



## Infection reports

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### Enteric

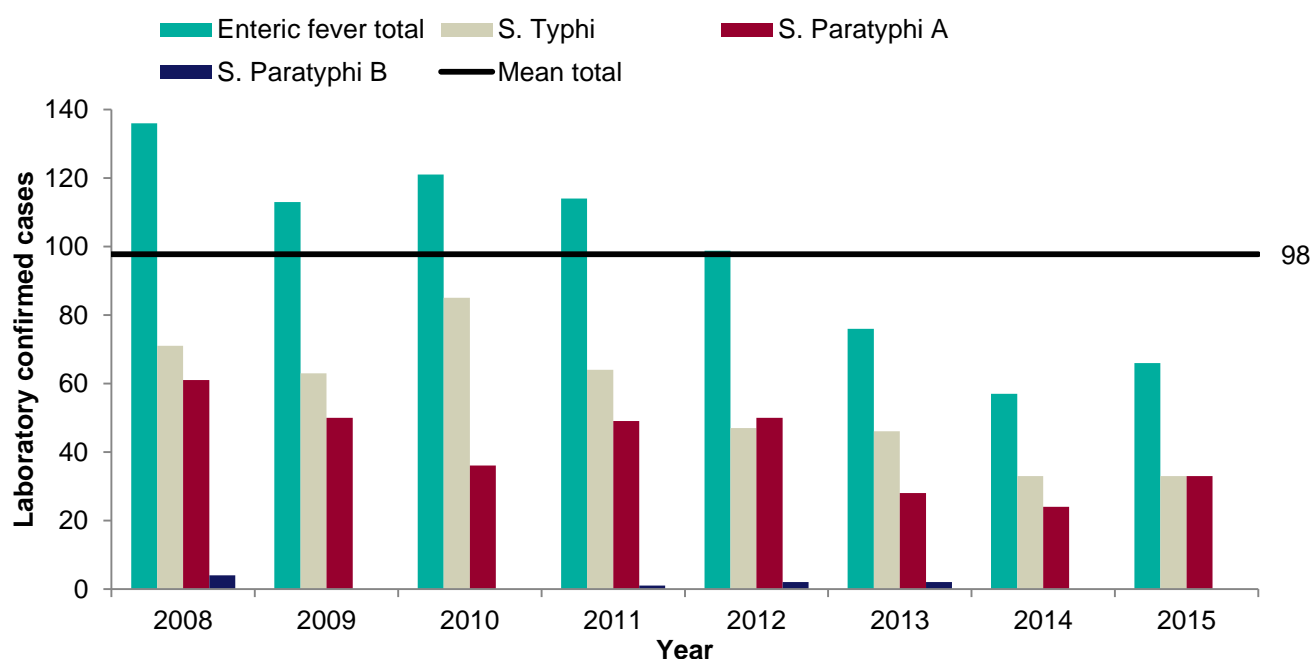
## Enteric fever surveillance quarterly report (England, Wales and Northern Ireland): first quarter 2015

*This quarterly report summarises the epidemiology of laboratory confirmed cases of typhoid and paratyphoid reported in England, Wales and Northern Ireland between January and March 2015. It includes both reference laboratory and enhanced enteric fever surveillance data. All data for 2015 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 2015, 66 laboratory confirmed cases of enteric fever were reported in England (table 1), 16% higher than the first quarter of 2014 (57) and 32% below the rolling mean (98) for Q1 2008 to 2015 (figure 1). There were no provisional cases reported in Wales and Northern Ireland for Q1. The number of cases of *S. Typhi* has remained stable compared to 2014: 33 cases reported in Q1 for both 2014 and 2015 (table 1).

**Figure 1. Laboratory confirmed cases of enteric fever by organism, England, Wales and Northern Ireland: first quarter 2008 - 2015**



**Table 1. Laboratory confirmed cases of enteric fever, England, Wales and Northern Ireland: first quarter 2008 – 2015**

Organism	Laboratory confirmed cases							
	Q1 2015	Q1 2014	Q1 2013	Q1 2012	Q1 2011	Q1 2010	Q1 2009	Q1 2008
<i>Salmonella</i> Typhi	33	33	46	47	64	85	63	71
<i>Salmonella</i> Paratyphi A	33	24	28	50	49	36	50	61
<i>Salmonella</i> Paratyphi B	-	-	2	2	1	-	-	4
<i>Salmonella</i> Paratyphi C	-	-	-	-	-	-	-	-
<i>Salmonella</i> Typhi and Paratyphi A	-	-	-	-	-	-	-	-
<b>Enteric fever total</b>	<b>66</b>	<b>57</b>	<b>76</b>	<b>99</b>	<b>114</b>	<b>121</b>	<b>113</b>	<b>136</b>

