



Infection report

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Zoonoses

Common animal associated infections quarterly report (England and Wales): first quarter 2016

This quarterly report, produced by the Emerging Infections and Zoonoses Section at Public Health England, and the Health Protection Division of Public Health Wales, summarises confirmed cases of zoonotic infection reported in England and Wales between January and March 2016 (first quarter; weeks 1-13).

Animal associated infections in England and Wales: laboratory reports to SGSS[†] (unless otherwise specified) by specimen date, Q1 (weeks 1-13/16)

Disease (Organism)	Reports for weeks 01-13	
	2016*	2015
Anthrax (<i>Bacillus anthracis</i>)	–	–
Brucellosis (<i>Brucella spp.</i>)	2	1
Hepatitis E	219	206
Hydatid (<i>Echinococcus granulosus</i>)	3	5
Leptospirosis (<i>Leptospira spp.</i>)	3	8
Lyme borreliosis (<i>Borrelia burgdorferi</i>)		
All cases	97	83
Acute infections	54	32
Pasteurellosis (<i>Pasteurella spp.</i>)	110	139
Psittacosis (<i>Chlamydophila psittaci</i>)	4	4
Q-fever (<i>Coxiella burnetii</i>)	6	5
Toxoplasmosis # (<i>Toxoplasma gondii</i>)	62	88

[†] Second Generation Surveillance System has now replaced LabBase

* Provisional data

Based on date specimen received

Anthrax

There were no cases reported in the first quarter of 2016.

Brucellosis (data from the Brucella Reference Laboratories)

There were two cases of brucellosis reported in the first quarter of 2016 compared to one in the first quarter of 2015. Both cases were male aged between 25 and 44 years, and their infections were due to *Brucella melitensis*. They are understood to have acquired their infections in countries where brucellosis is endemic.

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

There were 219 cases of hepatitis E in the first quarter of 2016 compared to 206 in the same quarter of 2015. One hundred and forty-seven cases (67%) were male (aged 21-86 years, median 60) and 70 (32%) were female (aged 26-87 years, median 57) (the gender of the remaining two was not reported). The persisting observation of the predominance of older men (see table below) remains unexplained. Cases were reported from all regions. The majority of cases (84%, n=184) had no apparent travel history.

The number of cases is consistent with the on-going increase observed since 2010 [1].

Laboratory confirmed cases of Hepatitis E infection (week 1-13, 2016)

Age Group	Male	Female	Unknown	Total
0-14	–	–	–	0
15-24	5	–	1	6
25-44	27	13	1	41
45-64	53	33	–	86
>64	62	24	–	86
Unknown	–	–	–	–
Total	147	70	2	219

Hydatid disease (data from the Parasitology Reference Laboratory)

There were three cases of hydatid disease (*Echinococcus granulosus*) reported in the first quarter of 2016, compared to five cases in the first quarter of 2015. Two of the cases were male aged between 25 and 44 years, while the third case was female aged over 65 years. All are understood to have acquired their infections in countries overseas where the disease is endemic.

Leptospirosis (data from the Leptospira Reference Unit)

There were three cases of confirmed leptospirosis reported in the first quarter of 2016, compared with 8 in the first quarter of 2015.

Two cases were male (aged 24 and 65 years), and one was female (aged 26 years). One case was reported from each of the East of England, the South West and Wales. One had travelled to Mexico, and one worked in a plant nursery. None of the cases mentioned specific water exposure or contact with rats.

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

A total of 97 cases of laboratory confirmed Lyme disease were reported during the first quarter of 2016, compared with 83 during the first quarter of 2015. Of these cases, 54 were acute (including seven with neuroborreliosis) and 43 were longstanding.

Of the acute cases, 23 were male (aged 3-93 years, median 45) and 31 were female (aged 8-74 years, median 45).

Three (5.6%) of the acute cases reported foreign travel: one each to Sri Lanka, Hungary and Poland. Nine acute cases reported an insect bite, of whom eight specified a tick bite. Five cases reported erythema migrans as a presenting symptom.

Laboratory confirmed cases of *Lyme borreliosis* (weeks 1-13, 2016): age group by sex; region of reporting laboratory

Age Group	Male	Female	Total
0-14	3	2	5
15-24	3	3	6
25-34	–	1	1
35-44	5	9	14
45-54	2	7	9
55-64	5	4	9
65-74	3	5	8
75+	2	–	2
Total	23	31	54

Region	Cases
East Midlands	2
East of England	4
London	16
North East	–
North West	6
South East	14
South West	11
Wales	1
West Midlands	–
Yorkshire & Humber	–
Total	54

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

Pasteurellosis

There were 110 confirmed cases of pasteurella reported in the first quarter of 2016. This compares with 139 reported in the same quarter of 2015. The following species were reported: *Pasteurella multocida* (76 cases), *P. canis* (12 cases), *P. pneumotropica* (1 case), *Pasteurella* other named (6 cases) and *Pasteurella* sp. (15 cases).

