



Infection report

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Zoonoses

Common animal associated infections quarterly report (England and Wales) – second quarter 2015

This quarterly report, produced by the Emerging Infections and Zoonoses Section at Public Health England National Infection Service, and the Health Protection Division of Public Health Wales, summarises confirmed cases of zoonoses reported in England and Wales between April and June 2015 (second quarter; weeks 14-26).

Animal associated infections in England and Wales: laboratory reports to SGSS[†] (unless otherwise specified) by specimen date, Q2 (weeks 14-26/15)

| Disease (Organism) | Reports for weeks 01-13 | | Reports for weeks 14-26 | |
|---|----------------------------|------|----------------------------|------|
| | 2015* | 2014 | 2015* | 2014 |
| Anthrax (<i>Bacillus anthracis</i>) | - | - | - | - |
| Brucellosis** (<i>Brucella spp.</i>) | 1 | 2 | 5 | 2 |
| Hepatitis E** | 202 | 217 | 193 | 250 |
| Hydatid** (<i>Echinococcus granulosus</i>) | 9 | 6 | 8 | 2 |
| Leptospirosis** (<i>Leptospira spp.</i>) | 10 | 7 | 10 | 9 |
| Lyme borreliosis** (<i>Borrelia burgdorferi</i>) | N/A | N/A | N/A | N/A |
| Pasteurellosis (<i>Pasteurella spp.</i>) | 139 | 126 | 147 | 163 |
| Psittacosis (<i>Chlamydophila psittaci</i>) | 4 | 6 | 11 | 4 |
| Q-fever (<i>Coxiella burnetii</i>) | 6 | 10 | 3 | 18 |
| Toxoplasmosis**# (<i>Toxoplasma gondii</i>) | 88 | 76 | 86 | 96 |

[†]Second Generation Surveillance System has now replaced LabBase

* Provisional data

** Enhanced surveillance system

Based on date specimen received

N/A=Not Available

Anthrax

There were no cases reported in the second quarter of 2015.

Brucellosis (data from the Brucella Reference Laboratories)

Reports of five *Brucella* cases were received during the second quarter of 2015, compared with two in the second quarter of 2014.

Of the five cases in 2015, all were identified as *Brucella melitensis*. Four were males aged 23 to 61 years, and one was female aged 31 years. Four were known to have come from countries where brucellosis is endemic. Additional epidemiological details and clinical presentations are awaited.

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

There were 193 cases of hepatitis E in the second quarter of 2015 compared to 250* in the same quarter of 2014. One hundred and twenty-eight cases (66%) were male (aged 24-91 years, median 57) and 58 (30%) were female (aged 18-88 years, median 58). The genders of the remaining seven cases were 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 (78%, n=151) had no apparent travel history.

The number of cases is consistent with the on-going increase observed since 2010¹.

Laboratory confirmed cases of Hepatitis E infection (week 14-26, 2015)

| Age Group | Male | Female | Unknown | Total |
|--------------|------------|-----------|----------|------------|
| 0-14 | - | - | - | - |
| 15-24 | 1 | 2 | - | 3 |
| 25-44 | 21 | 12 | 3 | 36 |
| 45-64 | 61 | 23 | 3 | 87 |
| >64 | 45 | 21 | - | 66 |
| Unknown | - | - | 1 | 1 |
| Total | 128 | 58 | 7 | 193 |

Hydatid disease (data from the Parasitology Reference Laboratory)

Eight cases of hydatid disease were reported during the second quarter of 2015, compared with six during the same quarter of 2014. Five of the cases were female (aged 30 to 74 years) and three were male (aged 34 to 61 years). One patient with long term eosinophilia came from South Africa. Two cases were identified with renal hydatid, two with liver cysts and one with a multilocular cystic lesion.

Leptospirosis (data from the Rare and Imported Pathogens Laboratory, Porton and the Bacteriology Reference Department, Colindale)

The reporting system for leptospirosis changed in the second quarter of 2015. The reference service is now run jointly between BRD and RIPL.

There were ten cases of leptospirosis reported in the second quarter of 2015 compared with 9 in the second quarter of 2014. Seven of the cases were male (aged 18 to 69 years), and three were female (aged 19 to 72 years). The cases were reported by the south of England (n=7) and the north of England (n=3). Four had been travelling (one each to Borneo, France, Malaysia and Borneo/Thailand). One of the cases reported a tick bite and one reported that they had been on a fishing trip in France, that they lived on a river bank and there were rats in the water.

Four of the confirmed cases were diagnosed by PCR alone. These PCR diagnoses have not previously been included in the number of cases of confirmed leptospirosis.

