



# Notifiable Diseases 2013 Annual Report

The Notifiable Diseases 2013 Annual Report from Public Health Services includes commentaries on diseases and a table (Table 2) of all diseases reported for this period.

Notification of cases of diseases of public health significance provides a way to monitor trends, inform prevention, and respond to notable cases, clusters, outbreaks, and even epidemics.

Data on notifiable communicable diseases in Tasmania are collected by Public Health Services (PHS) under the powers vested in the Director of Public Health by the *Public Health Act 1997*.

This process is specified in the *Guidelines for Notification of Notifiable Diseases, Human Pathogenic Organisms and Contaminants of February 2010* ([www.dhhs.tas.gov.au/publichealth/communicable\\_diseases\\_prevention\\_unit/infectious\\_diseases](http://www.dhhs.tas.gov.au/publichealth/communicable_diseases_prevention_unit/infectious_diseases)). Cases of notifiable diseases are notified to PHS by clinicians and laboratories.

Notifiable diseases in Tasmania comprise all 69 diseases included in the current national notifiable disease list, in the following categories: bloodborne diseases, gastrointestinal diseases, quarantinable diseases, sexually transmissible infections, vaccine preventable diseases, vector-borne diseases, zoonoses and other bacterial infections ([www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-nndss-casedefs-distype.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-nndss-casedefs-distype.htm)).

Surveillance data on notifiable diseases are collected in accordance with nationally agreed case definitions ([www.health.gov.au/internet/main/publishing.nsf/Content/cdna-casedefinitions.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-casedefinitions.htm)).

Recent and historical data for all states and territories are available here: <http://www9.health.gov.au/cda/source/cda-index.cfm>. Tasmanian data are published in quarterly and annual reports, available here: [www.dhhs.tas.gov.au/publichealth/communicable\\_diseases\\_prevention\\_unit](http://www.dhhs.tas.gov.au/publichealth/communicable_diseases_prevention_unit)

Some additional diseases, while not nationally notifiable, are currently notifiable in Tasmania.

These comprise rotavirus, chancroid, echinococcosis (hydatid disease), gastroenteritis in an institution, giardiasis, lymphogranuloma venereum, rickettsial infection (including Flinders Island spotted fever and others).

Suspected cases of food and waterborne illnesses, vibrio infection, and yersiniosis. *Staphylococcus aureus* bacteraemia and vancomycin resistant enterococci are also notifiable in Tasmania; their surveillance is managed separately by Public Health Services.

Data presented in this report are based on notifications to the Director of Public Health. They may not reflect the true incidence of some disease in the community. Changes in surveillance practice, diagnostic techniques and reporting may also affect notification data

over time. Data in this report were extracted on 5 May 2014. The date of each case was based on the available date that was closest to the illness onset date for the case. Due to ongoing data review processes, data are subject to small changes over time.

## Blood-borne Viruses

### Human Immunodeficiency Virus (HIV)

Eleven newly diagnosed cases were notified in Tasmania during 2013; one case had evidence of having acquired infection in the 12 months before diagnosis.

The annual count of notifications of HIV infection in Tasmania ranged from 11 to 15 cases in the years 2008 to 2012. The notification rate of HIV infection in Tasmania (2.2 per 100 000 persons) was lower than the national rate (5.3 per 100 000 persons).

Eight cases were male, three were female. Five male cases were associated with same sex sexual activity, three with the opposite sex.

No cases notified in 2013 were associated with injecting drug use.

Nearly half of all newly diagnosed infections were diagnosed by General Practitioners (GPs).

The median CD4 counts at diagnosis for males (229) and females (279) reflect relatively late diagnosis of established HIV infection.

### Hepatitis B

Three cases of newly acquired hepatitis B infection (infections acquired in the 24 months before diagnosis) were notified during 2013.

The annual count of notifications of newly acquired hepatitis B infection in Tasmania ranged from six to 15 cases in the years 2008 to 2012.

