



## Infection report

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### Zoonoses

## Common animal associated infections quarterly report (England and Wales) – first quarter 2014

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 2014 (first quarter; weeks 01-13).

### Animal associated infections in England and Wales: laboratory reports to LabBase (unless otherwise specified) by specimen date, weeks 01-13/14

Disease (Organism)	Reports for weeks 01-13	
	2014*	2013
Anthrax ( <i>Bacillus anthracis</i> )	–	1
Brucellosis** ( <i>Brucella spp.</i> )	2	1
Hepatitis E**	200	147
Hydatid** ( <i>Echinococcus granulosus</i> )	6	3
Leptospirosis** ( <i>Leptospira spp.</i> )	5	14
Lyme borreliosis** # ( <i>Borrelia burgdorferi</i> )	30	106
Pasteurellosis ( <i>Pasteurella spp.</i> )	105	136
Psittacosis ( <i>Chlamydochila psittaci</i> )	4	7
Q-fever ( <i>Coxiella burnetii</i> )	11	8
Toxoplasmosis**# ( <i>Toxoplasma gondii</i> )	92	70

\* Provisional data.

\*\* Enhanced surveillance system.

# Based on date specimen received

## Anthrax

There were no cases reported in the first quarter of 2014.

## Brucellosis (data from the Brucella Reference Laboratories)

There were two reports of brucellosis reported during the first quarter of 2014, compared with one during the first quarter of 2013. One infection confirmed as *Brucella melitensis* was in a 43 year old female and one identified by serology (*Brucella* spp.) in a 45 year old male; both are understood to be from countries where brucellosis is endemic.

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

There were 200 cases of Hepatitis E in the first quarter of 2014 compared to 147 in the same quarter of 2013. This is consistent with the on-going increase in cases observed since 2010<sup>1</sup>.

One hundred and thirty-two cases (66%) were male (aged 19-88 years, median 63) and 67 (33.5%) were female (aged 22-93 years, median 58). Older men predominate and this is a persisting observation, although the excess remains unexplained. Cases were reported from all regions. The majority of cases (92%, n=185) had no apparent travel history.

Age Group	Weeks 40-52/13			
	Male	Female	Unknown	Total
0-14	–	–	–	–
15-24	3	1	–	4
25-44	14	13	1	28
45-64	50	26	–	76
>64	65	27	–	92
<b>Total</b>	<b>132</b>	<b>67</b>	<b>1</b>	<b>200</b>

## Hydatid disease (data from the Parasitology Reference Laboratory)

Six reports of hydatid disease were received during the first quarter of 2014, compared with three cases during the first quarter of 2013. Four cases were in males, aged 22 to 83 years and two in females aged 29-39 years. All infections are believed to have been acquired outside the UK.

## Leptospirosis (data from the Leptospira Reference Unit)

There were five cases of leptospirosis reported in the first quarter of 2014, compared with 14 in the first quarter of 2013. Of these, three cases were known to have been indigenously acquired, two (one identified as *L. Hardjo* and the other *L. Icterohaemorrhagiae*) were in farmers and one infection, in which the serovar was not determined, was acquired whilst cleaning a slurry pit. All of three indigenous cases were males, aged between 40 and 50 years of age. Two infections were acquired overseas in males aged 20 to 50 years, one in the Caribbean and one in Japan; the serovars were not determined for these cases and further information is awaited on activities undertaken prior to the infection.

Confirmations by PCR (undertaken by the Leptospira Reference Unit [LRU] and the Rare and Imported Pathogens Laboratory, Porton) remain a developmental test with limited technical validation. Clinicians are asked to submit a second specimen from the patient to the LRU, together with exposure and clinical histories, as this increases the likelihood that the infecting serovar can be identified.

## Lyme disease

There were technical issues with obtaining the 2014 quarter 1 data – this information will be updated as soon as possible.

There were 30 confirmed cases of Lyme borreliosis reported through LabBase during the first quarter of 2014, compared with 106 in the first quarter of 2013.

