



Infection report

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Zoonoses

Common animal associated infections quarterly report (England and Wales) – first quarter 2017

This quarterly report, produced by the Emerging Infections and Zoonoses Section at Public Health England Centre for Infectious Disease Surveillance and Control, and the Health Protection Division of Public Health Wales, summarises confirmed cases of zoonoses reported in England and Wales between January and March 2017 (first quarter; weeks 1-13).

This edition marks a change in the format of the report. Following consultation, we will now focus on diseases of current interest, which will help readers to rapidly identify any trends of public health significance.

The main table – presenting overall case numbers for all zoonoses covered by this report – will continue to be published, along with detailed data for three diseases: Hepatitis E, Leptospirosis, and Lyme disease. Detailed sections on additional diseases will be reported if the epidemiology is likely to be of public health interest, eg increased case numbers or a change in the underlying epidemiology.

Animal associated infections in England and Wales: laboratory reports by specimen date, Q1 (weeks 1-13/17)

Disease (Organism)	Reports for weeks 1-13	
	2017*	2016
Anthrax (<i>Bacillus anthracis</i>)	–	–
Brucellosis (<i>Brucella spp.</i>)	N/A	2
Hepatitis E	218	348
Hydatid (<i>Echinococcus granulosus</i>)	N/A	10
Leptospirosis (<i>Leptospira spp.</i>)	9	3
Lyme borreliosis (<i>Borrelia burgdorferi</i>)		
All cases	200	113
Acute infections	138	63
Pasteurellosis (<i>Pasteurella spp.</i>)	177	110
Psittacosis (<i>Chlamydophila psittaci</i>)	16	4
Q-fever (<i>Coxiella burnetii</i>)	3	6
Toxoplasmosis# (<i>Toxoplasma gondii</i>)	83	63

* Provisional data. # Based on date specimen received. N/A = Not available

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

As more laboratories across the country acquired the capacity to investigate samples for hepatitis E virus and do not use the services of the reference laboratories, combining the reference laboratory data together with additional cases reported by local laboratories through the Second Generation Surveillance System (SGSS) is a more accurate reflection of the number of HEV infected cases reported in England and Wales. The combined datasets were first introduced in 2016 [1].

There were 218 cases of hepatitis E in the first quarter of 2017 compared to 348 in the same quarter of 2016. One hundred and twenty-five cases (57%) were male (aged 14-87 years, median 60) and 91 (42%) were female (aged 18-87 years, median 56). The genders of the remaining two cases were not reported. The persisting observation of the predominance of older men (see table below) remains unexplained.

Reference and Local Laboratory confirmed cases of Hepatitis E infection (week 1-13, 2017)

Age Group	Male	Female	Unknown	Total
<10	–	–	–	–
10-14	1	–	–	1
15-24	5	6	–	11
25-44	21	22	1	44
45-64	55	33	–	88
>64	43	30	1	74
Total	125	91	2	218

The majority of cases (n=174; 80%) had no apparent travel history. Non-travel cases were reported from all regions.

The total number of cases (n=218) for weeks 01-13 shows a decrease in newly diagnosed cases. There had been a persisting increasing trend in the number of cases of hepatitis E reported by local and reference laboratories between 2010 and 2016 [2]. However, in 2016 for the first time a small decrease in the number of newly diagnosed cases was observed in the last quarter of 2016 (218 cases compared to 328 in the year 2015 [1]). This downward trend has continued into the first quarter of 2017.

Leptospirosis (data from the Leptospira Reference Unit)

There were nine confirmed cases of leptospirosis reported in the first quarter of 2017, compared with three during the first quarter of 2016. Seven of the cases were male (aged 15-53 years, median=32) and two were female (ages 27 and 32 years). The region reporting the highest number of cases was the South West (four cases).

Two cases had occupational exposure (farmers), one of whom reported exposure to rats. Six cases reported travelling abroad, two to Jamaica, and one each to Brazil, Indonesia, Thailand and Vietnam. Three of the cases who travelled abroad reported water exposure.

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

A total of 200 cases of laboratory confirmed Lyme disease was reported during the first quarter of 2017, compared with 113 cases reported in the first quarter of 2016. Of the 2017 cases, 138 were acute (including 15 with neuroborreliosis) and 62 were longstanding.

Of the acute cases, 70 were male (aged 4-82 years, median 48) and 68 were female (aged 5-80 years, median 32). Eighteen (13%) of the acute cases reported foreign travel: three to Africa, three to Europe, two to Asia, two to Australasia, two to North America, one to South America, one visited more than one continent (Africa and Asia), and four had an unspecified travel history.

Laboratory confirmed cases of Lyme disease, by age and sex (Q1 2017)

Age group	Male	Female	Total
0-14	4	5	9
15-24	2	11	13
25-34	13	22	35
35-44	10	10	20
45-54	17	6	23
55-64	13	7	20
65-74	8	5	13
75+	2	2	4
NK	1	—	1
Total	70	68	138

Laboratory confirmed cases of Lyme disease, by region (Q1 2017)

Region	Cases
East Midlands	6
East of England	13
London	37
North East	1
North West	11
South East	25
South West	26
Wales	1
West Midlands	12
Yorkshire & Humber	6
Total	138

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

Psittacosis

There were 16 cases of psittacosis reported in the first quarter of 2017, compared with four in the first quarter of 2016.

The majority of these additional cases (n=14) were reported by one laboratory and cases were spread across four separate regions. This appears to be a change in laboratory reporting practice, rather than a change in the epidemiology of the disease however the situation is being investigated further.

Other zoonotic organisms

Other zoonotic infections of interest diagnosed in the first quarter of 2017 were as follows:

- Five cases of *Capnocytophaga* sp. were reported, all bacteraemic. One case was speciated as *C. ochracea*. Four cases were male (median age 56 years) and one was female (age 60 years). Two cases were reported from London, two from Yorkshire and Humber, and one from the West Midlands. One case was reported to have died.
- Three cases of *Erysipelothrix rhusiopathiae* were reported. Two of the cases were bacteraemic and one was an unspecified tissue infection. Two cases were female (median age 76.5 years) and one was male (age 46 years). Two of the cases came from the South East and one from the East of England.
- Four cases of *Mycobacterium marinum* were reported, comprised of three unspecified tissue infections and one lung infection. Three of the cases were male (median age 52 years) and one was female (age 49 years). Two of the cases were reported from the South East, and one each from the South West and the North East.
- One case of *Streptobacillus moniliformis* from unspecified fluid in a 49 year old female from London.

References

1. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593004/hpr0617_zoos.pdf.
 2. <https://www.gov.uk/government/publications/hepatitis-e-symptoms-transmission-prevention-treatment/hepatitis-e-symptoms-transmission-treatment-and-prevention>.
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