The notification rate of newly acquired hepatitis B in Tasmania (0.6 per 100 000 persons) was similar to the national rate (0.7 per 100 000 persons).

All three cases had a history of injecting drug use.

Fifty six cases of unspecified hepatitis B infections (infections of unknown duration, mostly chronic) were notified during 2013, similar to the annual mean count for the previous five years (54 cases).

The notification rate of unspecified hepatitis B in Tasmania (10.7 per 100 000 persons) was much lower than the national rate (30.2 per 100 000 persons).

Thirty-three cases (59%) were male. When data on country of birth was available, most cases were born overseas in countries with a high prevalence of hepatitis B infection.

### Hepatitis C

Nineteen cases of newly acquired hepatitis C infection (infections acquired in the 24 months before diagnosis) were notified during 2013, similar to the annual mean count for the previous five years (23 cases).

The notification rate of newly acquired hepatitis C in Tasmania (3.7 per 100 000 persons) was higher than the national rate (2.2 per 100 000 persons). Twelve cases (60%) were male. All cases had a history of injecting drug use.

Two hundred and fourteen cases of unspecified hepatitis C infections (infections of unknown duration, mostly chronic) were notified during 2013, slightly less than the annual mean count of the previous five years (254 cases).

The notification rate of unspecified hepatitis C in Tasmania (41 per 100 000 persons) was slightly lower than the national rate (45 per 100 000 persons). One hundred and twenty four cases (58%) were male.

Risk factors most commonly associated with notification were a history of injecting drug use and imprisonment.

## Gastrointestinal Diseases

### Campylobacter Infection

There were 699 cases of *Campylobacter* infection notified in Tasmania during 2013, slightly less than the annual mean count for the previous five years (724 cases).

The notification rate of *Campylobacter* infection in Tasmania (136 cases per 100 000 persons) was the highest rate of any Australia State or Territory during 2013.

The highest number of cases, and rate of disease, was reported in the 0 to four year age group (67 cases, rate 213 per 100 000 persons). Cases in this age group included a disproportionate number of males.

### Salmonellosis

There were 247 cases of salmonellosis notified in Tasmania during 2013, more than the annual mean count for the previous five years (216 cases).

The notification rate of salmonellosis in Tasmania (48 cases per 100 000 persons) was slightly less than the national rate (55.3 per 100 000 persons).

The highest number of cases, and rate of disease, was reported in the 0 to four year age group (39 cases, rate 124 per 100 000 persons). In 2013, 12% of all salmonellosis notifications in Tasmania were reported as acquired overseas.

*Salmonella* Mississippi (107 cases) was the most commonly reported *Salmonella* serovar in Tasmania in 2013 and comprised 43% of all salmonellosis notifications.

Within Australia this serovar is thought to have an environmental niche almost exclusively limited to Tasmania; occasional isolations from travellers to Vanuatu are also reported.

### **Cryptosporidiosis**

There were 74 cases of cryptosporidiosis notified in Tasmania during 2013, more than the annual mean count for the previous five years (57 cases).

The notification rate of cryptosporidiosis in Tasmania (14 cases per 100 000 persons) was similar to the national rate (16.6 per 100 000 persons). Two-thirds of cases (48 of 74) were female.

There were more cases in the Southern region in 2013 than usual. This region had a recent five-year average of seven notified cases a year; whereas in 2013, there were 53 cases.

A cluster investigation into cryptosporidiosis cases in the south of the state did not identify a common source of infection.

### **Other Gastrointestinal Diseases**

Other gastrointestinal diseases notified in Tasmania in 2013 included *Giardia* (125 cases), Shiga toxin producing *E. coli* (1 case), Listeriosis (two cases), Shigellosis (three cases), *Vibrio* Infection (a single case of *V. cholerae* non-O1 non-O139, acquired in Hong Kong) and *Yersinia* (four cases).

There were no notified cases of Hepatitis A, Typhoid or Haemolytic Uraemic Syndrome.