Information on cases remains limited at this stage however infection was reported in 14 females and 16 males with ages ranging from 10 to 65 years (median=37). Reports were received from patients in 6 regions of England and Wales with 60% of reports from the South East (37%) and South West (23%) regions of England.

## Pasteurellosis

One hundred and five cases of pasteurellosis were reported in the first quarter of 2014, compared with 136 in the first quarter of 2013: *Pasteurella multocida* (74 cases, 70.5%), *Pasteurella pneumotropica* (3 cases, 2.8%) and *Pasteurella* sp. (28 cases, 26.7%).

Thirty-eight of the cases were male (1-89 years, median 49) and 67 were female (3-92 years, median 63). One death with renal failure was reported. The North of England reported the most cases (26), and Wales reported the fewest (10). Of the six cases giving an animal exposure, four reported cat bites and two reported dog bites.

	Weeks 01-13/14	
Age group	Male	Female
0-14	3	3
15-29	4	7
30-39	3	6
40-49	9	8
50-59	3	7
60-69	8	11
70-79	6	13
80+	2	12
<b>Total</b>	<b>38</b>	<b>67</b>

## Psittacosis

Four cases of psittacosis were diagnosed in the first quarter of 2014, compared with seven during the first quarter of 2013. One case was male (aged 70) and three were female (aged 37-42 years, median 39). Three of the cases were from the South of England, one from the East of England.

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 11 cases of Q fever reported in the first quarter of 2014, compared with eight in the first quarter of 2013. Five cases were male (aged 18-57 years, median 43) and 6 were female (aged 26-82, median 57). Five cases were reported by the South of England, and three each by the North of England and London.

## Toxoplasma (Data from the Toxoplasma Reference Unit)

There were 92 cases of *Toxoplasma* infection in the first quarter of 2014, compared with 70 cases in the first quarter of 2013. Nine cases reported ocular symptoms. Nine cases occurred in pregnant women and there were six confirmed congenital cases, of which two were twins.

**Tables: Laboratory confirmed cases of Toxoplasma infection (week 01-13, 2014)**

Age group	Male	Female	Unknown	Total
Foetus	–	–	2	2
0	2	1	1	4
1-9	1	1	–	2
10-14	1	–	–	1
15-24	6	6	–	12
25-44	18	24	2	44
45-64	10	9	2	21
>64	1	4	–	5
Unknown	–	1	–	1
<b>Total</b>	<b>39</b>	<b>46</b>	<b>7</b>	<b>92</b>

Age group	Con-genital	Pregnant	HIV	Organ donor	Organ recipient	Other (Immuno-competent)	Other (Immuno-suppressed)	Unknown*	Total
Foetus	2	–	–	–	–	–	–	–	2
0	4	–	–	–	–	–	–	–	4
1-9	–	–	–	–	–	2	–	–	2
10-14	–	–	–	–	–	1	–	–	1
15-24	–	–	2	–	–	9	–	–	11
25-44	–	8	6	–	–	29	1	–	44
45-64	–	–	3	–	2	14	3	–	22
>64	–	–	2	–	–	2	1	–	5
unknown	–	1	–	–	–	–	–	–	1
<b>Total</b>	<b>6</b>	<b>9</b>	<b>13</b>	<b>–</b>	<b>2</b>	<b>57</b>	<b>5</b>	<b>–</b>	<b>92</b>

\* No clinical details or information given.

## Other zoonotic organisms

Other zoonotic infections of interest diagnosed in the first quarter of 2014 were as follows:

- Five cases of *Capnocytophaga* sp. infection; two infections were in females aged 73 and 76 years, and three were in males aged 13, 67 and 85 years. All the infections were bacteraemias.
- Two cases of *Erysipelothrix* sp, one of which was speciated as *E. rhusiopathiae*, Both cases were male, (aged 71 and 87) and had bacteraemia.
- Three cases of *Mycobacterium marinum*, two in females aged 51 and 67 years and one was in a male aged 61 years. All had tissue infections.
- One *Streptococcus zooepidemicus* bacteraemia in a 73 year old female

## Reference

1. <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisE/Surveillance/>