**Table 2. Laboratory confirmed cases of enteric fever by organism and phage type, England, Wales and Northern Ireland: first quarter 2015**

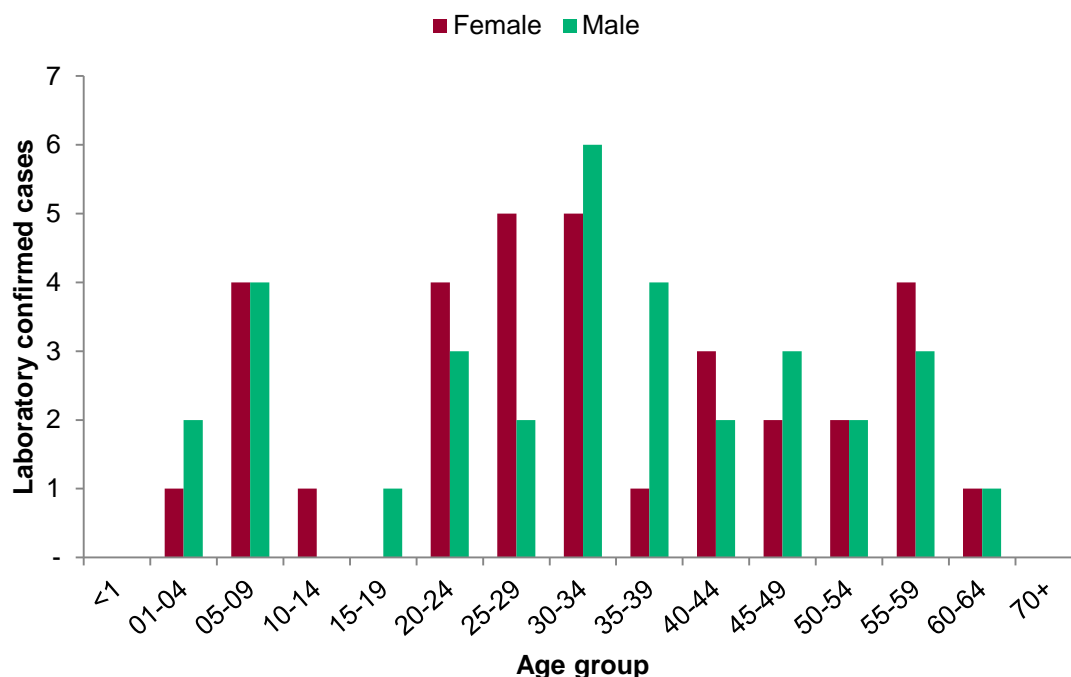
Phage type	S. Paratyphi A	Phage type	S. Typhi
PT 4	9	PT E1	9
PT 13	6	Untyp.VI	8
PT 2	5	PT E9 Var.	4
RDNC	5	Degr.VI	3
PT 1	3	PT A	2
Untypable	2	PT 40	1
PT 1a	1	PT B1	1
PT 6a	1	PT J1	1
PT 7	1	PT M1	1
<b>Total</b>	<b>33</b>	PT O	1
		Untyp.VI 1	1
		Untyp.VI 2	1
		<b>Total</b>	<b>33</b>

In general, *S. Typhi* phage types E1, Untyp. VI and E9 Var and *S. Paratyphi A* phage types 1, and 13 occur most frequently, however in Q1 2015, *S. Paratyphi A* PT 4 was most frequently reported (table 2) [2].

### Age/sex distribution

In the first quarter of 2015, the median age of cases was 32 years and 18% (for both males and females) were aged 16 years and under (figure 2). Cases were evenly split between males and females (50% each).

**Figure 2. Laboratory confirmed cases of enteric fever by age and sex (N=66): first quarter 2015**



### Geographical distribution

London PHE Region reported 36% of the total cases during the first quarter of 2015 (table 3). Only regions are shown in this report as the numbers are too small to disaggregate by PHE Centre; between one and 24 cases were reported by each of 13 PHE Centres during the first quarter in 2015. PHE Centre data is available for local PHE teams on request.

