



## 8. Sexually transmissible infections

### Acquired immunodeficiency syndrome (AIDS)

#### Surveillance case definition

The current case definition for AIDS is published in the *Interim Surveillance Case Definitions for the Australian National Notifiable Disease Surveillance System* and is available from <http://www.cda.gov.au>

#### Summary of notifications

There were 38 individuals diagnosed with AIDS in Victoria in 2004 – 33 males and five females – a 25 per cent decrease on the 51 cases in 2003.

In 2004 the median age of males diagnosed with AIDS was 45 years (range: 21–73 years). Fifty-three per cent of individuals diagnosed were aged between 40 and 49 years (table 16).

#### Clinical presentation of those diagnosed with AIDS in Victoria in 2004

In 2004, 21 (55 per cent) people diagnosed with AIDS presented with CD4 counts of less than 100 per  $\mu$ l. This proportion has remained fairly consistent over the last ten years (table 17).

**Table 16: AIDS diagnoses, by age group and sex, Victoria, 1983 – 2004**

Age group (years)	Sex	Year of AIDS diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
0–12	M	3	0	0	0	0	0	0	0	0	0	3
	F	3	0	1	0	0	0	1	0	0	0	5
13–19	M	6	1	0	0	1	0	0	0	0	0	8
	F	1	0	0	0	0	0	0	0	0	0	1
20–29	M	271	19	11	8	3	4	2	4	2	1	329 <sup>1</sup>
	F	16	1	2	2	1	1	0	0	0	2	25
30–39	M	606	68	34	23	9	28	25	13	17	8	831 <sup>1</sup>
	F	22	2	4	1	1	2	4	2	3	0	41
40–49	M	395	39	16	20	7	20	15	15	15	17	559
	F	4	1	1	0	1	0	2	1	2	3	15
50–59	M	123	17	11	9	10	8	5	6	6	4	200 <sup>1</sup>
	F	8	2	1	0	1	0	0	0	0	0	12
60+	M	49	3	5	7	2	6	2	5	6	3	88
	F	3	0	0	0	0	0	0	0	0	0	3
<b>Total</b>		<b>1,519<sup>1</sup></b>	<b>153</b>	<b>86</b>	<b>70</b>	<b>37<sup>1</sup></b>	<b>69</b>	<b>57<sup>1</sup></b>	<b>46</b>	<b>51</b>	<b>38</b>	<b>2,126<sup>1</sup></b>

<sup>1</sup> Includes 11 people whose sex was reported as transgender

**Table 17: AIDS diagnoses, by CD4 Count, Victoria, 1983–2004**

CD4 count per $\mu$ l at AIDS diagnosis	Year of AIDS diagnosis										Total n
	≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<100	480	86	43	38	21	35	27	26	27	21	804
100 to 199	129	13	13	11	6	10	15	8	8	7	220
200 to 499	64	19	11	7	5	13	6	7	8	4	144
≥500	11	3	4	1	0	1	1	2	0	1	24
Unavailable*	835	32	15	13	5	10	8	3	8	5	934
<b>Total</b>	<b>1,519</b>	<b>153</b>	<b>86</b>	<b>70</b>	<b>37</b>	<b>69</b>	<b>57</b>	<b>46</b>	<b>51</b>	<b>38</b>	<b>2,126</b>

\* Includes CD4 count which were not performed or available and counts performed greater than or less than three months from the date of diagnosis of AIDS.

Table 18: AIDS diagnoses, by AIDS defining illness, Victoria, 1983–2004

AIDS defining illness	Year of AIDS diagnosis										Total	
	<=1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	n	% <sup>1</sup>
PCP	603	48	29	24	9	28	25	19	12	13	810	34.3
Kaposi's sarcoma	244	18	13	5	4	7	4	5	5	4	309	13.1
Oesophageal candidiasis	190	27	13	15	6	17	9	10	11	7	305	12.9
Herpes simplex	59	4	2	1	0	2	1	1	0	0	70	3.0
Toxoplasmosis	86	6	4	3	0	1	2	3	4	2	111	4.7
Mycobacterial disease (non TB)	128	16	14	3	4	4	1	0	3	1	174	7.4
Cytomegalovirus	66	14	1	4	4	2	1	0	0	3	95	4.0
Non-Hodgkin's lymphoma	71	16	4	4	4	4	4	2	5	5	119	5.0
Myelopathy	70	6	8	1	2	4	0	2	2	2	97	4.1
Cryptosporidiosis	48	4	1	3	0	2	1	1	4	0	64	2.7
Cryptococcus	50	2	1	3	3	2	1	2	4	4	72	3.0
HIV encephalopathy	31	6	3	5	1	2	5	0	1	0	54	2.3
Pulmonary tuberculosis <sup>2</sup>	2	1	3	3	1	5	4	3	3	3	28	1.2
Recurrent pneumonia <sup>2</sup>	2	0	3	1	0	0	2	1	0	1	10	0.4
Cervical cancer <sup>2</sup>	1	0	1	0	0	0	0	0	0	0	2	0.1
Other	16	3	1	8	2	2	6	4	0	2	44	1.9
<b>Total</b>	<b>1,667</b>	<b>171</b>	<b>101</b>	<b>83</b>	<b>40</b>	<b>82</b>	<b>66</b>	<b>53</b>	<b>54</b>	<b>47</b>	<b>2,364</b>	<b>100.0</b>

<sup>1</sup> Proportion of all notifications with the AIDS defining illness. Individuals may have presented with more than one AIDS defining illness

<sup>2</sup> Included as an AIDS defining illness in Australia from January 1993

*Pneumocystis carinii* pneumonia (PCP) as an AIDS defining illness was reported for 28 per cent of those diagnosed during 2004. Oesophageal candidiasis was the next most common, reported by 15 per cent (table 18). These proportions have remained fairly consistent over time.