### **Foodborne Disease Outbreaks**

Eleven confirmed cases of *S. Mississippi* and 25 suspected cases became ill following consumption of meals at a restaurant over several days in early 2013.

The investigation did not conclusively identify a food vehicle for the *S. Mississippi*; salad served with meals was the plausible, suspected source.

A very large outbreak of norovirus associated with consuming Tasmanian oysters occurred in March 2013, around Easter.

Investigations identified a total of 525 cases nationally, including 306 in Tasmania. Environmental investigations identified leaking sewerage infrastructure near where the oysters were grown as the likely origin of the contamination.

Follow up of a notified *Shigella* case identified an outbreak of gastroenteritis amongst participants in a trek in Papua New Guinea.

Seven cases of gastroenteritis were identified, two of whom had *Shigella flexneri* isolated (each a different biotype).

The investigation identified various risk factors, including the consumption of fresh fruit from local villages, consumption of untreated chilled water, and poor hygiene and toilet facilities.

### **Non-foodborne Disease Outbreaks**

There were 47 non-foodborne outbreaks notified in Tasmania during 2013; 43 due to suspected person-to-person transmission, and four with an unknown transmission route.

Aged care facilities and childcare centres were the most common settings for outbreaks that spread from person to person.

The most commonly detected etiological agent of non-foodborne outbreaks was norovirus, which was detected in specimens from nine outbreaks. Adenovirus was detected from one case in one aged care outbreak.

The etiological agent was unknown in 37 non-foodborne outbreaks.

This may result from limited or no testing of cases in the outbreak, or to testing being performed but no bacterial and viral pathogens being detected.

Many such outbreaks have the clinical and epidemiological appearance of viral gastroenteritis.

**Table 1: Non-foodborne outbreaks in Tasmania during 2013, by suspected mode of transmission and etiological agent.**

Transmission Type	Agent	Setting						Transmission Type Total
		Aged Care	Child Care	Hospital	Private residence	Restaurant	School	
Person to person transmission	Adenovirus	1						1
	Norovirus	7		2				9
	Unknown	11	19	1	1	1		33
Unknown transmission	Unknown	2	1				1	4
<b>Setting Total</b>		<b>21</b>	<b>20</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>47</b>

## Sexually Transmissible Infections

### Chlamydia

*Chlamydia* was the most commonly notified disease during 2013 in Tasmania. There were 1 538 cases of *Chlamydia* notified in Tasmania during 2013, slightly fewer than the annual mean count for the previous five years (1704 cases). The notification rate of *Chlamydia* in Tasmania (330 cases per 100 000 persons) was slightly less than the national rate (357 per 100 000 persons).

The notification rate was similar in each of the Tasmanian regions. Cases were most common among people in their late teens and early twenties, and were mostly associated with heterosexual sexual activity. Two-thirds of the notifications were female. Additional information was available from 1 100 notifications (71% of cases).

These data showed that half of female cases were tested as part of a screening process; one third of male cases were tested through screening. The sex difference in notification rates therefore appears to be influenced by health seeking behaviours and screening practices.

### Gonococcal Infection

There were 69 cases of gonococcal infection notified in Tasmania during 2013, significantly more than the annual mean count for the previous five years (24 cases). This increase in notification during 2013 was the continuation of an increase that began in the latter half of 2012.

Despite this, the notification rate of gonococcal infection in Tasmania (13 per 100 000 persons) was

significantly lower than the national rate (65 per 100 000 persons).

Notifications of gonococcal infection during 2013 were predominantly male (62, 90%), and mostly associated with sexual activity with other men.

Seventy one percent of infections notified during 2013 were diagnosed at the DHHS Sexual Health Services. No isolates of *Neisseria gonorrhoea* were resistant to ceftriaxone.

### Syphilis

There were 20 cases of infectious syphilis notified in Tasmania during 2013, significantly more than the annual mean count for the previous five years (9 cases), and increase over 2012 (14 cases).

