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Enteric

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

This quarterly report summarises the epidemiology of laboratory confirmed cases of typhoid and paratyphoid reported in England, Wales and Northern Ireland (EWNI) between October and December 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 fourth quarter (Q4) of 2015, 70 laboratory confirmed cases of enteric fever were reported in England, Wales and Northern Ireland (table 1), 19% higher than Q4 2014 (59 cases) and 21% below the rolling mean (89 cases) for Q4 2008 to 2015 (figure 1).

Figure 1. Laboratory confirmed cases of enteric fever by organism, England, Wales and Northern Ireland: Q4 2008 – 2015

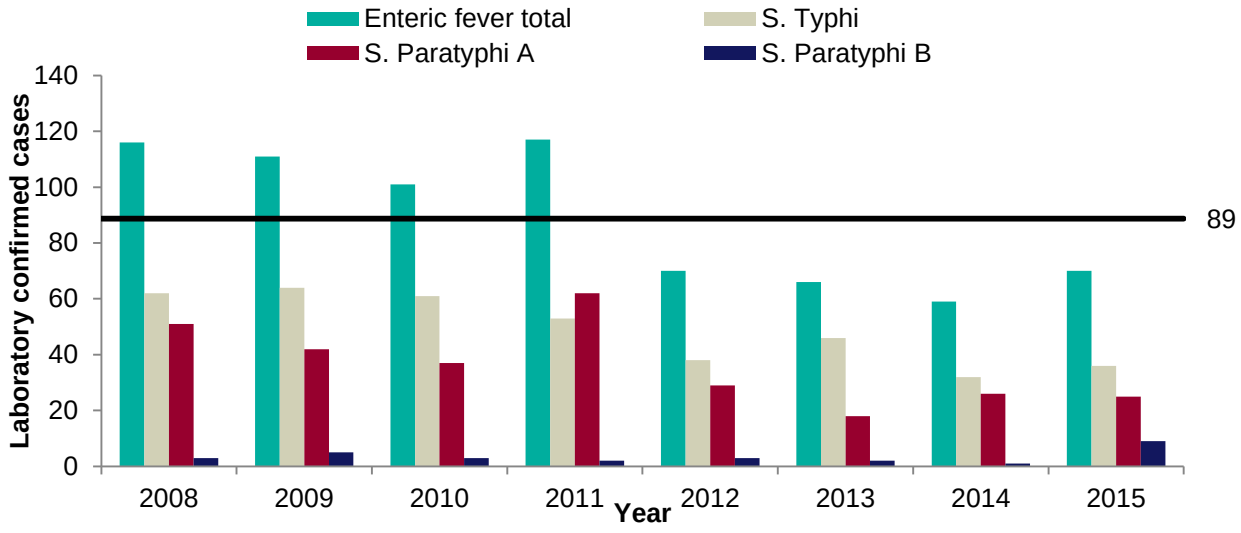


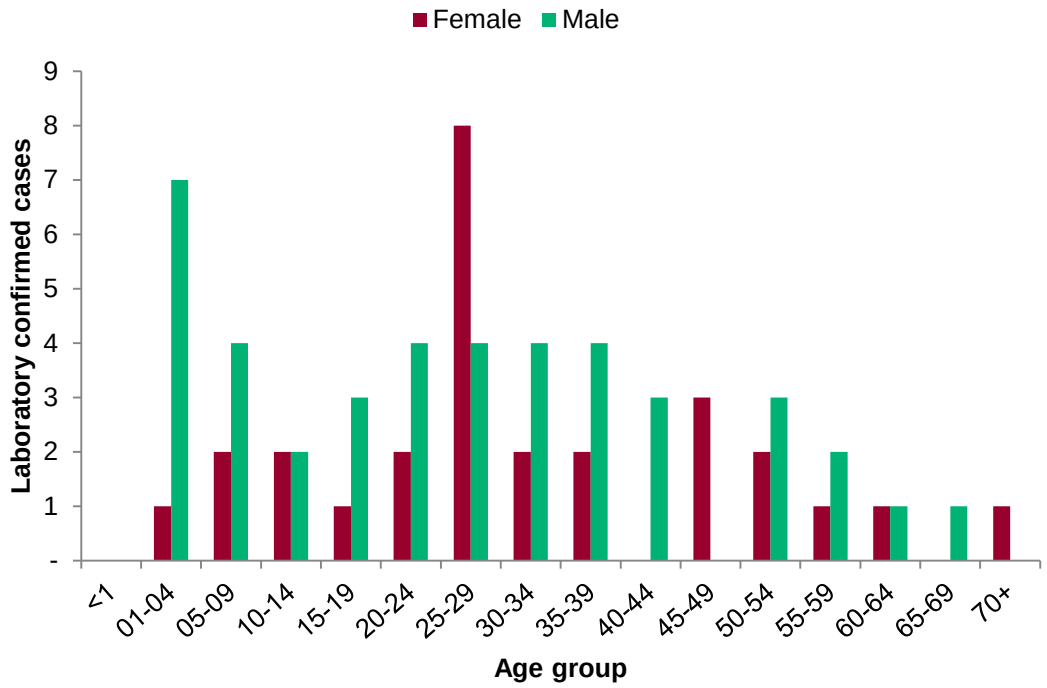
Table 1. Laboratory confirmed cases of enteric fever, England, Wales and Northern Ireland: Q4 2008 – 2015