### People living with AIDS in Victoria in 2004

At the end of 2004, there were an estimated 604 people living with AIDS in Victoria – 561 males, 41 females and two transgender individuals. Of these, 506 (84 per cent) resided in metropolitan Melbourne, with the largest numbers in the North and West Metropolitan region

and Southern Metropolitan region (table 19).

In 2004, the North and West Metropolitan DHS regions were merged; previously the largest number of annual diagnoses were reported from the Southern Metropolitan region.

### Risk factors

The proportion of all AIDS diagnoses in which male-to-male sexual contact (homosexual and bisexual) was reported as the primary risk factor for infection fell from 84 per cent prior to 1996 to 63 per cent in 2004. The proportion of all AIDS diagnoses attributable to origin from a

high prevalence country increased from less than one per cent prior to 1996 to 13 per cent in 2004 (table 20).

Of the 38 AIDS diagnoses notified in 2004, 20 individuals (53 per cent) were diagnosed within 12 months of their HIV diagnosis (table 21). Of these 20, 60 per cent were among males reporting male-to-male sexual contact and 40 per cent were among individuals reporting heterosexual contact as their primary exposure, the latter group being overrepresented as only 24 per cent of total AIDS diagnoses in 2004 were attributed to heterosexual contact (table 21).

**Table 19: People living with AIDS, by sex and region, Victoria, 31 December 2004**

Region	Sex		Total	
	Males	Females	n	%
Barwon-South Western	14	0	14	2.3
Grampians	9	0	9	1.5
Loddon Mallee	17	2	19	3.1
Hume	9	2	11	1.8
Gippsland	18	0	18	3.0
North and West Metropolitan	206	21	227	37.6
Eastern Metropolitan	82	2	85 <sup>1</sup>	14.1
Southern Metropolitan	180	13	194 <sup>1</sup>	32.1
Unknown	26	1	27	4.5
<b>Total</b>	<b>561<sup>1</sup></b>	<b>41</b>	<b>604<sup>1</sup></b>	<b>100.0</b>

<sup>1</sup> Includes two people whose sex was reported as transgender

**Table 20: AIDS diagnoses, by sex and exposure category, Victoria, 1983–2004**

AIDS exposure Category	Sex	Year of AIDS diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Male homosexual/bisexual	M	1,274	125	58	43	21	49	31	26	31	24	1,682 <sup>1</sup>
Male homosexual/bisexual and IDU	M	78	13	4	2	0	3	1	5	3	2	111 <sup>1</sup>
IDU	M	14	0	1	3	0	4	3	0	1	1	27
	F	6	1	2	1	1	1	0	0	1	0	13
Heterosexual contact	M	33	4	4	11	5	2	6	6	6	3	80
	F	37	5	5	1	3	1	2	1	4	1	60
Person from high prevalence country	M	8	1	3	0	2	4	2	5	2	1	28
	F	5	0	1	1	0	1	2	1	0	4	15
Haemophilia/coagulation Disorder	M	33	2	1	1	1	1	1	1	0	0	41
	F	1	0	0	0	0	0	0	0	0	0	1
Receipt of blood/tissue	M	6	1	0	1	0	0	1	0	0	1	10
	F	5	0	0	0	0	0	0	1	0	0	6
Other	M	0	0	0	0	1	0	0	0	0	0	1
	F	1	0	1	0	0	0	1	0	0	0	3
Unavailable	M	7	1	6	6	2	3	4	0	3	1	33
	F	2	0	0	0	0	0	2	0	0	0	4
<b>Total</b>		<b>1,519<sup>1</sup></b>	<b>153</b>	<b>86</b>	<b>70</b>	<b>37<sup>1</sup></b>	<b>69</b>	<b>57<sup>1</sup></b>	<b>46</b>	<b>51</b>	<b>38</b>	<b>2,126<sup>1</sup></b>

<sup>1</sup> Includes 11 people whose sex was reported as transgender

Of the 38 AIDS diagnoses notified in 2004, 20 individuals (53 per cent) were diagnosed within 12 months of their HIV diagnosis (table 21). Of these 20, 60 per cent were among males reporting male-to-male sexual contact and 40 per cent were among individuals reporting heterosexual contact as their primary exposure, the latter group being overrepresented as only 24 per cent of total AIDS diagnoses in 2004 were attributed to heterosexual contact (table 21).

### Deaths following an AIDS diagnosis

There have been a total of 1,522 deaths following diagnosis with AIDS notified in Victoria since 1983, in 1,452 males, 61 females and nine transgender individuals. The annual number of deaths following AIDS has steadily decreased over the last decade from 128 deaths in 1996 to 17 in 2004 (table 22).

