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Common animal-associated infections quarterly report (England and Wales): second quarter 2019

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Common animal-associated infections (England and Wales): second quarter 2019

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 2019 (second quarter; weeks 14-26) and includes additional information on the quarterly trends for hepatitis E, leptospirosis and Lyme disease. The rolling year total of case numbers 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 2018 – Q2 2019 (weeks 27/2018-26/2019) compared to the previous year

Disease (Organism)	Number of Reports								Total for weeks 27(2018)-26(2019)	
	weeks 27-39		weeks 40-52		weeks 01-13		weeks 14-26		2018/9*	2017/8
	2018	2017	2018	2017	2019	2018	2019	2018		
Anthrax (<i>Bacillus anthracis</i>)	0	0	0	0	0	0	0	0	0	0
Brucellosis (<i>Brucella spp.</i>)	4	0	8	0	7 [‡]	0	4	0	23	0
Hepatitis E	210	229	256	213	349	273	326	255	1141	970
Leptospirosis (<i>Leptospira spp.</i>)	39	32	20	31	12	8	5	5	76	76
Lyme disease (<i>Borrelia burgdorferi</i>)										
All cases	821	724	387	362	189	135	298	298	1695	1519
Acute infections	632	621	246	246	89	66	173	190	1140	1123
Pasteurellosis [‡] (<i>Pasteurella spp.</i>)	207	208	160	164	173	178	172	157	712	707
Q-fever (<i>Coxiella burnetii</i>)										
All cases	5	6	5	7	4	5	6	9	20	27
Acute infections	5	6	3	3	2	4	5	7	15	20
Toxoplasmosis [†] (<i>Toxoplasma gondii</i>)	84	60	90	55	75	79	50	105	299	299

* Provisional data.

[†] Based on date specimen received.

[‡] Serology results, in addition to culture results, introduced in Q1 2019

Note: Hydatid data not available due to inconsistencies in surveillance data provided to PHE; these are currently being addressed. Psittacosis data is not available due to a laboratory reporting issue which is being addressed.

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

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

There were 326 cases of hepatitis E in the second quarter of 2019 compared to 255 in the same quarter of 2018. Two-hundred and seven (63%) were male (aged 0-95 years, median age 58) and 111 (34%) were female (aged 3-94 years, median age 53). Gender was not recorded for eight cases. 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, 2019)

Age Group	Male	Female	Unknown	Total
Not recorded	0	0	0	0
<15	3	1	0	4
15-24	7	8	0	15
25-44	41	26	1	68
45-64	72	44	3	119
>64	83	33	4	120
Total	207	111	8	326

Leptospirosis (data from the National Leptospirosis Service)

There were five confirmed cases of leptospirosis reported in the second quarter of 2019, which is the same number as the second quarter of 2018.

Three of the cases were male (aged 26-72 years) and two were female (aged 18-52 years). Two cases were reported from the South East, two cases from Yorkshire & the Humber and one case from London.

Three of the cases reported recent travel abroad to South East Asia. Of the travel related cases, one reported swimming in a freshwater waterfall and had contact with elephants. Of the two cases that did not report travel abroad, one case was a farmer that had both water and animal contact (rat), whilst no exposure information was available for the other case.

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

A total of 298 cases of laboratory confirmed Lyme disease were reported during the second quarter of 2019, which is the same number as for the second quarter of 2018. Of these cases, 173 were acute (including 20 with neurological Lyme disease) and 125 were longstanding.

Of the acute cases, 87 were male (aged 2-81 years, median age 48) and 86 were female (aged 1-87 years, median age 45). Table 3 shows the age group and gender distribution, and Table 4 shows the distribution by region. Eighteen of the acute cases (10%) reported foreign travel; the majority of cases (12 cases) reported travel to Europe and one case reported travel to Africa; five cases did not report their destination.

Table 3. Laboratory confirmed acute cases of Lyme disease, by age and sex (Q2 weeks 14-26, 2019)

Age Group	Male	Female	Unknown	Total
0-14	13	10	0	23
15-24	2	5	0	7
25-34	10	15	0	25
35-44	14	12	0	26
45-54	13	14	0	27
55-64	16	16	0	32
65-74	14	10	0	24
75+	5	4	0	9
Unknown	0	0	0	0
Total	87	86	0	173

Table 4. Laboratory confirmed acute cases of Lyme disease, by region (Q2 weeks 14-26, 2019)

PHE Centre	Cases
East Midlands	2
East of England	7
London	40
North East	5
North West	19
South East	45
South West	34
Wales	4
West Midlands	6
Yorkshire and Humber	11
Total	173

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

Other zoonotic organisms reported in Q2 2019

- Twenty-three cases of *Capnocytophaga* spp. (bacteria commonly inhabiting the mouth of cats and dogs) were reported in quarter two of 2019 from 11 female and 12 male patients. The cases were dispersed geographically across England. Speciation was reported for half of the cases, with eleven *C. canimorsus* and one *C. canis*.
- Two *Erysipelothrix rhusiopathiae* cases were reported from the South West and East Midlands.
- Three cases of toxigenic *Corynebacterium ulcerans* were reported; two from the West Midlands and one from Yorkshire and Humber. Exposure to animals was reported in all three cases.

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About Health Protection Report

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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