However, the notification rate of infectious syphilis in Tasmania (3.9 per 100 000 persons) was significantly lower than the national rate (7.6 per 100 000 persons).

Nineteen of 20 notifications were males and infection was mostly associated with sexual activity with other men.

Sixty-seven percent of infections notified during 2013 were diagnosed at the DHHS Sexual Health Services.

Ten cases of syphilis of unknown duration (often long-standing or past infection) were notified in Tasmania during 2013, slightly fewer than the annual mean count for the previous five years (15 cases).

The notification rate of syphilis of unknown duration in Tasmania (2.1 per 100 000 persons) was significantly lower than the national rate (7.4 per 100 000 persons).

## Other Sexually Transmissible Infections

There were no cases of Lymphogranuloma venereum (LGV) or Chancroid notified in Tasmania in 2013.

## Vaccine Preventable Diseases

### Influenza

There were 297 cases of Influenza notified in Tasmania during 2013, fewer than the annual mean count for the previous five years (652 cases), and far fewer than 2012 (1093 cases).

The notification rate of Influenza in Tasmania (58 per 100 000 persons) was lower than the national rate (122 per 100 000 persons).

The 2013 influenza season in Tasmania could therefore be regarded as mild to moderate, with a peak in weekly case numbers in late September.

The population-based rate of notification of influenza was higher in Southern Tasmania (77 cases per 100 000 persons) than in the North (45 cases per 100 000 persons) and North-West (34 cases per

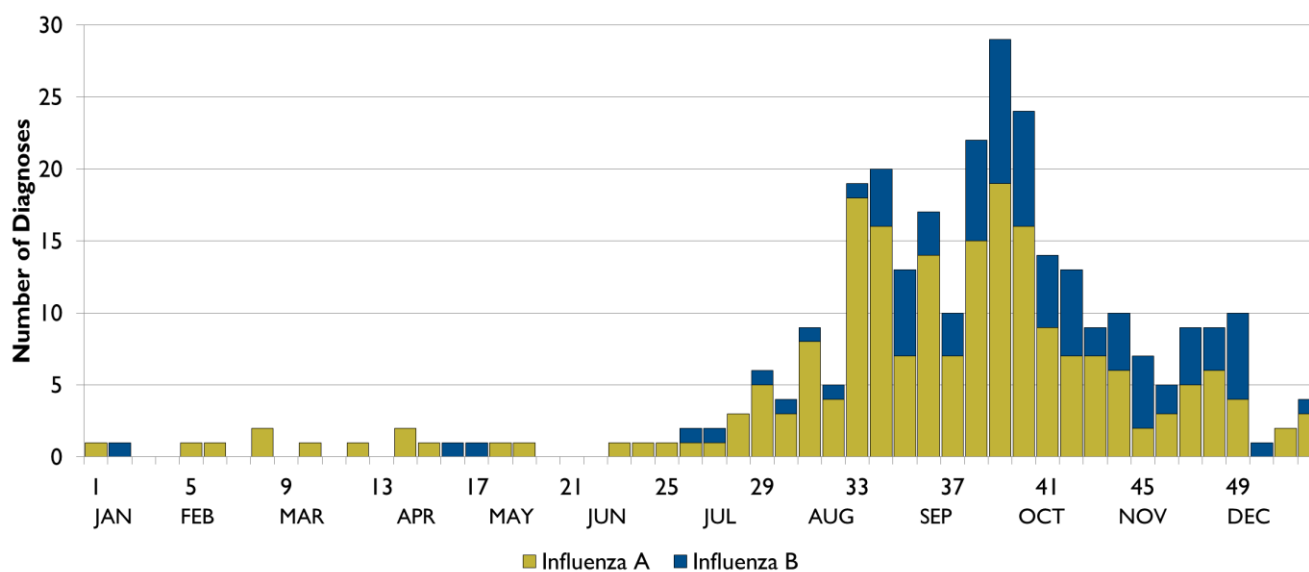
100 000 persons). Peaks in notification were apparent among young children, and adults aged 40 to 60 years.