**Table 22: Deaths following AIDS diagnosis, by sex, Victoria, 1983–2004**

Year of death	Sex		Total	
	Males	Females	n	%
<=1995	1,088	36	1,129 <sup>1</sup>	74.2
1996	123	5	128	8.4
1997	67	6	74 <sup>1</sup>	4.9
1998	41	3	45 <sup>1</sup>	3.0
1999	38	2	41 <sup>1</sup>	2.7
2000	29	1	30	2.0
2001	21	5	26	1.7
2002	12	0	12	0.8
2003	19	1	20	1.3
2004	15	2	17	1.1
<b>Total</b>	<b>1,452</b>	<b>61</b>	<b>1,522<sup>1</sup></b>	<b>100.0</b>

<sup>1</sup> Includes nine people whose sex was reported as transgender

**Table 21: Exposure category of individuals diagnosed with AIDS within 12 months of their HIV diagnosis**

AIDS exposure category	Sex	Year of AIDS diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Male homosexual/bisexual	M	253	24	22	15	2	16	14	9	13	12	380 <sup>1</sup>
Male homosexual/bisexual and IDU	M	12	3	2	1	0	0	0	1	0	0	19 <sup>1</sup>
IDU	M	2	0	0	0	0	2	1	0	1	0	54
	F	2	0	1	0	0	0	0	0	0	0	15
Heterosexual contact	M	20	2	1	7	4	2	5	6	5	2	19
	F	9	1	1	0	0	0	1	1	1	1	8
Person from high prevalence country	M	4	0	1	0	2	3	2	4	2	1	6
	F	2	0	0	0	0	1	0	1	0	4	3
Haemophilia/coagulation Disorder	M	0	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt of blood/tissue	M	3	0	0	0	0	0	0	0	0	0	3
	F	1	0	0	0	0	0	0	0	0	0	1
Other	M	0	0	0	0	1	0	0	0	0	0	1
	F	1	0	0	0	0	0	0	0	0	0	1
Unavailable	M	3	1	5	6	0	2	4	0	2	0	23
	F	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>313<sup>1</sup></b>	<b>31</b>	<b>33</b>	<b>29</b>	<b>9</b>	<b>26</b>	<b>28<sup>1</sup></b>	<b>22</b>	<b>24</b>	<b>20</b>	<b>535<sup>1</sup></b>

<sup>1</sup> Includes two people whose sex was reported as transgender

## Human immunodeficiency virus (HIV)

### Notes

The HIV report refers to diagnoses rather than notifications as the surveillance system utilises the specimen collection date for HIV rather than notification date for reporting.

The report describes annual diagnoses from 1983 onwards and makes particular reference to the time frame between 1999 and 2004 as it includes the lowest numbers (140 notifications in 1999) and the subsequent upturn in notification numbers.

Annual HIV numbers in this report may be slightly different to previous reports due to the receipt of new information enabling identification of duplicate notifications and ongoing data cleaning.

Collection of enhanced data such as 'Clinical presentation at HIV diagnosis' and 'Reason for test' commenced in 1994; therefore the relevant tables do not include data prior to this time.

### Summary of notifications

In 2004, 217 cases of HIV were diagnosed in Victoria. This represents a four per cent decrease from the total of 225 in 2003 and a 55 per cent increase on the 1999 total of 140 (figure 22).

**Figure 22: Notified cases of HIV and AIDS diagnoses, Victoria, 1983–2004**



**Table 23: HIV diagnoses, by age group and sex, Victoria, 1983 to 2004**

Age group (years)	Sex	Year of HIV diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
0–12	M	31	0	0	0	3	0	0	1	0	0	35
	F	9	0	0	0	1	0	2	0	0	1	13
13–19	M	86	5	1	6	1	6	6	1	3	2	117
	F	9	0	2	0	0	0	1	1	1	0	14
20–29	M	1,269	56	43	37	38	54	38	44	47	37	1,663
	F	70	7	4	5	4	9	7	7	4	11	128
30–39	M	1,155	68	72	48	50	62	87	95	88	80	1,805
	F	43	4	2	1	5	8	8	11	10	7	99
40–49	M	487	28	30	28	20	32	45	40	40	53	803
	F	15	1	6	1	1	1	5	2	3	5	40
50–59	M	160	17	20	12	10	16	13	20	21	12	301
	F	12	1	1	0	1	0	0	1	1	1	18
60+	M	44	4	7	10	6	6	4	6	7	7	101
	F	6	0	0	1	0	2	0	2	0	0	11
Unavailable	M	102	0	0	0	0	0	0	0	0	0	102
	F	1	0	0	0	0	0	0	0	0	0	1
<b>Total</b>		<b>3,536<sup>1</sup></b>	<b>191</b>	<b>188</b>	<b>149</b>	<b>140</b>	<b>197<sup>1</sup></b>	<b>218<sup>1</sup></b>	<b>233<sup>1</sup></b>	<b>225</b>	<b>217<sup>1</sup></b>	<b>5,294<sup>1</sup></b>

<sup>1</sup>Includes 20 people whose sex was reported as transgender and 23 people whose sex was unknown

Of the 217 cases, 191 (88 per cent) were males, 25 (12 per cent) were females and one individual was transgender. The median age at diagnosis was 36 years for males (range: 19–73 years) and 30 years for females (range: three to 58 years). The largest proportion (n=87, 40 per cent) of diagnoses were among individuals aged between 30 and 39 years (table 23).

