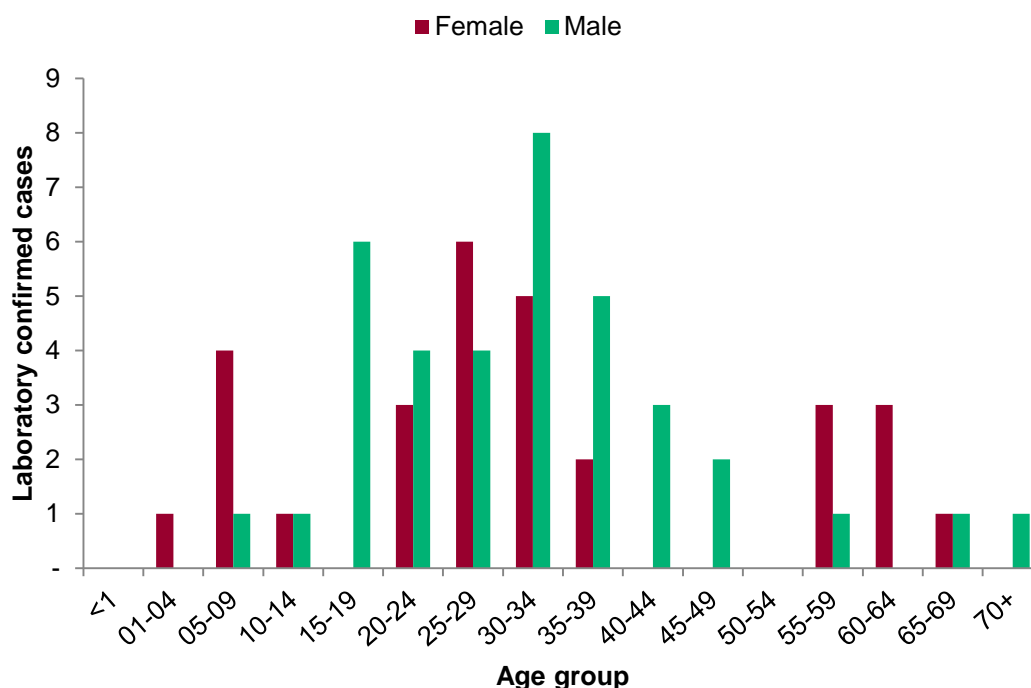
**Table 1. Laboratory confirmed cases of enteric fever, England, Wales and Northern Ireland: Q1 2009 – 2016**

Organism	Laboratory confirmed cases							
	Q1 2016	Q1 2015	Q1 2014	Q1 2013	Q1 2012	Q1 2011	Q1 2010	Q1 2009
<i>Salmonella</i> Typhi	32	46	33	46	47	64	85	63
<i>Salmonella</i> Paratyphi A	31	36	24	28	50	49	36	50
<i>Salmonella</i> Paratyphi B	3	-	-	2	2	1	-	-
<i>Salmonella</i> Paratyphi C	-	-	-	-	-	-	-	-
<i>Salmonella</i> Typhi and Paratyphi A	-	-	-	-	-	-	-	-
<b>Enteric fever total</b>	<b>66</b>	<b>82</b>	<b>57</b>	<b>76</b>	<b>99</b>	<b>114</b>	<b>121</b>	<b>113</b>

### Age/sex distribution

In Q1 2016, the median age of all cases was 30 years and 17% (11/66) were aged 16 years and under (figure 2). Females accounted for 44% of all cases in Q1 2016.

**Figure 2. Laboratory confirmed cases of enteric fever by age and sex (N=66): Q1 2016**



### Geographical distribution

Table 3 shows the cases reported by the PHE Centres (PHECs) in Q1 2016 compared to Q1 2015. For all reported cases, the geographical regions have been assigned using the residential postcode where this was available, otherwise referring diagnostic laboratory locations were used. London usually reports the highest proportion of cases in England (43% in Q1 2016 and 44% in Q1 2015), although reported a 25% decrease in cases reported compared to Q1 2015.

