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# **Common animal associated infections quarterly report (England and Wales): second quarter 2018**

Health Protection Report

Volume 12 Number 29

10 August 2018

# Common animal associated infections (England and Wales): second quarter 2018

This quarterly report is produced by the Emerging Infections and Zoonoses team at the National Infection Service, Public Health England. The report summarises confirmed cases of zoonoses reported in England and Wales between April and June 2018 (second quarter; weeks 14-26) and includes additional information on the quarterly trends for hepatitis E, leptospirosis, and Lyme disease. Overall case numbers (rolling four-quarters of data) for zoonoses covered in this report are shown Table 1.

**Table 1. Animal associated infections in England and Wales: rolling four-quarter laboratory reports by specimen date, Q3 2017 – Q2 2018 (weeks 27-52/2017; 01-26/2018) compared to the previous year**

Disease (Organism)	Number of Reports								Total for weeks 27(2017)-26(2018)	
	weeks 27-39		weeks 40-52		weeks 01-13		weeks 14-26		2017/8*	2016/7
	2017	2016	2017	2016	2018	2017	2018*	2017		
Anthrax ( <i>Bacillus anthracis</i> )	0	0	0	0	0	0	0	0	0	0
Brucellosis ( <i>Brucella spp.</i> )	0	4	0	4	0	2	0	3	0	13
Hepatitis E	229	307	206	221	279	227	247	241	961	996
Hydatid ( <i>Echinococcus granulosus</i> )	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leptospirosis ( <i>Leptospira spp.</i> )	32	35	31	17	8	10	5	14	76	76
Lyme disease ( <i>Borrelia burgdorferi</i> )										
All cases	724	584	362	267	133	200	295	293	1514	1344
Acute infections	621	483	246	213	64	138	188	209	1119	1043
Pasteurellosis ( <i>Pasteurella spp.</i> )	209	169	164	161	178	177	157 <sup>◊</sup>	193	708	700
Psittacosis ( <i>Chlamydophila psittaci</i> )	N/A	4	N/A	3	N/A	N/A	N/A	N/A	N/A	N/A
Q-fever ( <i>Coxiella burnetii</i> )										
All cases	6	10	7	4	5	3	9	2	27	19
Acute infections	6	5	3	3	4	3	7	0	20	11
Toxoplasmosis <sup>†</sup> ( <i>Toxoplasma gondii</i> )	60	84	55	92	79	84	105	63	299	323

\* Provisional data. <sup>†</sup> Based on date specimen received. <sup>◊</sup> *P. Dagmatis* and *P. Stomatidis* added into the query from 2018 onwards (accounted for four cases (one dual infection) in Q2 2018)

Hydatid data not available due to inconsistencies in surveillance data provided to PHE; these are currently being addressed. Psittacosis data for 2017/18 not available due to an ongoing laboratory reporting issue that is being investigated.

## Hepatitis E (data from SGSS, Public Health Laboratory Birmingham and Blood Borne Virus Unit Colindale)

The hepatitis E surveillance reports reference laboratory data together with additional cases reported by local laboratories through the Second Generation Surveillance System (SGSS)<sup>1</sup>. The combined datasets provide a more accurate reflection of the number of HEV infected cases reported in England and Wales.

There were 247 cases of hepatitis E in the second quarter of 2018 compared to 241 in the same quarter of 2017. One hundred and sixty (65%) were male (aged 12-87 years, median 55) and 87 (35%) were female (aged 8-89 years, median 56). The persisting observation of the predominance of older men remains unexplained (see Table 2).

**Table 2. Reference and local laboratory confirmed cases of hepatitis E infection (Q2 weeks 14-26, 2018)**

Age Group	Male	Female	Total
<15	2	2	4
15-24	7	4	11
25-44	39	18	57
45-64	64	35	99
>64	48	28	76
<b>Total</b>	<b>160</b>	<b>87</b>	<b>247</b>

The total number of newly diagnoses cases of hepatitis E in the rolling year from Q3 2017 to Q2 2018 (n=961) compares to 996 cases in the same period in the year before (Q3 2016 – Q2 2017). Previously, between 2010 and 2016<sup>2</sup>, there was an increasing trend in the number of cases of hepatitis E reported by local and reference laboratories.