In 2004, 87 per cent of individuals diagnosed with HIV reported residing in Metropolitan Melbourne (table 24), with the largest numbers in the North and West Metropolitan region (n=85, 39 per cent) and Southern Metropolitan region (n=77, 36 per cent).

### Males diagnosed with HIV in 2004

There were 191 males diagnosed with HIV infection in 2004 – seven per cent less than the 2003 total of 206 (table 25).

### Males who reported male-to-male sexual contact

Male-to-male sexual contact (homosexual and bisexual) was the most common risk factor in 2004 (n=147, 77 per cent), compared with 163 (72 per cent of total) in 2003 and 80 (57 per cent) in 1999.

Of the 147 males with a history of male-to-male sexual contact in 2004, 128 (87 per cent) reported they had acquired their

infection in Australia (appendix 2, table 45). Of the 147 males, 48 per cent were reported to have acquired their infection from a casual or anonymous partner and 18 per cent from a regular partner (appendix 2, table 42).

### Males who reported heterosexual contact

There were 24 males (13 per cent) who reported heterosexual contact as a risk factor in 2004, a nine per cent increase on the 22 males in 2003 (table 25).

There was an increase in the number of males diagnosed with HIV who originated from a high prevalence country. These

**Table 24: HIV diagnoses, by region and sex, Victoria, 1983 – 2004**

Region	Sex	Year of HIV diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Barwon-South Western	M	35	5	5	4	2	3	5	3	4	7	73
	F	3	0	0	0	0	2	1	0	1	2	9
Grampians	M	27	4	1	1	5	5	0	3	3	1	50
	F	0	0	0	0	0	2	0	0	0	0	2
Loddon Mallee	M	36	4	3	2	2	2	6	4	6	5	70
	F	4	0	0	0	1	0	1	1	0	1	8
Hume	M	30	0	1	2	4	4	5	2	4	4	56
	F	7	0	1	1	0	0	0	0	0	0	9
Gippsland	M	21	3	2	4	4	5	0	2	1	4	46
	F	0	1	1	0	0	0	0	0	0	0	2
North and West Metropolitan	M	581	60	65	53	44	69	73	87	70	73	1,175
	F	38	8	6	2	5	7	9	9	10	12	106
Eastern Metropolitan	M	248	26	27	20	12	21	21	21	27	23	446
	F	23	2	4	1	1	2	2	5	1	3	44
Southern Metropolitan	M	646	69	64	40	39	55	73	80	86	73	1,225
	F	38	2	3	2	3	4	7	5	7	4	75
Unavailable	M	1,710	7	5	15	16	12	10	5	5	1	1,786
	F	52	0	0	2	2	3	3	4	0	3	69
<b>Total</b>		<b>3,536<sup>1</sup></b>	<b>191</b>	<b>188</b>	<b>149</b>	<b>140</b>	<b>197<sup>1</sup></b>	<b>218<sup>1</sup></b>	<b>233<sup>1</sup></b>	<b>225</b>	<b>217<sup>1</sup></b>	<b>5,294<sup>1</sup></b>

<sup>1</sup>Includes 20 people whose sex was reported as transgender and 23 people whose sex was unknown

countries included those in sub-Saharan Africa, Cambodia, Myanmar, and certain countries within the Caribbean where HIV is transmitted predominantly by heterosexual contact. Eleven such males (six per cent) were diagnosed in 2004, compared with six (three per cent) in 2003 (table 25). Of these 11 males, the

majority (n=ten, 91 per cent) reported they had acquired their infection overseas (appendix 2, table 45).

Of the 13 other males with a history of heterosexual contact (not born in a high prevalence country); four were reported to have acquired their infection from a partner from a high prevalence country,

four from a female partner with HIV and five reported heterosexual contact (no further information provided) (table 26). Of these 13 males, five (38 per cent) reported they had acquired their infection in Australia, and six (46 per cent) overseas (appendix 2, table 45).

