

12. Zoonoses

The objectives of zoonosis surveillance are to:

- Monitor the epidemiology of zoonoses in terms of time, person and place;
- Detect outbreaks of zoonoses to identify a source, implement appropriate public health interventions and prevent further transmission, particularly in occupational settings;
- Communicate the patterns, risks and trends about zoonoses to the public, government and other key stakeholders.

Leptospirosis

Summary of notifications

There were notifications received for seven cases of leptospirosis in 2006, two fewer than in 2005. All cases were male with a median age of 30 years (range: 19–44 years). Six cases were residents of rural regions of Victoria (four in Barwon-South Western Region and one each in Gippsland and Hume Regions) and the other lived in metropolitan Melbourne.

Five cases were due to infection with *Leptospira interrogans* serovar *hardjo*, one was due to *L. interrogans* serovar *australis* and the other (the resident of metropolitan Melbourne) was due to *L. interrogans* serovar *copenhagenii*.

Risk factors

All cases from rural Victoria reported occupational risk factors: three cases were farmers, one was a farm hand, one was a meat tradesperson and another was a stock transporter. The case with a reported metropolitan residence was a student with a disease onset nine days after arriving from a rural area of Nepal and had no reported farm, lake or swamp exposures since arriving in Australia.

Outbreak investigations

No outbreaks or links between cases were identified.

Comment

In Victoria, the occupational groups most commonly affected by leptospirosis are farmers, farm workers and meat industry workers. Transmission primarily occurs through contact of skin with water, moist soil or vegetation contaminated with the urine of infected animals. Use of appropriate personal protection for people in high risk professions should be encouraged.

Psittacosis

Summary of notifications

There were 58 cases of psittacosis notified to the department in 2006, an increase of nearly 50 per cent on the 40 cases notified in 2005. On the basis of the laboratory results notified, 23 cases were classified as confirmed and 35 as probable. The median age of cases was 58 years (range: 22–79 years) with nearly 30 per cent of cases aged between 55 and 64 years inclusive (figure 57). A slight majority of cases (57 per cent) were males.

North and West Metropolitan Region was the most commonly reported region of residence, accounting for 38 per cent of cases. However, the notification rate was highest for Gippsland Region and was between approximately 3.5 and 7.5 times greater than the notification rates of other regions (figure 58). There were no reported cases in residents of Barwon-South Western and Hume Regions.

Thirty-eight cases (66 per cent) were reported as hospitalised although no deaths were reported.

Table 38: Notified cases of psittacosis by risk factor, Victoria, 2006

Risk factor*	Cases (per cent)
Contact with domestic bird(s)	29 (50)
Contact with domestic psittacine bird(s)	25 (43)
Contact with wild bird(s)	30 (52)
Occupational bird exposure	7 (12)

* Multiple risk factors reported.

Figure 57: Notified cases and notification rates of psittacosis by age group and sex, Victoria, 2006