**Table 3. Cases of enteric fever by geographical distribution, England, Wales and Northern Ireland: Q1 2016 and 2015.**

Geographical area	Q1 2016	Q1 2015	% change between 2015 and 2016
London, PHEC	27	36	-25.0%
Yorkshire and Humber, PHEC	9	6	50.0%
South East, PHEC	7	12	-41.7%
North West, PHEC	7	5	40.0%
East of England, PHEC	5	3	66.7%
South West, PHEC	4	2	100.0%
West Midlands, PHEC	2	11	-81.8%
East Midlands, PHEC	1	4	-75.0%
North East, PHEC	1	3	-66.7%
<b>England subtotal</b>	<b>63</b>	<b>82</b>	<b>-23.17%</b>
Wales	2	-	-
Northern Ireland	1	-	-
<b>Total EWNI</b>	<b>66</b>	<b>82</b>	<b>-19.5%</b>

### Travel history

In Q1 2016, travel history was available for 61 of the 66 cases; of which 57/61 cases (93%) were presumed to have been acquired abroad (51 who had travelled abroad from the UK and four new entrants to the UK; reason for travel was unknown for seven cases). The remaining four cases had not travelled outside the UK in the 28 days prior to onset of symptoms.

### Travel-associated cases

Country of travel was known for all 51 cases that had travelled abroad from the UK.

Travel-associated cases were likely to have acquired their infection in: India (23), Pakistan (17), Bangladesh (six), Myanmar (four), Nepal, Nigeria, Austria\*, Qatar, Afghanistan, Indonesia (one each).

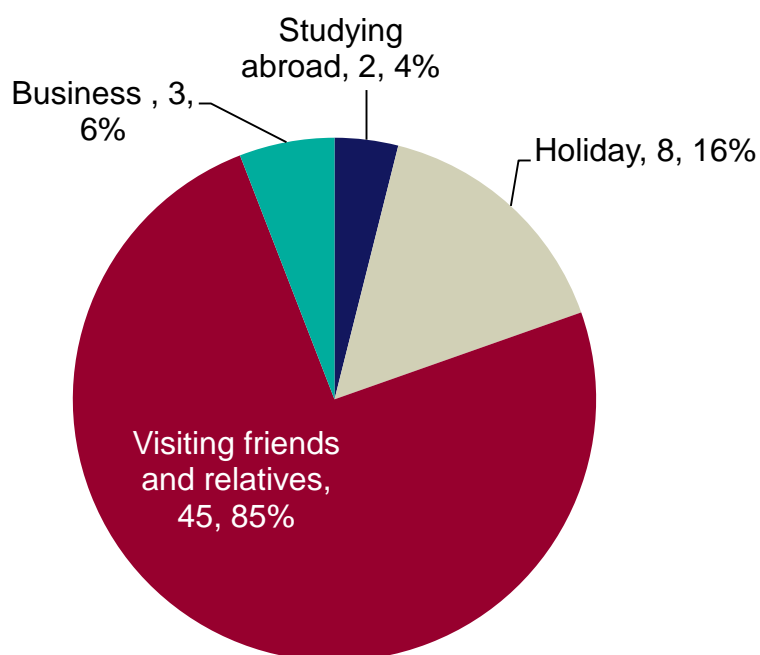
\*Note that Austria is not typically an endemic country for typhoid or paratyphoid, but this case has been included as travel-associated cases in the absence of an alternative source of infection in the UK.

Where multiple countries of travel have been stated by the case, only risk countries, as identified by the National Travel Health Network and Centre [3], were included for analysis. If a case travelled to multiple risk countries each country was counted individually. India and Pakistan continue to be the most frequently reported countries of travel for Q1 2016.

## Reason for travel

Reason for travel was known for all 51 cases who travelled abroad from the UK. Among those, 75% of cases (38/51) travelled to visit friends and relatives (figure 4).

**Figure 4. Laboratory-confirmed cases of enteric fever that have travelled abroad from the UK (N=51) by reason for travel: Q1 2016**



## Non-travel-associated cases

There were four non-travel-associated cases reported in Q1 2016. One of these is likely to be a secondary case resulting from contact with others who have recently travelled to endemic regions, although none of these contacts had claimed to have had enteric fever.

The remaining three cases stated that they had not been in recent contact with a probable or confirmed case prior to the onset of illness. No other possible sources of infection for these three cases have been identified.

## Data sources and acknowledgements

Data were collated and analysed by the Travel and Migrant Health Section, National Infections Service, Colindale. Laboratory data were provided by Gastrointestinal Bacterial Reference Unit, National Infections Service, Colindale. Other surveillance data were provided by Environmental Health Officers and local health protection colleagues in PHE and Wales and Northern Ireland through enteric fever enhanced surveillance.

## References

1. GOV.UK website. Typhoid and paratyphoid: guidance, data and analysis. Available at: <https://www.gov.uk/government/collections/typhoid-and-paratyphoid-guidance-data-and-analysis>
2. National Travel Health Network and Centre (NaTHNaC) website. Available at: <http://travelhealthpro.org.uk/>