**Table 25: HIV diagnoses, by sex and exposure category, Victoria, 1983–2004**

	Sex	Year of HIV diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Sex	M	3,334	178	173	141	128	176	193	207	206	191	4,927
	F	165	13	15	8	12	20	23	24	19	25	324
<b>HIV exposure category</b>												
Male homosexual	M	2,772	145	137	98	80	126	150	162	163	147	3,980
	F	-	-	-	-	-	-	-	-	-	-	0
Male homosexual and IDU	M	155	10	8	9	12	8	7	8	10	12	239
	F	-	-	-	-	-	-	-	-	-	-	0
IDU only	M	88	2	5	5	5	11	8	4	8	7	143
	F	30	2	2	1	0	1	2	0	2	1	41
Heterosexual contact	M	92	11	14	16	16	13	17	19	16	13	227
	F	98	10	7	6	4	7	12	13	10	13	180
Heterosexual contact (Person from high prevalence country)	M	29	9	3	5	9	11	5	12	6	11	100
	F	14	1	4	1	6	12	7	11	7	10	73
Haemophilia/coagulation Disorder	M	98	0	0	1	1	0	1	0	0	0	101
	F	1	0	0	0	0	0	0	0	0	0	1
Receipt of blood/tissue	M	18	0	0	0	1	0	0	0	0	0	19
	F	12	0	1	0	2	0	0	0	0	0	15
Other	M	2	0	0	0	1	0	0	1	0	0	4
	F	7	0	0	0	0	0	2	0	0	1	10
Unavailable	M	80	1	6	7	3	7	5	1	3	1	114
	F	3	0	1	0	0	0	0	0	0	0	4
<b>Total</b>		<b>3,536<sup>1</sup></b>	<b>191</b>	<b>188</b>	<b>149</b>	<b>140</b>	<b>197<sup>1</sup></b>	<b>218<sup>1</sup></b>	<b>233<sup>1</sup></b>	<b>225</b>	<b>217<sup>1</sup></b>	<b>5,294<sup>1</sup></b>

<sup>1</sup> Includes 20 people whose sex was reported as transgender and 23 people whose sex was unknown

**Table 26: HIV diagnoses reporting heterosexual exposure, by partner type, Victoria, 1983–2004**

	Sex	Year of HIV diagnosis										Total n
		≤1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Heterosexual contact, person is from high prevalence	M	29	9	3	5	9	11	5	12	6	11	100
	F	14	1	4	1	6	12	7	11	7	10	73
Heterosexual contact with person from high prevalence country	M	16	2	4	5	2	7	5	1	6	4	52
	F	9	3	2	1	1	2	6	2	2	3	31
Heterosexual contact with bisexual man	M	1	0	0	0	0	0	0	0	0	0	1
	F	27	5	1	2	1	1	1	3	3	3	47
Heterosexual contact with IDU	M	7	1	0	0	0	0	0	1	1	0	10
	F	14	0	1	0	0	3	0	1	0	0	19
Heterosexual contact with person with HIV with no specified risk	M	11	0	0	2	0	0	1	0	1	4	19
	F	22	0	3	0	0	1	0	1	3	1	31
Heterosexual contact with person with other specified risk	M	7	1	0	0	1	0	0	0	0	0	9
	F	7	1	0	1	1	0	2	3	0	1	16
Heterosexual contact, not otherwise specified	M	51	7	10	9	13	6	11	17	8	5	137
	F	18	1	0	2	1	0	3	3	2	5	35
<b>Total</b>		<b>233</b>	<b>31</b>	<b>28</b>	<b>28</b>	<b>35</b>	<b>43</b>	<b>41</b>	<b>55</b>	<b>39</b>	<b>47</b>	<b>580</b>

### Females diagnosed with HIV during 2004

The number of new HIV diagnoses among females in Victoria increased in 2004, with 25 cases notified compared with 19 in 2003, and 12 in 1999. This increase was largely attributable to a greater number of notifications from women who reported heterosexual contact as a risk factor and women from high prevalence countries (table 25).

Of the 25 females, ten were born in a high prevalence country and were reported to have acquired their infection from a partner born in a high prevalence country. Of these ten females, the majority (n=9, 90 per cent) reported they had acquired their infection overseas (appendix 2, table 45).

Of the other 13 females with a history of heterosexual contact (not born in a high prevalence country) three were reported to have acquired their infection from a

partner from a high prevalence country, three from bisexual men and five provided no further information (table 26). Of these 13 females, the majority (n=8, 62 per cent) reported that they had acquired their infection in Victoria (appendix 2, table 45).

### HIV among sex workers

In 2004, there were four new HIV diagnoses reported among sex workers in Victoria. Two were male, one female and one transgender. All reported a history of having sex with men. The female sex worker reported acquiring HIV infection in Australia from a male bisexual partner who was HIV positive.

### HIV among injecting drug users

During 2004 there were 21 individuals (19 males, one female, one transgender) diagnosed with HIV who reported a history of IDU (table 25). Of these, 13 also reported a history of male-to-male sexual

contact and eight reported IDU only.

Of the eight individuals with a history of drug use only, five were born in Australia and the other three in Asia. Between 1999 and 2004, there were 49 cases reported with a history of IDU only; of these, 22 (45 per cent) were born in Asia, 19 (39 per cent) in Australia and the remainder in other countries (appendix 2, table 46). The median age of injecting drug users in 2004 (without male-male sexual contact) was 31 years (range: 19–44 years).

Between 1983 and 2004, 186 people (144 males and 42 females) reporting IDU only as a risk factor for infection had been notified with HIV, representing 3.5 per cent of all cases of HIV notified in Victoria (table 25).

### Incident infections

Notifications are classified as newly acquired (incident infections) on the basis of a previous negative HIV test and/or

a seroconversion illness within the 12 months preceding HIV diagnosis. Incident infections provide information about who is currently being infected with HIV.

Of the 217 HIV diagnoses in 2004, 69 (32 per cent) were classified as incident infections compared to 74 (33 per cent) in 2003. Of the incident infections in 2004, 63 were males, five were females and one individual was transgender. Of the 63 males, 57 (90 per cent) reported male-to-male sexual contact (appendix 2, table 47).