Sixty five of the cases were female (aged 3-88 years, median 62) and 45 were male (aged 0-88 years, median 48). The South East of England reported the most cases (n=19), and Wales reported the fewest (n=0). Seven of the cases were associated with dog bites, and seven with cat bites. One further case specified an 'animal bite'.

A 87 year old female from the East Midlands was reported to have died.

Laboratory confirmed cases of pasteurellosis (week 1-13, 2016)

Age group	Male	Female
0-14	4	3
15-29	6	4
30-39	4	3
40-49	9	4
50-59	7	15
60-69	8	19
70-79	5	10
80+	2	7
Total	45	65

Psittacosis

Four cases of psittacosis were diagnosed in the first quarter of 2016, the same number as in the first quarter of 2015. Three cases were female (ages 28, 39 and 62 years), and one case was male (age 53 years). Two cases were reported by the South West of England, and one each by the East of England and the West Midlands.

Note: Serological tests for respiratory chlamydia infections cannot consistently distinguish psittacosis. The cases reported above have been identified by reporting laboratories as infection with *Chlamydia psittaci*.

Q fever (data from the Rare and Imported Pathogens Laboratory, Porton, and Bristol Reference Laboratory)

There were six cases of Q fever reported in the first quarter of 2016, compared with five cases in the first quarter of 2015. Four were male (aged 37-72 years, median 70) and two were female (ages 51 and 53 years). Three were reported by the South West of England, and one each by London, the South East and the West Midlands.

Toxoplasma (Data from the Toxoplasma Reference Unit)

There were 62 cases of toxoplasmosis reported in the first quarter of 2016, compared with 88 cases in the first quarter of 2015. One case reported ocular symptoms. Six cases occurred in pregnant women.

In addition, there were three unconfirmed congenital cases reported, all linked to pregnant cases in this quarter (and not included in the numbers given for this report).

Laboratory confirmed cases of toxoplasma infection (weeks 01-13, 2016): age group by sex; age group by clinical category

Age Group	Male	Female	Unknown	Total
0	–	–	–	0
1-9	1	1	–	2
10-14	1	–	–	1
15-24	5	4	1	10
25-44	12	22	–	34
45-64	5	6	–	11
>64	1	2	1	4
Total	25	35	2	62

Age Group	Cong-enital	Pregnant	HIV	Transplant donor	Transplant recipient	Other (immuno-competent)	Other (immune-suppressed)	Total
0	–	–	–	–	–	–	–	0
1-9	–	–	–	–	–	2	–	2
10-14	–	–	–	–	–	1	–	1
15-24	–	–	–	–	–	10	–	10
25-44	–	6	1	1	1	24	1	34
45-64	–	–	2	–	1	6	2	11
>64	–	–	–	–	–	3	1	4
Total	-	6	3	1	2	46	4	62

Other zoonotic organisms

Other zoonotic infections of interest diagnosed in the first quarter of 2016 were as follows:

- Two cases of *Capnocytophaga* were reported, one of which was bacteraemic and one was diagnosed by culture from a wound. One case was a 62 year old male, and the other a 65 year old female. One case was reported by the East of England, and the second by London;
- One case of *Corynebacterium ulcerans* was reported, diagnosed by culture from a toe. The case was a 57 year old female from Yorkshire and Humber;
- Eight cases of *Erysipelothrix rhusiopathiae* were reported in seven males (aged 46-71 years, median 62) and one female (48 years). Three were bacteraemic; other specimen types included tissue and sputum. Five of the cases were reported by the East Midlands, and one each by the North West, South East and Yorkshire and the Humber;
- Three cases of *Mycobacterium marinum* were reported in two males (aged 68 and 77 years) and a female (aged 71 years). All three were diagnosed by culture from tissue samples. Two of the cases were reported by the East of England, and one by the West Midlands;
- One case of *Streptococcus canis* was reported in a 63 year old male from the West Midlands. He was diagnosed by culture from a wound.

Reference

1. <https://www.gov.uk/government/publications/hepatitis-e-symptoms-transmission-prevention-treatment/hepatitis-e-symptoms-transmission-treatment-and-prevention>
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