



Public Health
England

Protecting and improving the nation's health

Travel-associated *Giardia* infection in England, Wales and Northern Ireland: 2014

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-class 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 are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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Contents

About Public Health England	2
General trend	4
Travel-associated cases	5
Age and sex	5
Geographical distribution	5
Travel history	6
Data sources	8
References	9

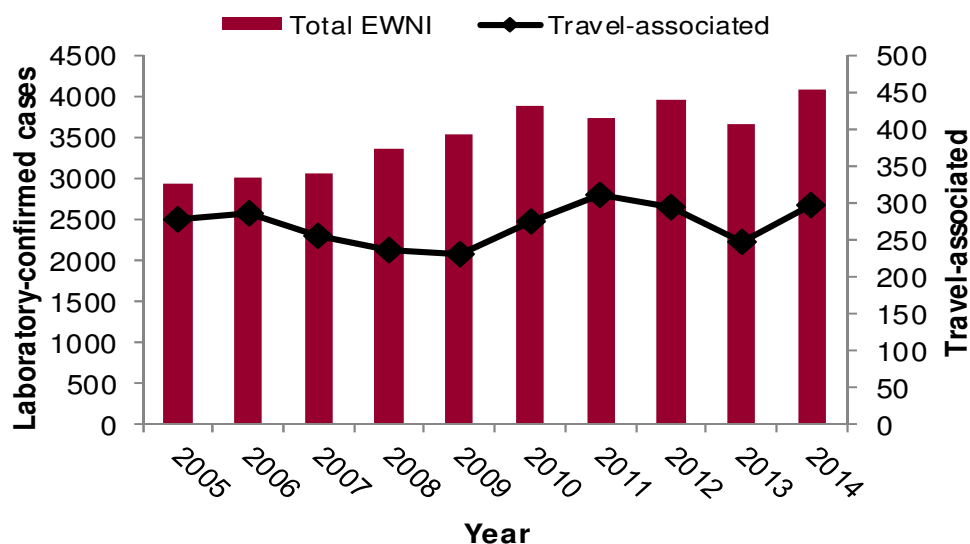
General trend

In 2014, there were 4,087 *Giardia* infections reported in England, Wales and Northern Ireland (EWNI), of which 297 (7%) were associated with foreign travel. On average, total cases have increased by 4% each year between 2005 and 2014 compared to an average annual increase of 1.3% for travel-associated cases [Figure 1]. Travel history reporting for *Giardia* is poor through routine laboratory reporting (see *note in [data sources section](#)) and changes in laboratory testing, allowing more samples to be tested at once, means the presence of travel history may be less important in decisions to test for *Giardia*, which may partly explain the slow decline in the proportion of travel-associated cases [Table 1] [1].

Table 1. Laboratory confirmed cases of *Giardia*, England, Wales and Northern Ireland: 2005 to 2014.

Year	England and Wales	Northern Ireland	Total for EWNI	Of which travel-associated (%)
2005	2,908	18	2,926	278 (10%)
2006	2,996	15	3,011	286 (9%)
2007	3,054	14	3,068	254 (8%)
2008	3,342	9	3,351	236 (7%)
2009	3,501	38	3,539	231 (7%)
2010	3,858	16	3,874	275 (7%)
2011	3,697	35	3,732	311 (8%)
2012	3,902	50	3,952	295 (7%)
2013	3,622	47	3,669	246 (7%)
2014	4,039	48	4,087	297 (7%)

Figure 1. Laboratory-confirmed cases of *Giardia*, England, Wales and Northern Ireland: 2005 to 2014.