Influenza A virus was the main cause of influenza infections in Tasmania during 2013. The H1N1 subtype of Influenza A virus that first appeared during the 2009 Influenza pandemic now circulates annually as one of several seasonal strains and was the most common strain during 2013.

By contrast with 2012, when the H3N2 subtype of Influenza A was very common in Tasmania, this strain was rare during 2013.

Influenza B virus also occurred in Tasmania during 2013 and comprised approximately 30 percent of notifications, predominantly from the peak and through the latter half of the influenza season (Figure 1).

**Figure 1: Weekly Influenza laboratory notifications, Tasmania 2013**



### Invasive Meningococcal Disease

Three cases of Invasive Meningococcal Disease were notified in Tasmania during 2013, fewer than the annual mean count for the previous five years (five cases).

The notification rate of Invasive Meningococcal Disease in Tasmania (0.6 per 100 000 persons) was the same as the national rate.

All three cases were children aged less than 10 years; two were serogroup B infections and one could not be typed.

Infant vaccination against serogroup C meningococcal disease is part of the funded National Immunisation

Program. There were no cases of serogroup C infection in 2013, and only two cases in the preceding five years.

### Pertussis (Whooping Cough)

There were 522 cases of pertussis notified in Tasmania during 2013, similar to the annual mean count for the previous five years (545 cases), and far less than during the peak of the recent epidemic cycle in 2012 (1276 cases).

The notification rate of pertussis in Tasmania (102 per 100 000 persons) was higher than the national rate (53 per 100 000 persons).

This reflects Tasmania experiencing ongoing (but declining) epidemic pertussis activity during the first three months of 2013 (when 63% of all cases for 2013 occurred) while most other jurisdictions were in the trough of their epidemic cycles.

The population-based rate of notification of pertussis was higher in Northern Tasmania (143 cases per 100 000 persons) than in the South (92 cases per 100 000 persons) and North-West (66 cases per 100 000 persons).

Fifty-two percent of pertussis cases were children aged less than 15 years.

Fifty-six percent of pertussis cases were female. Pertussis can be severe.

Nearly half of infants aged less than six months with pertussis were hospitalised due to their illness.

A much smaller proportion of older cases required hospitalisation.

### **Invasive Pneumococcal Disease**

Thirty seven cases of invasive pneumococcal disease were notified in Tasmania during 2013, slightly less than the annual mean count for the previous five years (43 cases).

The notification rate of invasive pneumococcal disease in Tasmania (7.2 per 100 000 persons) was similar to the national rate (6.7 per 100 000 persons).

Infants are routinely vaccinated against invasive pneumococcal disease, previously with a seven-valent conjugated vaccine, and since 2011 with a 13-valent conjugated vaccine, as part of the funded National Immunisation Program.

Only two cases in 2013 were children aged less than five years; both were infected with serotypes of *Streptococcus pneumoniae* that are not included in the current infant vaccine.

Eighteen cases (49%) of invasive pneumococcal disease were aged 65 years or more.

Adults aged 65 years and more are eligible for vaccination with the 23-valent polysaccharide vaccine as part of the funded National Immunisation Program.

Fourteen of the 18 cases in this age group were infected with serotypes included in the 23-valent pneumococcal vaccine.

For eight of these cases the serotype was also one of those included in the 13-valent vaccine.

Thus, while elimination of invasive pneumococcal disease due to specific 13-valent vaccine serogroups may already be close for children, the herd immunity effect of infant vaccination is yet to significantly affect invasive disease in older age groups.

### **Mumps**

Five cases of laboratory-diagnosed mumps were notified in Tasmania during 2013, more than the annual mean count for the previous five years (two cases). The notification rate of mumps in Tasmania (1.0 per 100 000 persons) was similar to the national rate (0.9 per 100 000 persons). The age of cases ranged from eight to 63 years; there were no links between individual cases.