* Figure corrected on 29 September 2015

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

Data are not yet available for Lyme disease for 2015.

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

Pasteurellosis

A total of 147 confirmed cases of pasteurellosis were reported in the second quarter of 2015. This compares to 163 reported in the same quarter in 2014. The following species were reported: *Pasteurella multocida* (104 cases), *Pasteurella canis* (7 cases), *Pasteurella pneumotropica* (1 case), *Pasteurella* other named (17 cases) and *Pasteurella* sp. (18 cases).

Ninety-six of the cases were female (aged 3 to 95, median 56.5 years) and 51 were male (aged 6 to 84, median 58 years). The north of England and south of England reported the most cases (46 and 45 respectively), and Wales reported the least (2). Eighteen of the cases were associated with cat bites, and six with dog bites.

Laboratory confirmed cases of pasteurellosis (week 14-26, 2015)

| Age group | Male | Female |
|--------------|-----------|-----------|
| 0-14 | 4 | 2 |
| 15-29 | 5 | 7 |
| 30-39 | 3 | 9 |
| 40-49 | 8 | 16 |
| 50-59 | 6 | 17 |
| 60-69 | 12 | 17 |
| 70-79 | 5 | 18 |
| 80+ | 8 | 10 |
| Total | 51 | 96 |

Psittacosis

Eleven cases of psittacosis were diagnosed in the second quarter of 2015, compared with four during the second quarter of 2014. Seven were male (aged 25 to 88, median 51 years) and four were female (aged 38 to 61, median 58.5 years). Five of the cases were reported by the Midlands and East of England, five by the south of England and one by the north of England. One case was known to have owned a parrot that recently died of a chlamydial infection.

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 three cases of Q fever reported in the second quarter of 2015, compared with 18 during the second quarter of 2014. All were male (aged 27, 45 and 66 years) and were reported by the Midlands and East of England (n=2) and the south of England (n=1) regions.

Toxoplasma (Data from the Toxoplasma Reference Unit)

There were 86 cases of toxoplasmosis reported in the second quarter of 2015 compared with 96 in the second quarter of 2014. Five cases reported ocular symptoms. Five cases occurred in pregnant women and there was one confirmed congenital case (which formed a mother-child pair with one of the pregnant cases).

Laboratory confirmed cases of toxoplasma infection (week 14-26, 2015)

| Age group | Male | Female | Unknown | Total |
|--------------|-----------|-----------|----------|-----------|
| 0 | 1 | 1 | | 2 |
| 1-9 | 1 | | | 1 |
| 10-14 | | | | |
| 15-24 | 9 | 11 | | 20 |
| 25-44 | 13 | 31 | | 44 |
| 45-64 | 6 | 10 | | 16 |
| >64 | 2 | | | 2 |
| Unknown | | | 1 | 1 |
| Total | 32 | 53 | 1 | 86 |

| Age group | Con-genital | Pregnant | HIV | Organ donor | Organ recipient | Other (Immuno-competent) | Other (Immuno-suppressed) | Total |
|--------------|-------------|----------|----------|-------------|-----------------|--------------------------|---------------------------|-----------|
| 0 | 1 | | | | | 1 | | 2 |
| 1-9 | | | | | | 1 | | 1 |
| 10-14 | | | | | | | | |
| 15-24 | | 1 | | | | 19 | | 20 |
| 25-44 | | 4 | 3 | | 1 | 35 | 1 | 44 |
| 45-64 | | | 1 | | | 15 | | 16 |
| >64 | | | | | | 2 | | 2 |
| Unknown | | | | 1 | | | | 1 |
| Total | 1 | 5 | 4 | 1 | 1 | 73 | 1 | 86 |

Other zoonotic organisms

Other zoonotic infections of interest diagnosed in the second quarter of 2015 were as follows:

- Five cases of *Capnocytophaga* infection, four of which had bacteraemic infections. Four of the cases were in males aged 20-79 years, and one was in a female aged 26 years. Cases were reported from the Midlands and the East of England (n=3), the north of England (n=1) and the south of England (n=1).
- One case of *Corynebacterium ulcerans* wound infection in a 49 year old man from the south of England who had a pet dog.
- Three cases of *Erysipelothrix* in two females (aged 33 and 89 years) and a male neonate. The two female cases were reported by the north of England, and the neonate was reported from the south of England. Two of the cases were bacteraemic.
- Eight cases of *Mycobacterium marinum* in seven males (aged 36 to 79 years, median 47 years) and one female (aged 70 years). Cases were reported by the Midlands and East of England (n=3), the south of England (n=3) and the north of England (n=2). Seven of the cases were tissue infections, whilst one immunocompromised case suffered from a bacteraemic infection.

Reference

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