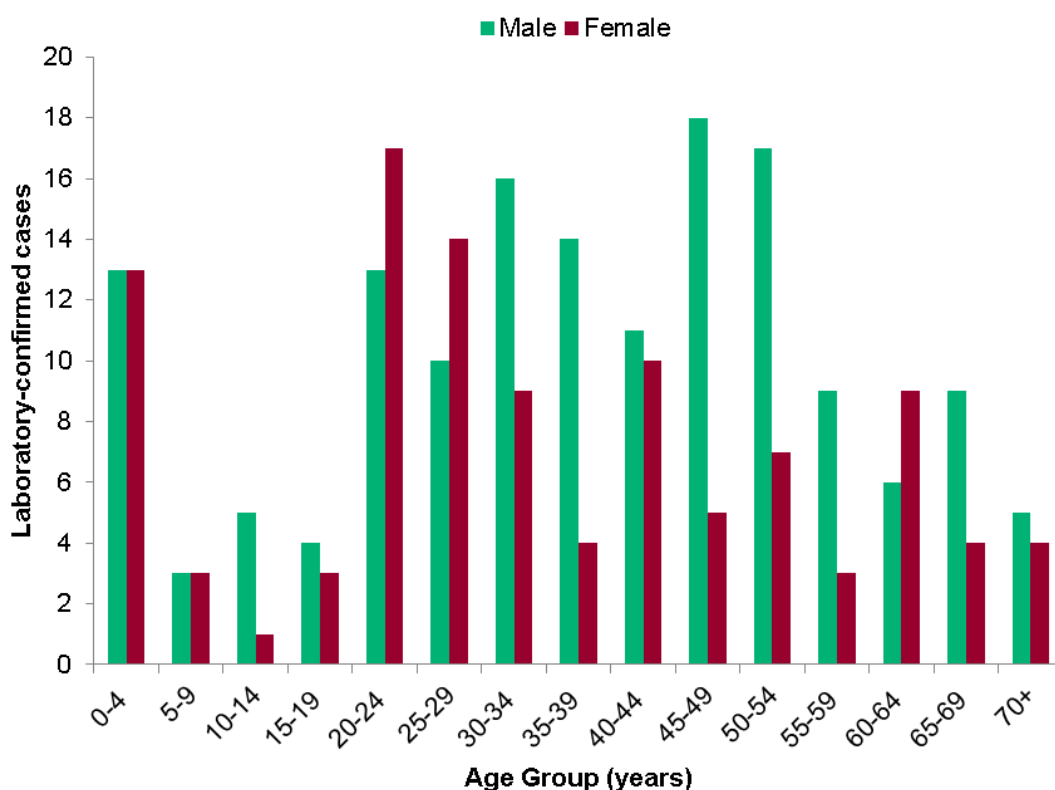


Travel-associated cases

Age and sex

In 2014, 296/297 travel-associated cases of *Giardia* infection in EWNI had known information about age and sex, of which 61% (n=180) were male. The median age for males was 39 years (range 1 to 79 years) and 31 years for females (range 0 to 83 years). Travel-associated *Giardia* is most frequently reported in adults [Figure 2] in contrast to *Cryptosporidium* infections, which tend to predominate in younger age groups [2].

Figure 2. Travel-associated laboratory-confirmed cases of *Giardia* by age and sex, England, Wales and Northern Ireland: 2014 (N=296).



Geographical distribution

Geographical areas were assigned based on patient postcode; where patient postcode was missing the sending laboratory postcode was used. The South West PHE Centre reported the highest proportion (29%) of travel-associated cases of *Giardia* infection in

2014, followed by Wales (13%) [Table 2]. Cases reported in South West, Yorkshire and Humber, East of England, North West, North East and Wales all reported an increase in the number of cases in 2014 compared to 2013 [Table 2].

Table 2. Travel-associated laboratory-confirmed cases of *Giardia* by geographical distribution, England, Wales and Northern Ireland: 2013 and 2014.

Geographical area	2014	2013	% change between 2013 and 2014
South West	85	68	25%
Wales	38	3	~*
South East	34	34	0%
Yorkshire and Humber	30	26	15%
East of England	26	11	136%
North West	25	13	92%
London	20	46	-57%
North East	13	10	30%
East Midlands	9	10	-10%
West Midlands	9	15	-40%
Northern Ireland	8	10	-20%
Grand total	297	246	21%

Travel history

The top 10 countries of travel for cases of *Giardia* in 2014 compared to 2013 are detailed in Table 3. *Giardia* is common worldwide, but particularly in regions where hygiene and sanitation are poor. Countries of travel for most travel-associated cases of *Giardia* in EWNl tend to reflect regions and countries of the world where hygiene and sanitation facilities are less robust than in the UK. In 2014, the highest number of travel-associated cases were associated with travel to India, consistent with previous years. However, a total of 84 different destinations were reported for *Giardia* infections in 2014.

Table 3. Top 10 countries of travel for travel-associated cases of *Giardia* England, Wales and Northern Ireland: 2014 and 2013.

Country/region of travel†	2014	2013	% change between 2013 and 2014
India	51	79	-35%
Spain	18	9	100%
Pakistan	14	14	0%
Thailand	11	8	38%
Turkey	11	5	120%
Egypt	9	6	50%
Greece	6	5	20%
Cyprus	5	1	400%
Morocco	5	-	-
Tunisia	5	2	150%
Other countries	104 (n=54)	92 (n=49)	12%
Country not stated	63	35	80%

N= number of countries.

†Totals may not match those stated in Table 1, where two or more countries of travel were stated for a case, each listed country was counted individually.

Data sources

- data for the total reports of *Giardia* in England and Wales 2006 to 2014 were provided by the PHE Gastrointestinal Infections Department
- data for the total reports of *Giardia* in Northern Ireland are from the [Health and Social Care Public Health Agency \(HSC PHA\) website](#)
- travel-associated infections for England (2005 to 2014) and Wales (2005 to 2012) comprise laboratory reports sent to the PHE Centre for Infectious Disease Surveillance and Control, Colindale, through the Co-Surv system and were extracted from the Second Generation Surveillance System (SGSS) using sample specimen date
- travel-associated infections for Wales 2013 and 2014 were supplied by Public Health Wales extracted from the information bureau for infectious disease (IBID). There was a change in electronic reporting in Wales between 2013 and 2014
- travel-associated infections data for Northern Ireland were provided by HSC PHA and comprise laboratory reports extracted from Co-Surv using sample specimen date

* Note

Enhanced surveillance is not conducted for *Giardia* infections; travel history information is collected from laboratory reports where it is available. Dates of travel and onset are not usually given and therefore incubation period is not considered when assigning travel history. Travel history on laboratory request forms is underreported for *Giardia* infections (around 3% have information). Furthermore, recent changes in the data reporting systems have resulted in some travel information being lost from the reports so the trends presented in this report should be interpreted with caution. In particular, Wales and Northern Ireland may be underrepresented in this report.

References

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