These results should be interpreted with caution as the data rely on a history of a past negative test or seroconversion illness which is biased by health seeking behaviour and HIV testing practices in clinics.

## Outbreaks and other investigations

### Case-control study among men who have sex with men (MSM), 2002–2004

In response to the increasing number of HIV diagnoses among MSM, a case-control study commenced in 2002. The aim of the study was to gain further information about risk behaviour among MSM recently diagnosed with HIV to inform public health strategies. Recruitment was completed in May 2003 and results are available at <http://epi.burnet.edu.au/downloads>

### Linked HIV sentinel surveillance among MSM: A pilot study, 2004–2005

In April 2004 a pilot HIV sentinel surveillance project was implemented in Victoria. The project was conducted on behalf of the Victorian AIDS Council and the department to aid in the evaluation of a campaign to increase HIV/STI testing

among MSM and to help interpret HIV case reporting (passive surveillance) results.

The objectives of the system were:

- 1) To describe the HIV and STI testing patterns in clinics with a high case load of MSM
- 2) To compare the sexual risk behaviour between MSM who test positive for HIV and those that test negative.

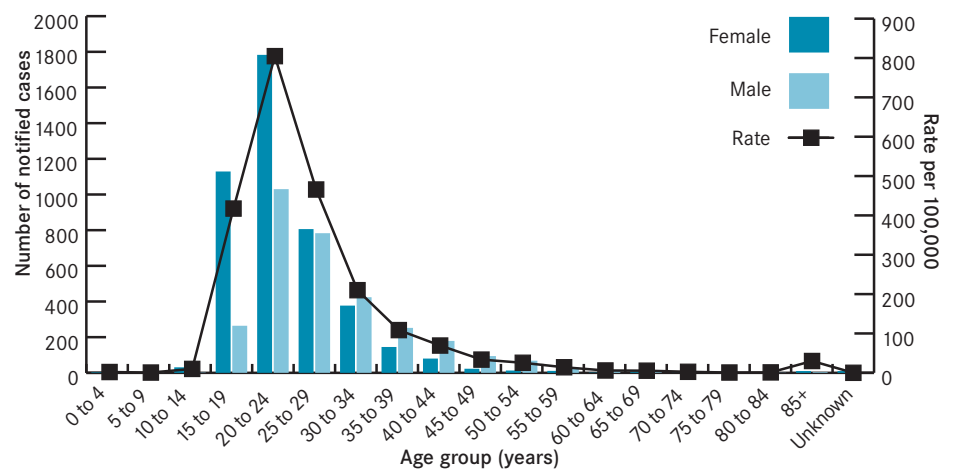
The project included five clinics that have a high case load of MSM. All patients deemed by their clinician to require a HIV test were asked a series of risk behaviour questions. This information was then linked with the patient's HIV test results. The project concluded in March 2005 and results for this project should be available soon.

## Chlamydia

### Summary of notifications

The department received notifications for 7,634 cases of chlamydia in 2004, an 18 per cent increase on the total for 2003. Of these cases, 3,153 (41 per cent) were male and 4,419 (58 per cent) were female; sex was unknown for 62 cases. The median age was 26 years for males (range: zero to 80 years) and 22 years for females (range: zero to 71 years). Notification rates were highest for those aged 20–24 years (figure 23). Fifty-six notified cases were reported as being of Aboriginal and/or Torres Strait Islander origin.

Figure 23: Notified cases of chlamydia, by age group, sex and rate per 100,000 population, Victoria, 2004



Notifications were received sporadically throughout the year. The highest number and rate of notified cases were for residents of the North and West Metropolitan region (figure 24). These data should be interpreted with caution, as residential addresses were not always provided.

Despite the legislative requirement for both clinicians and laboratories to notify chlamydia cases, the department received 636 notifications (eight per cent) from clinicians alone without laboratory evidence. These cases have historically been included as confirmed notifications.

The reason for testing was obtained for 2,816 cases (37 per cent), with screening (49 per cent) reported as the most common reason, followed by clinical presentation (33 per cent) and contact tracing (13 per cent) (table 27). These data should be interpreted with caution as they are based on a sample of total notified cases that in turn is a sample of all cases in Victoria.

**Table 27: Reported reason for chlamydia testing, Victoria, 2004**

Reason for testing	Number	Per cent
Screening	1,379	49
Presented with symptoms	923	33
Contact tracing	361	13
Other/not stated	153	5
<b>Total</b>	<b>2,816</b>	<b>100</b>

**Risk factors**

Victoria has a passive surveillance system for chlamydia, which is enhanced by the collection of risk factor information obtained from clinicians. Laboratories send a departmental questionnaire to diagnosing doctors to complete on behalf of their patients. There were 2,818 (37 per cent) questionnaires returned in 2004.

