



## Infection report

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### Zoonoses

## Common animal associated infections quarterly report (England and Wales) – second 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 April and June 2014 (second quarter; weeks 14-26).

### Animal associated infections in England and Wales: laboratory reports to LabBase (unless otherwise specified) by specimen date, weeks 14-26/14

Disease (Organism)	Reports for weeks 01-13		Reports for weeks 14-26	
	2014*	2013	2014*	2013
Anthrax ( <i>Bacillus anthracis</i> )	–	1	–	–
Brucellosis** ( <i>Brucella spp.</i> )	2	1	2	6
Hepatitis E**	218	147	243	155
Hydatid** ( <i>Echinococcus granulosus</i> )	6	3	1	3
Leptospirosis** ( <i>Leptospira spp.</i> )	5	14	6	5
Lyme borreliosis** # ( <i>Borrelia burgdorferi</i> )	136	106	188	201
Pasteurellosis ( <i>Pasteurella spp.</i> )	105	136	164	168
Psittacosis ( <i>Chlamydochila psittaci</i> )	4	7	10	5
Q-fever ( <i>Coxiella burnetii</i> )	11	8	14	11
Toxoplasmosis**# ( <i>Toxoplasma gondii</i> )	88	70	96	86

\* Provisional data.

\*\* Enhanced surveillance system.

# Based on date specimen received

## Anthrax

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

## Brucellosis (data from the Brucella Reference Laboratories)

There were two reports of brucellosis reported during the second quarter of 2014, compared with six during the second quarter of 2013. Both infections were confirmed as *Brucella melitensis*, one was in a 49 year old and the other in a 75 year old (the sex of each case was not recorded); 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 243 cases of Hepatitis E in the second quarter of 2014 compared to 155 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 fifty-two cases (63%) were male (aged 20-93 years, median 58) and 89 (37%) were female (aged 19-93 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 (76%, n=184) had no apparent travel history.

### Laboratory confirmed cases of Hepatitis E infection (week 14-26, 2014)

Age Group	Weeks 14-26/14			
	Male	Female	Unknown	Total
0-14	–	–	–	–
15-24	1	2	–	3
25-44	35	19	2	56
45-64	60	40	–	100
>64	56	28	–	84
<b>Total</b>	<b>152</b>	<b>89</b>	<b>2</b>	<b>243</b>

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

One report of hydatid disease was received during the second quarter of 2014, compared with three cases during the second quarter of 2013. The case was a 72 year old female whose infection is believed to have been acquired outside the UK.

## Leptospirosis (data from the Leptospira Reference Unit)

There were six cases of leptospirosis reported in the second quarter of 2014, compared with 5 in the second quarter of 2014. Of these, five cases were known to have been indigenously acquired, two were occupationally acquired, one in a builder, the other in a farmer following immersion in a canal. Two infections were identified in triathletes who competed in the 2014 'Enduroman' contest in Dorset around the late May Bank Holiday. Of the five indigenous cases, four were males aged 20 and 54 year and one female aged 32 years. One infection was acquired overseas and identified by serology in a 53 year old male who had been fishing in France. Five cases were identified by PCR and infecting serovars were not determined.

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

### Data are presented here for the first 6 months of 2014

Note: Specimens sent for Lyme borreliosis referral testing should be accompanied by a completed referral form: [http://www.hpa.org.uk/webc/HPAwebFile/HPAweb\\_C/1317134852210](http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317134852210)

Three hundred and twenty-four serologically confirmed cases of Lyme borreliosis were reported during the first 6 months of 2014 (136 in Q1 and 188 in Q2). Case sera were submitted from hospitals in regions throughout England and Wales; South of England reported the most cases (147), and Wales reported the fewest (6). Twenty-one (6%) cases reported overseas travel (Poland n=9, Germany n=4, USA n=2, France n=2 and one each from Slovenia, Austria, Italy and Slovakia). Cases were reported from all age groups (see below). Clinical presentations were available for 141 (43%) cases: 75 (23%) tick bite, 41 (12%) erythema migrans, 18 (5%) myalgia/ arthralgia, 11 (3%) facial palsy, nine (2%) influenza-like illness, nine (2%) arthropathy/ arthritis and eight (2%) fatigue. Some cases reported multiple symptoms.