### **Varicella Zoster Infection**

There were 366 cases of laboratory-diagnosed varicella zoster infection notified in Tasmania during 2013, comprising 30 cases of chicken-pox, 251 cases of shingles and 85 cases of unspecified varicella zoster.

This count was higher than the annual mean for the previous five years (283 cases), largely due to more notifications of shingles cases than in most recent years.

The notification rate of varicella zoster in Tasmania (71 per 100 000 persons) was similar to the national rate (73 per 100 000 persons).

The meaning of notification rates of varicella zoster are somewhat difficult to interpret because of variation in surveillance and follow-up processes.

### **Rotavirus Infection**

One hundred and nine cases of laboratory-diagnosed rotavirus infection were notified in Tasmania during 2013, higher than the annual mean count for the previous five years (68 cases).

The notification rate of rotavirus infection in Tasmania was 21 per 100 000 persons.

Rotavirus infection is not yet a nationally notifiable disease; no national rate is available for comparison.

### **Other Vaccine Preventable Diseases**

There were no cases of Invasive *Haemophilus influenzae* type B (HiB) infection, Measles, Rubella, Diphtheria, Poliomyelitis or Tetanus notified within Tasmania during 2013.

All these infectious diseases were once either common or occasional causes of significant illness and sometimes death.

All have become very rare since the advent of widespread vaccination.

## Vector-borne Diseases

### Barmah Forest Virus Infection

Three cases of Barmah Forest Virus infection were notified in Tasmania during 2013, similar to the annual mean count for the previous five years (two cases).

The notification rate of Barmah Forest Virus infection in Tasmania (0.6 per 100 000 persons) was the lowest rate of any Australia State or Territory during 2013.

This probably reflects the absence of endemic Barmah Forest Virus transmission in Tasmania.

The three locally diagnosed cases had recently travelled outside Tasmania to either Queensland or South Australia.

### Dengue

Nineteen cases of dengue virus infection were notified in Tasmania during 2013, many more than the annual mean count for the previous five years (five cases).

The notification rate of dengue virus infection in Tasmania (3.7 per 100 000 persons) was among the lowest of any Australia State or Territory during 2013.

All cases had acquired their infection during recent overseas travel, with travel to South East Asia (particularly Indonesia and Thailand) accounting for most.

### Malaria

Eleven cases of malaria were notified in Tasmania during 2013, slightly more than the annual mean count for the previous five years (seven cases). The notification rate of malaria in Tasmania (2.1 per 100 000 persons) was similar to the national rate (1.8 per 100 000 persons).

Notifications of malaria comprised 8 cases of *P. falciparum*, 2 of *P. vivax* malaria and a single case of mixed infection with *P. falciparum* and *P. vivax* malaria. Exposure in Africa accounted for seven notifications; South East Asia and India made up the remainder.

Notifications included both symptomatic persons (nine cases) and screened asymptomatic refugees (two cases).

### Chikungunya Virus Infection

There was one case of Chikungunya virus infection (acquired in Indonesia) notified in Tasmania during 2013.

### Ross River Virus Infection

Ross River Virus infection is the only endemic mosquito-borne disease in Tasmania.

Eight cases of Ross River Virus infection were notified in Tasmania during 2013. Four cases were deemed locally acquired at locations on the east coast of Tasmania.

The remaining four cases had recently travelled to Queensland, Northern Territory or South Australia where they probably acquired their infections.

The annual count of notifications of Ross River Virus infection in Tasmania varies considerably, and ranged from seven to 77 cases in the years 2008 to 2012.

In 2013, as in most years, the notification rate of Ross River Virus infection in Tasmania (1.6 per 100 000 persons) was among the lowest of any Australia State or Territory.

### Other Vector-borne Infections

Two cases of rickettsial infection were notified in Tasmania during 2013. The annual count of notifications of rickettsial infection in Tasmania ranged from 0 to six cases in the years 2008 to 2012.