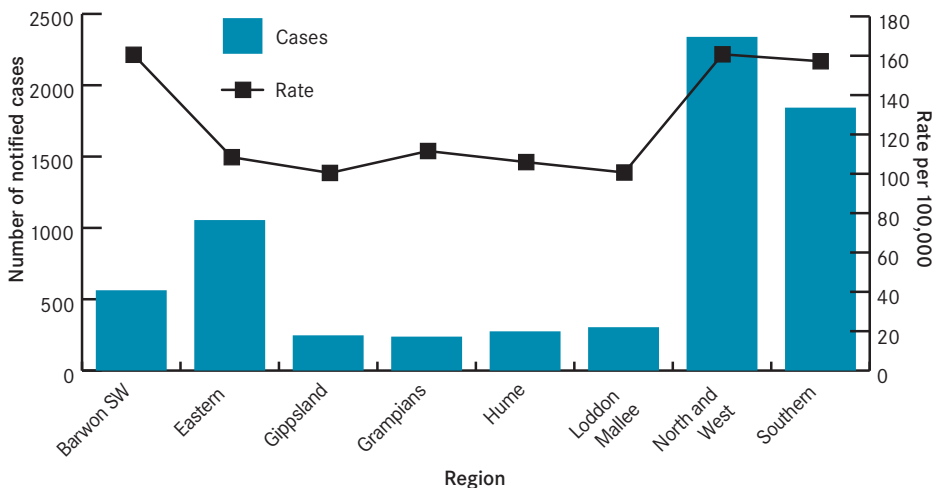
Of the cases for which enhanced data were received, the majority were for:

- persons born in Australia (n=2,170, 77 per cent)
- persons who reported a sexual partner of the opposite sex (n=2,253, 80 per cent)
- persons who acquired the infection from their regular partner (n=1,303, 46 per cent)
- persons who acquired their infection in Victoria (n=2,293, 81 per cent)

**Comment**

The department is establishing a sentinel surveillance project for chlamydia in clinics with a high case load of young people, women and indigenous Australians, and will collect information about testing and risk factors. The Burnet Institute will coordinate the project in collaboration with VIDRL and the Melbourne Sexual Health Centre.

**Figure 24: Notified cases of chlamydia, by region and rate per 100,000 population, Victoria, 2004**



\* Excludes 770 notifications with missing data

## Gonorrhoea

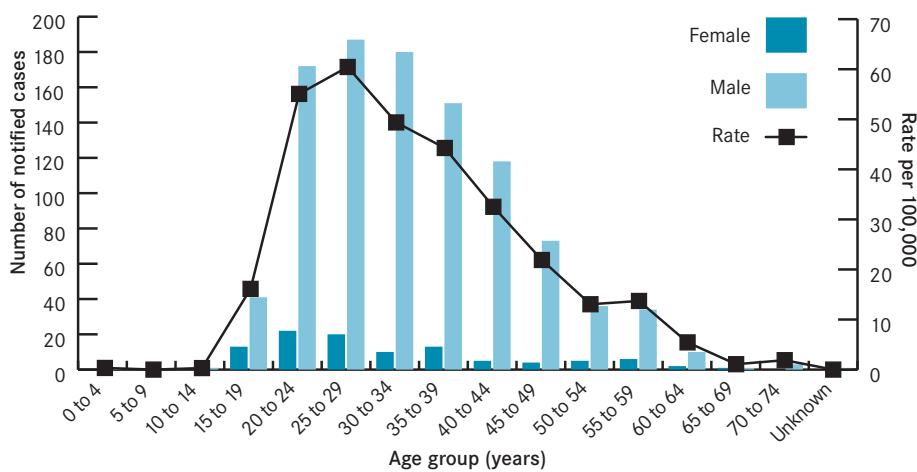
### Summary of notifications

The department received notifications for 1,112 cases of gonorrhoea in 2004, corresponding to a notification rate of 22 per 100,000 population; a five per cent decrease compared to 2003 (n=1,165). Of the total, 1,010 (91 per cent) were male and 101 (nine per cent) were female; sex was not specified for one case. The

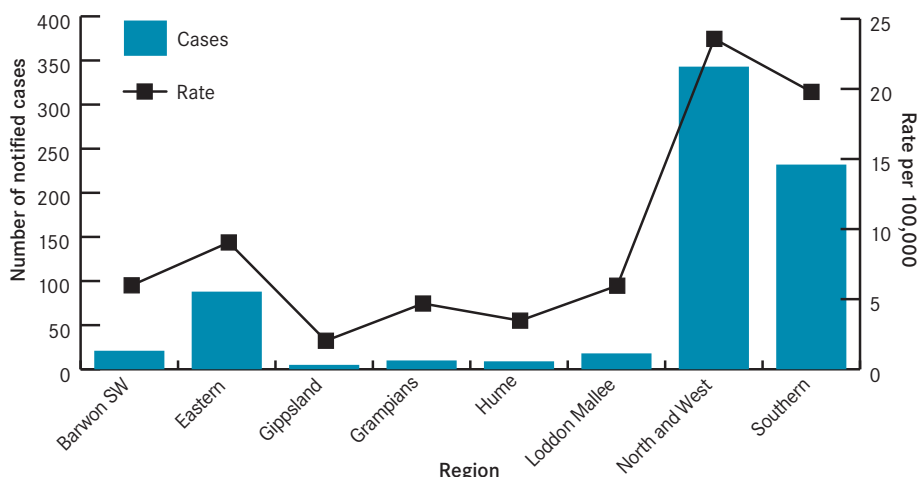
median age was 33 years for males and 28 years for females. Eighty per cent of male cases were aged 20–44 years (figure 25). Cases were clustered in Melbourne metropolitan regions, with notification rates highest for the North and West Metropolitan region (figure 26). Seven cases (0.6 per cent) were reported as being of Aboriginal and/or Torres Strait Islander origin.