## Leptospirosis (data from the National Leptospirosis Service)

There were five confirmed cases of leptospirosis reported in the second quarter of 2018, compared to fourteen cases reported during the second quarter of 2017.

All the cases were male (aged 21-65 years, median 29 years). Cases were reported from the following regions: London (2 cases), South East (1) and South West (2).

Two cases reported travelling abroad and both visited South East Asia. One case reported possible water exposure in the UK whilst on a boating trip. No other exposures were reported.

### Lyme disease (data from the Rare and Imported Pathogens Laboratory, Porton)

A total of 295 cases of laboratory confirmed Lyme disease were reported during the second quarter of 2018, compared with 293 cases reported in the same quarter of 2017. Of the 295 cases, 188 were acute (including 30 with neurological Lyme disease) and 107 were longstanding. Table 3 shows the reported age group and gender distribution, and Table 4 shows the distribution by region.

Of the acute cases, 95 were male (aged 2-85 years, median 38), 91 were female (aged 0-85 years, median 41). Gender was not reported for two cases. Travel outside the UK was reported by 13 (7%) of the acute cases: 12 to Europe, and one to North America.

**Table 3. Laboratory confirmed acute cases of Lyme disease, by age and sex (Q2 weeks 14-26, 2018)**

Age Group	Male	Female	Unknown	Total
0-14	17	13	0	30
15-24	14	5	0	19
25-34	15	18	0	33
35-44	8	18	0	26
45-54	16	10	1	27
55-64	15	15	1	31
65-74	5	8	0	13
75+	5	4	0	9
N/K	0	0	0	0
<b>Total</b>	<b>95</b>	<b>91</b>	<b>2</b>	<b>188</b>

**Table 4. Laboratory confirmed acute cases of Lyme disease, by region (Q2 weeks 14-26, 2018)**

PHE Centre	Cases
East Midlands	3
East of England	13
London	42
North East	4
North West	13
South East	47
South West	38
Wales	6
West Midlands	8
Yorkshire and Humber	14
<b>Total</b>	<b>188</b>

Note: Specimens sent for Lyme borreliosis referral testing should be accompanied by a completed referral form: <https://www.gov.uk/lyme-borreliosis-service>

## Other zoonotic organisms

Other zoonotic infections of interest diagnosed in the second quarter of 2018 were as follows:

- Ten cases of *Capnocytophaga* spp. were reported, of which four cases (two of which were bacteraemia) were speciated to *C. canimorsus*. Eight cases were female and two cases were male. The cases were reported from the East of England (4), East Midlands (3), South West (1), West Midlands (1) and Yorkshire and The Humber (1).
- Four cases of *Mycobacterium marinum* were reported. All of the cases were adult males. The cases were reported from the East of England (2) and South East (2).
- Three cases of *Corynebacterium ulcerans* were reported. Two were toxigenic cases; one was reported in a male from Yorkshire and The Humber and one from a female in the South East. The third case was non-toxigenic reported from a female in London.
- One case of *Erysipelothrix rhusiopathiae* was reported from a female in the North West.
- One case of *Toxocara* sp. was reported from an adult male in the East Midlands.

## References

1. Oeser *et al* (2017) Using data linkage to improve surveillance methods for acute hepatitis E infections in England and Wales 2010-2016. *Epidemiol Infect* 45(14):2886-2889. Doi: 10.1017/S0950268817002047
2. <https://www.gov.uk/government/publications/hepatitis-e-symptoms-transmission-prevention-treatment/hepatitis-e-symptoms-transmission-treatment-and-prevention>

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*Health Protection Report* is a national public health bulletin for England and Wales, published by Public Health England. It is PHE's principal channel for the dissemination of laboratory data relating to pathogens and infections/communicable diseases of public health significance and of reports on outbreaks, incidents and ongoing investigations.

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Published May 2018

PHE publications gateway number: 2018327