Organism	Laboratory confirmed cases							
	Q4 2015	Q4 2014	Q4 2013	Q4 2012	Q4 2011	Q4 2010	Q4 2009	Q4 2008
Salmonella Typhi	36	32	46	38	53	61	64	62
Salmonella Paratyphi A	25	26	18	29	62	37	42	51
Salmonella Paratyphi B	9	1	2	3	2	3	5	3
Salmonella Paratyphi C	–	–	–	–	–	–	–	–
Salmonella Typhi and Paratyphi A	–	–	–	–	–	–	–	–
Enteric fever total	**70**	**59**	**69**	**70**	**117**	**101**	**111**	**116**

Age/sex distribution

In Q4 2015, the median age of all cases was 29 years and 27% (19/70) were aged 16 years and under (figure 2). Females accounted for 40% of all cases in Q4 2015.

Figure 2. Laboratory confirmed cases of enteric fever by age and sex (N=70): Q4 2015



Geographical distribution

Table 3 shows the cases reported by the PHE Centres (PHECs) in Q4 2015 compared to Q4 2014. 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 (38% in Q4 2015 and 32% in Q4 2014). The three regions accounting for the majority of cases: London, West Midlands and Yorkshire & Humber, each reported an increase in cases compared to Q4 2014.

Table 3. Cases of enteric fever by geographical distribution, England, Wales and Northern Ireland: Q4 2015 and 2014

Region	Q4, 2015	Q4, 2014	% change between 2014 and 2015
London, PHEC	24	19	26.3%
West Midlands, PHEC	11	6	83.3%
Yorkshire and Humber, PHEC	7	3	133.3%
South East, PHEC	6	12	-50.0%
North West, PHEC	5	10	-50.0%
East Midlands, PHEC	5	5	0.0%
South West, PHEC	3	–	–
East of England, PHEC	2	2	0.0%
North East, PHEC	2	2	0.0%
England subtotal	**64**	**59**	**8.47%**
Wales	4	–	–
Northern Ireland	1	–	–
Total EWNI	**70**	**59**	**20.3%**

Travel history

In Q4 2015, travel history was available for 68 of the 70 cases; of which 65/68 cases (96%) were presumed to have been acquired abroad (57 who had travelled abroad from the UK, three new entrants to the UK and three foreign visitors to the UK; reason for travel was unknown for two cases). The remaining three 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 57 cases that had travelled abroad from the UK.

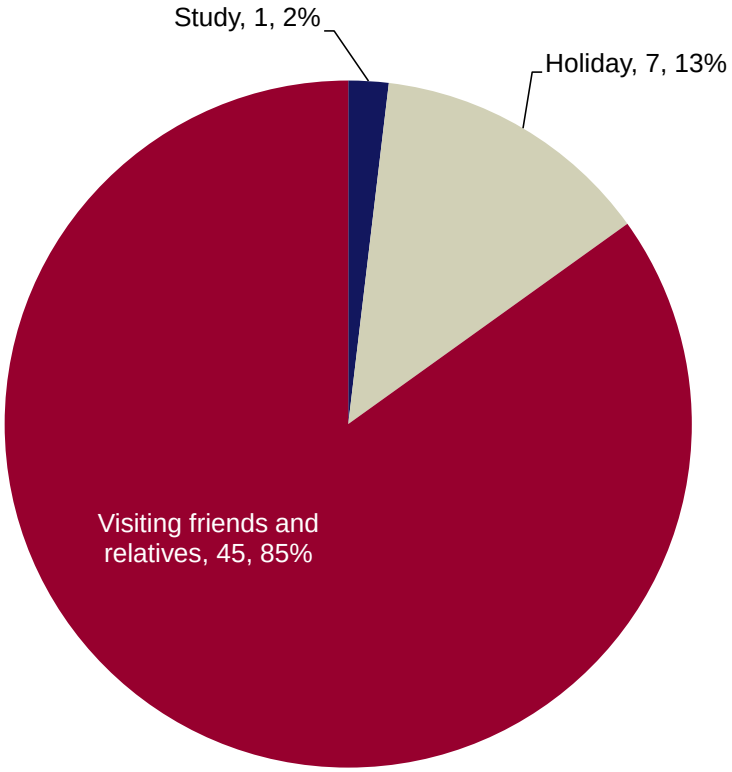
Travel-associated cases were likely to have acquired their infection in: Pakistan (19), India (17), Bangladesh (seven), Iraq (four), Nigeria (three); Afghanistan, Cambodia, Egypt, France*, Peru, Turkey and Viet Nam (one each).

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 Q4 2015.

Reason for travel

Of the 57 cases who travelled abroad from the UK, reason for travel was known for 53. Among those, 85% of cases (45/53) travelled to visit friends and relatives (figure 4).

Figure 4. Laboratory-confirmed cases of enteric fever that have travelled abroad from the UK (N=53) by reason for travel: Q4 2015



*Note that France 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.

Non-travel-associated cases

There were three non-travel-associated cases reported in Q4 2015. One of these is likely to be a secondary case resulting from household contact with a travel-associated confirmed case (family member).

The remaining two cases stated that they had not been in recent contact with a probable or confirmed case prior to onset of illness, although one case had reported travel to endemic regions two months prior to the onset of illness (which falls outside of the 28-day incubation period for typhoid). No other possible sources of infection for these two 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/