The two cases in 2013 comprised two cases of Flinders Island Spotted Fever; both were residents of Flinders Island.

There were no cases of Japanese encephalitis virus infection, Kunjin virus infection or Murray Valley encephalitis virus infection notified in Tasmania in 2013.

There were no notifications of Typhus (*Rickettsia prowazekii* infection).

## Zoonoses

### Hydatid Infection

One case of hydatid infection was notified in Tasmania during 2013. The annual count of notifications of hydatid infection in Tasmania ranged from 0 to three cases in the years 2008 to 2012.

The single case in 2013 was a person aged in their 50s who had a lifelong association with sheep and dogs.

Their infection was deemed likely to have been acquired many years before Tasmania was declared provisionally Hydatid-free in 1996.

### Other Zoonoses

There were no cases of anthrax, Australian bat lyssavirus, brucellosis, leptospirosis, psittacosis (ornithosis), Q fever or tularaemia notified in Tasmania in 2013.

### Quarantinable Diseases

There were no cases of the quarantinable diseases cholera, plague, rabies, smallpox, viral haemorrhagic fever or yellow fever notified in Tasmania in 2013.

### Other Notifiable Diseases

#### Legionellosis

Six cases of legionellosis (Legionnaire's disease) were notified in Tasmania during 2013. The annual count of notifications of legionellosis in Tasmania ranged from one to 12 cases in the years 2008 to 2012.

The notification rate of legionellosis in Tasmania (1.2 per 100 000 persons) was less than the national rate (2.2 per 100 000 persons).

The six cases in 2013 comprised three *Legionella longbeachae* cases and 3 *Legionella pneumophila*.

All infections appeared to have been acquired within Tasmania; no cases were linked and no point sources of infections were identified.

#### Tuberculosis

Ten cases of tuberculosis were notified in Tasmania during 2013. The annual count of notifications of tuberculosis in Tasmania ranged from five to 14 cases in the years 2008 to 2012.

The notification rate of tuberculosis in Tasmania (two per 100 000 persons) was less than the national rate (5.5 per 100 000 persons).

Most cases were aged between 30 and 50 years. Only four cases involved pulmonary infection. Most cases were born or lived in countries with high tuberculosis rates including South East Asian and African countries, and Pakistan.

No cases of multi drug resistant tuberculosis were identified during 2013. Three cases were diagnosed on clinical criteria alone.

### Other Notifiable Diseases

There were no cases of Leprosy or Creutzfeldt-Jacob Disease notified in Tasmania in 2013.

This report is produced by Public Health Services.

For any queries and feedback please make contact via [cdpu.surveillance@dhhs.tas.gov.au](mailto:cdpu.surveillance@dhhs.tas.gov.au)

Information about influenza activity in Tasmania is available in the **fluTAS Report** at [www.dhhs.tas.gov.au/peh/alerts/flutas\\_2013](http://www.dhhs.tas.gov.au/peh/alerts/flutas_2013)

Find more information about notifiable diseases in **Tasmania** at [www.dhhs.tas.gov.au/peh/infectious\\_diseases](http://www.dhhs.tas.gov.au/peh/infectious_diseases)

**National** communicable disease information and reports are available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-communic-1>

Summary **national** data is available at [www9.health.gov.au/cda/source/cda-index.cfm](http://www9.health.gov.au/cda/source/cda-index.cfm)

### Acknowledgements

The conduct of notifiable disease surveillance for public health purposes is not possible without the timely and diligent notification of these diseases by pathology laboratories and medical practitioners.

We wish to thank all those organisations and individuals who were involved with reporting notifications during 2013.

In addition, we wish to thank all those involved providing additional information of cases and responding individual events which required follow up of contacts.

Contributors: David Coleman, Michelle Green, Dr Scott McKeown, Cameron Sault, Simone Duncombe, Dr Mark Veitch.