Age group	Weeks 01-26/14	
	Male	Female
0-14	13	10
15-24	6	29
25-34	26	26
35-44	34	25
45-54	31	33
55-64	31	19
65-74	11	12
75+	11	7
<b>Total</b>	<b>163</b>	<b>161</b>

## Pasteurellosis

One hundred and sixty-four cases of pasteurellosis were reported in the second quarter of 2014, compared with 168 in the same quarter of 2013: *Pasteurella multocida* (128 cases, 78%), *Pasteurella pneumotropica* (13 cases, 8%), and *Pasteurella* sp. (23 cases, 14%). One of the cases had a dual infection with *Pasteurella multocida* and *Pasteurella* sp.

Seventy-two of the cases were male (0-91 years, median 56) and 79 were female (2-88 years, median 64). Gender and age was unknown for 13 cases. The North of England reported the most cases (46), and Wales reported the fewest (12). Of the two cases giving an animal exposure both reported dog bites.

Age group	Weeks 01-13/14		Weeks 14-26/14		
	Male	Female	Male	Female	Unknown
0-14	4	3	4	3	-
15-29	4	7	7	4	-
30-39	3	6	7	3	-
40-49	9	8	11	13	-
50-59	3	7	16	10	-
60-69	8	11	10	16	-
70-79	6	13	12	18	-
80+	2	12	5	12	-
Unknown	-	-	-	-	13
<b>Total</b>	<b>38</b>	<b>67</b>	<b>72</b>	<b>79</b>	<b>13</b>

## Psittacosis

Ten cases of psittacosis were diagnosed in the second quarter of 2014, compared with five during the second quarter of 2013. Eight cases were male (aged 31-74, median 45) and two were female (aged 39 and 49). Seven of the cases were from the South of England, two from the North of England and one from Wales.

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 14 cases of Q fever reported in the second quarter of 2014, compared with 11 in the second quarter of 2013. Nine cases were male (aged 19-74 years, median 53) and 5 were female (aged 19-80, median 63). Seven cases were reported by the South of England, three by the North of England, two by Midlands and the East of England and one each by London and Wales.

## Toxoplasma (Data from the Toxoplasma Reference Unit)

There were 96 laboratory-confirmed cases of *Toxoplasma* infection in the second quarter of 2014, compared with 86 cases in the second quarter of 2013. One case reported ocular symptoms. Nine cases occurred in pregnant women and there were two confirmed congenital cases, one of which formed a mother-child pair with one of the pregnant cases.

**Tables: Laboratory confirmed cases of Toxoplasma infection (week 14-26, 2014)**

Age group	Male	Female	Unknown	Total
Foetus	–	–	–	–
0	–	1	1	2
1-9	–	1	–	1
10-14	–	2	–	2
15-24	5	3	–	8
25-44	27	35	2	64
45-64	10	7	1	18
>64	1	–	–	1
Unknown	–	–	–	–
<b>Total</b>	<b>43</b>	<b>49</b>	<b>4</b>	<b>96</b>

Age group	Con-genital	Pregnant	HIV	Organ donor	Organ recipient	Other (Immuno-competent)	Other (Immuno-suppressed)	Unknown*	Total
Foetus	–	–	–	–	–	–	–	–	–
0	2	–	–	–	–	–	–	–	2
1-9	–	–	–	1	–	–	–	–	1
10-14	–	–	–	–	–	2	–	–	2
15-24	–	–	1	–	–	7	–	–	8
25-44	–	9	3	2	2	44	3	1	64
45-64	–	–	5	1	–	11	1	–	18
>64	–	–	–	–	–	1	–	–	1
unknown	–	–	–	–	–	–	–	–	–
<b>Total</b>	<b>2</b>	<b>9</b>	<b>9</b>	<b>4</b>	<b>2</b>	<b>65</b>	<b>4</b>	<b>1</b>	<b>96</b>

\* No clinical details or information given.

## Other zoonotic organisms

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

- Three cases of *Capnocytophaga sp.* infection; all in females aged 61, 71 and 87 years. All the infections were bacteraemias.
- Three cases of *Mycobacterium marinum*, one in a female aged 48 and two in males aged 26 and 64 years. All had tissue infections.

## Reference

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