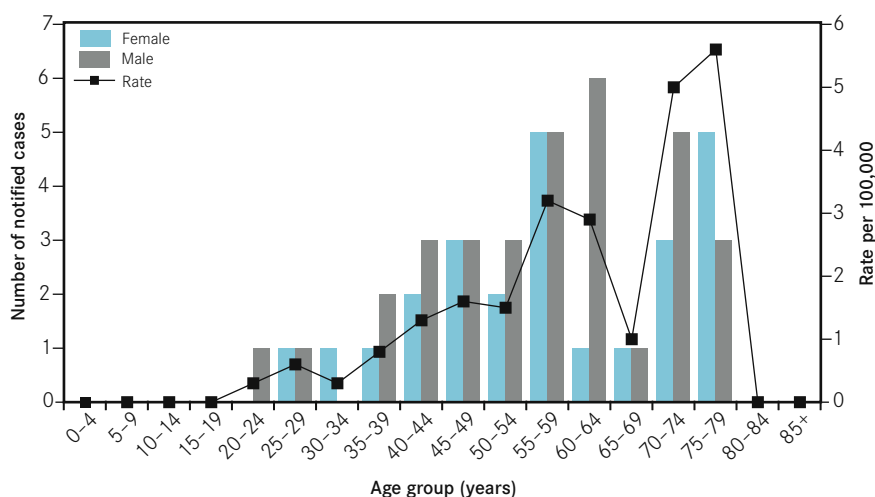
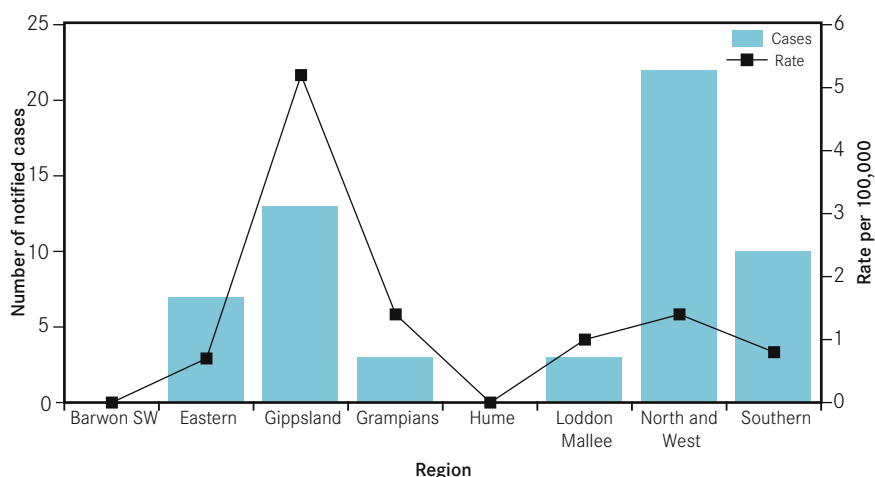


Figure 58: Notified cases and notification rates of psittacosis by region, Victoria, 2006



Risk factors

Risk factor data about exposure to birds were collected from all cases. Half of the notified cases reported contact with domestic birds, of which all but four cases reported the bird(s) to be psittacine (table 38). Approximately one half and one eighth of cases reported wild bird and occupational exposures respectively.

Outbreak investigations

No outbreaks or links between cases were identified.

Comment

Birds of all types serve as a reservoir for *Chlamydia psittaci*, although it is most common in psittacine varieties, which include parrots, cockatiels and budgerigars, both domestic and wild. Humans generally become infected after inhaling dust from dried faeces

or secretions from infected birds. Prevention measures include wearing gloves and dust masks when cleaning cages, aviaries, bird feeders or areas frequented by birds. In instances where a case is thought to have acquired psittacosis from birds that have been purchased within the last 12 months, the Communicable Disease Control Unit liaises with the Department of Primary Industries to investigate the premises from which the implicated bird(s) was purchased. This involves a veterinary inspection of the premises and discussion of a psittacosis management plan with the proprietor to further reduce the spread of psittacosis.

Q fever

Summary of notifications

There were 33 cases of Q fever notified in 2006, an increase of two cases on the total notified in 2005. The median age of cases was 41 years (range: 5–65 years) with one third of the cases aged between 40 and 49 years (figure 59). Six cases (18 per cent) were females; the remainder were males.

One third of the notified cases were reported to be residents of North and

West Metropolitan Region; however, notification rates were highest in Grampians, Hume and Loddon Mallee Regions in which there were between five and six cases each (figure 60).

Twenty-three cases (70 per cent) were reported as hospitalised although no deaths were reported.