**Table 3. Laboratory confirmed cases of enteric fever by region: first quarter 2015**

Region	Q1 2015	Q1 2014	% change
London	24	27	-11.1%
Midlands and East of England	16	6	166.7%
North of England	13	12	8.3%
South of England	13	12	8.3%
Wales	-	-	-
Northern Ireland	-	-	-
<b>Grand Total</b>	<b>66</b>	<b>57</b>	<b>15.8%</b>

## Travel history

In the first quarter of 2015, travel history was available for all 66 cases; of which 58 cases were presumed to be acquired abroad and eight cases had not travelled outside the UK in the 28 days prior to symptoms.

## Travel-associated cases

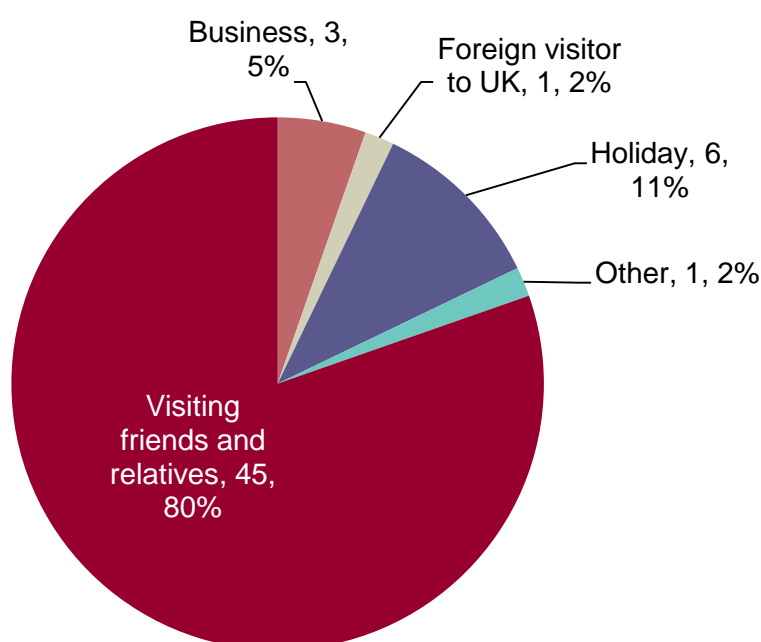
Travel-associated cases were likely to have acquired their infection in: India (34); Pakistan (15); Bangladesh (three); Uganda, (two); Sierra Leone, Malaysia, Thailand, Indonesia, Angola, Myanmar (one each).

Country of travel was known for all 58 cases that travelled abroad. Some cases travelled to more than one country so totals will not equal the number of total cases that travelled. 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 the first quarter of 2015.

## Reason for travel

Of the 58 cases that had travelled abroad, reason for travel was known for 56. Among those, 80% of cases travelled to visit friends and relatives (figure 4).

**Figure 4. Laboratory-confirmed cases of enteric fever that have travelled abroad (N=56) by reason for travel: first quarter 2015**



## **Non-travel-associated cases**

Eight cases in the first quarter 2015 had enhanced information available stating they had not travelled abroad within 28 days of developing symptoms.

One of the cases was suspected to have acquired *S. Typhi* from a family member who was recently diagnosed as a confirmed case. A further case was suspected to have acquired *S. Paratyphi A* infection from a microbiology lab where the case worked.

The remaining six cases stated that they had not been in recent contact with a probable or confirmed case prior to the onset of illness. None of these six cases had links to known cases or travellers from endemic countries and no other possible sources have been identified.

## **Data sources and acknowledgements**

Data were collated and analysed by the Travel and Migrant Health Section, Centre for Infectious Disease Surveillance and Control, Colindale. Laboratory data were provided by Gastrointestinal Bacterial Reference Unit, Microbiology Services, Colindale. Other surveillance data were provided by Environmental Health Officers and local health protection colleagues in PHE through enteric fever enhanced surveillance.

## **References**

1. GOV.UK website. Enhanced surveillance of enteric fever. Available at: <https://www.gov.uk/government/collections/typhoid-and-paratyphoid-guidance-data-and-analysis>
  2. GOV.UK website. Typhoid and paratyphoid: laboratory confirmed cases in England, Wales and Northern Ireland. Available at: <https://www.gov.uk/government/publications/typhoid-and-paratyphoid-laboratory-confirmed-cases-in-england-wales-and-northern-ireland>
  3. National Travel Health Network and Centre (NaTHNaC) website. Available at: <http://www.nathnac.org/>
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