**Table 2 : Notifiable diseases reported in Tasmania during 2013 with comparison to previous years, by derived diagnosis date.**

	2008	2009	2010	2011	2012	5y Mean*	2013	Ratio^
<b>Blood-borne Diseases</b>								
Hepatitis B-Newly Acquired	15	14	6	14	10	12	3	0.25
Hepatitis B-Unspecified	52	71	48	37	60	54	56	1.04
Hepatitis C-Newly Acquired	21	22	23	27	23	23	19	0.83
Hepatitis C-Unspecified	327	261	240	201	240	254	214	0.84
Human Immunodeficiency Infection (HIV)	14	15	11	14	14	14	11	0.79
<b>Gastrointestinal Diseases</b>								
Campylobacter infection	487	650	737	864	882	724	699	0.97
Cryptosporidiosis	36	67	100	42	42	57	74	1.30
Giardia	118	105	128	106	97	111	125	1.13
Haemolytic Uraemic Syndrome	0	0	0	0	1	0	0	0
Hepatitis A	1	5	4	4	2	3	0	0
Listeriosis	1	3	3	2	3	2	2	1
Salmonellosis	205	166	236	195	278	216	247	1.14
Shiga toxin producing E. coli	0	0	0	2	7	2	1	0.50
Shigellosis	3	2	5	2	7	4	3	0.75
Typhoid	0	1	1	3	1	1	0	0
Vibrio Infection	2	0	1	0	3	1	1	1.00
Yersinia	2	0	2	0	1	1	4	4.00
<b>Sexually Transmissible Infections</b>								
Chlamydia	1 474	1 470	2 014	1 777	1 786	1 704	1 538	0.90
Gonococcal Infection	25	21	20	19	35	24	69	2.88
Lymphogranuloma venereum (LGV)	0	0	0	1	0	0	0	0
Syphilis-infectious	8	10	6	6	14	9	20	2.22
Syphilis-unknown duration	13	18	15	20	10	15	10	0.67
<b>Vaccine-preventable Diseases</b>								
Haemophilus Influenzae Type B Infection (invasive)	1	0	0	0	1	0	0	0
Influenza	385	1 312	107	363	1 093	652	297	0.46
Measles	0	2	0	0	0	0	0	0
Meningococcal Disease (invasive)	1	3	6	10	7	5	3	0.60
Mumps	2	1	0	4	1	2	5	2.50
Pertussis	198	622	280	351	1 276	545	522	0.96
Pneumococcal Disease (invasive)	39	39	46	47	45	43	37	0.86
Rotavirus	0	51	119	73	97	68	109	1.60
Rubella	0	0	0	0	1	0	0	0
Varicella zoster (chicken pox)	30	38	24	36	28	31	30	0.97
Varicella zoster (shingles)	139	133	193	217	263	189	251	1.33
Varicella zoster (unspecified)	36	64	70	62	84	63	85	1.35
<b>Vector-borne Diseases</b>								
Barmah Forest Virus	1	3	2	2	0	2	3	1.50
Chikungunya virus	0	0	1	1	0	0	1	0
Dengue	6	2	7	3	8	5	19	3.80
Malaria	8	5	5	9	7	7	11	1.57
Rickettsial Infection	4	0	6	6	4	4	2	0.50
Ross River Virus	77	29	38	7	18	34	8	0.24
Typhus	0	0	0	1	0	0	0	0
<b>Zoonoses</b>								
Hydatids	1	3	0	3	1	2	1	0.50
Leptospirosis	0	0	1	1	0	0	0	0
Psittacosis(Ornithosis)	0	0	3	1	0	1	0	0
Tularaemia	0	0	0	2	0	0	0	0
<b>Other Notifiable Diseases</b>								
Creutzfeldt-Jakob disease (CJD)	0	0	2	1	0	1	0	0
Legionellosis	1	1	6	7	12	5	6	1.20
Tuberculosis	5	11	11	14	6	9	10	1.11

Note: \*The five-year mean was calculated for the years 2008-2012.

^The ratio is the number of cases notified in 2013 divided by the five-year mean for the years 2008-2012