Risk factors

Eleven cases (33 per cent) reported being employed in high risk occupations

Figure 59: Notified cases and notification rates of Q fever by age group and sex, Victoria, 2006

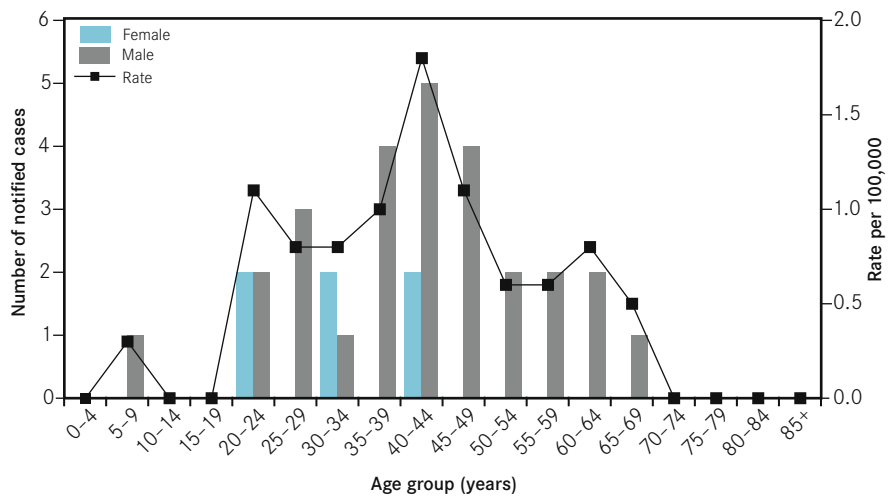
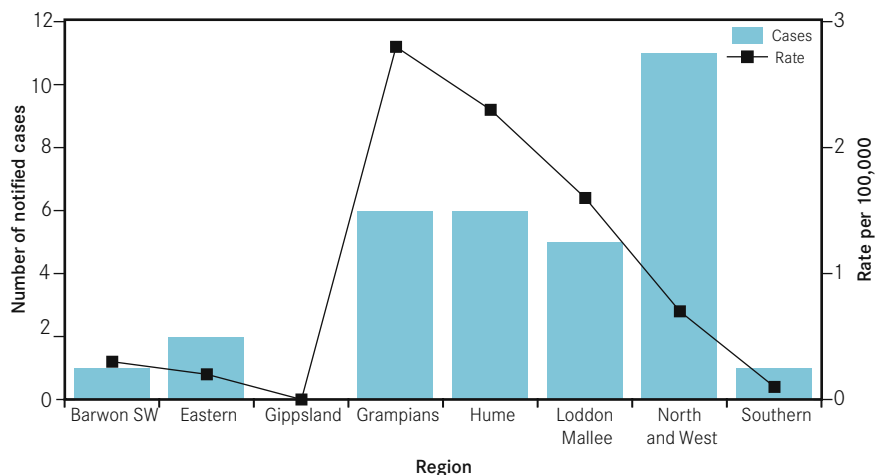


Figure 60: Notified cases and notification rates of Q fever by region, Victoria, 2006



(table 39). A further five cases (15 per cent) in other occupations (two other labourers, two transport workers and one sales representative) reported contact with livestock or wholesale meat products during the incubation period. None of the cases was reported as being vaccinated against Q fever.

Outbreak investigations

Seven of the notified cases were associated with two outbreaks in regional Victoria during the third quarter of 2006. The first involved five males aged from 20 to 60 years who lived near or used a community walking/cycling track that passed close to an abattoir. None of the men had occupational risk factors. The second outbreak occurred among two Victorian and three New South Wales employees of an abattoir. The two Victorian cases were males aged 41 and 42 years; neither was vaccinated. Health alerts were distributed in relation to both outbreaks and control and prevention measures were implemented in cooperation with local Government and industry.

Comment

Funded Q fever vaccination of those working with animals, part of the National Q fever management program, ceased on 20 June 2006; however vaccination is still recommended for those in occupational high risk groups.

Table 39: Notified cases of Q fever by occupation, Victoria, 2006

Occupation	Cases (per cent)
Meatworks labourer	5 (15)
Farmer	4 (12)
Office worker	4 (12)
Other labourers	4 (12)
Transport worker	3 (9)
Home duties	2 (6)
Slaughterperson	2 (6)
Student	2 (6)
Unemployed	2 (6)
Unknown	2 (6)
Child at home	1 (3)
Retired/pensioner	1 (3)
Sales representative	1 (3)
Total	33 (100)