*Neisseria gonorrhoeae* isolates from 771 cases (69 per cent) were tested for ciprofloxacin resistance (table 28). Among those acquired in Australia by males who reported a male sexual partner, resistance to ciprofloxacin was reported in 28 per cent, a marked increase from one per cent and 14 per cent in 2002 and 2003 respectively. Among infections acquired heterosexually in Australia, the prevalence of ciprofloxacin resistant strains was 48 per cent. Isolates from 746 cases (67 per cent) were tested for ceftriaxone resistance; all were sensitive.

**Figure 25: Notified cases of gonorrhoea, by age group, sex and rate per 100,000 population, Victoria, 2004**



**Figure 26: Notified cases of gonorrhoea, by region and rate per 100,000 population, Victoria, 2004**



\* Excludes 385 notifications for which the postcode was unknown, interstate or overseas.

### Risk factors

Enhanced data on cases of gonorrhoea were collected via a questionnaire sent to all notifying doctors. In 2004, 864 (78 per cent) enhanced surveillance questionnaires were returned, although not all questionnaires were complete.

Information on the sex of partners was available for 716 males (71 per cent), of whom 77 per cent (n=550) reported having a male sexual partner and 166 (23 per cent) reported having a female sexual partner. This information was available for 69 females (68 per cent); 99 per cent (n=68) reported contact with a male partner and only one reported contact with a female partner.

Complete enhanced data on the reported source of the infection were available for 710 cases (64 per cent) (table 29). Of these, 77 per cent (n=383) of males who reported having a male sexual partner acquired their infection from a casual sexual partner, as did 69 per cent (n=109) of males who reported having a female sexual partner. In contrast, the majority of infections of women were attributed to a regular sexual partner.

**Table 28: Susceptibility of *N. gonorrhoeae* isolates to ciprofloxacin, by sex, sex of partner and place of acquisition, Victoria, 2004\***

Sex	Sex of partner	Place acquired	Ciprofloxacin less sensitive	Ciprofloxacin resistant	Number of isolates
			(MIC > 0.5 mcg/mL)	(MIC > 1.0 mcg/mL)	
Male	Male	Australia	4	109	394
		Overseas	1	2	6
	Female	Australia	2	39	79
		Overseas	2	33	49
Female	All	Australia	0	16	36
		Overseas	0	4	7

\* Excludes where place of infections acquired and gender was not known.

MIC: Minimum inhibitory concentration.

**Table 29: Notified cases of gonorrhoea, by sex, sex of partner, partner type and place of acquisition, Victoria, 2004\***

Sex	Sex of partner	Partner type	Place acquired	
			Australia	Overseas
Male	Male	Casual partner	378	5
		Regular partner	104	2
		Sex worker	2	0
		Client (case is a sex worker)	6	0
	Female	Casual partner	71	38
		Regular partner	18	7
		Client (case is a sex worker)	1	0
Female	All	Sex worker	7	15
		Casual partner	16	1
		Regular partner	30	7
		Sex worker	0	0
		Client (case is a sex worker)	2	0

\* Excludes notifications with incomplete information.

## Comment

Resistance to ciprofloxacin among men who have sex with men has increased considerably in the last several years, underscoring the importance of treating gonococcal infections with ceftriaxone, as recommended by both the department and the Venereology Society of Victoria.

## Syphilis – infectious

### Summary of notifications

In 2004, the department received notifications for 421 cases of syphilis, of which 83 (20 per cent) were classified as infectious syphilis, a 51 per cent increase on the 55 infectious cases notified in 2003. Among the infectious syphilis cases, the median age was 35 years (range: 18–70 years) and 76 (92 per cent) were male. Two cases of infectious syphilis were identified as of Aboriginal and/or Torres Strait Islander origin. Symptomatic infection and sexually transmissible infection screening were the most common reasons for testing reported by clinicians (table 30). Three of the infectious syphilis cases were detected on antenatal screening; two were born overseas.

**Table 30: Notified cases of infectious syphilis, by reason for testing, Victoria, 2004**

Reason for testing	Number	Per cent
Symptomatic infection	34	41
Sexually transmissible infection screen	33	40
Sexual contact with infected partner	6	7
Abnormalities on examination	4	5
Antenatal screen	3	4
Other	1	1
Unknown	2	2
<b>Total</b>	<b>83</b>	<b>100</b>

## Risk factors

Risk factor information was obtained from treating clinicians for all infectious syphilis cases. Of the 76 male cases, 62 (82 per cent) reported a male sexual partner and ten (13 per cent) reported a female sexual partner. Five of the seven female cases reported a male partner; sex of partner was unknown for the other two.

Infection was reported as acquired in Victoria for 49 cases (59 per cent), compared with 42 per cent of cases in 2003. Infection was acquired overseas and interstate for 14 (17 per cent) and six (seven per cent) cases respectively, while for 16 cases the place of acquisition was unknown.

Casual sexual partners were reported as the source of 59 infections (71 per cent), while regular partners were reported for 12 infections (14 per cent). A sex worker was reported as the source for three infections (three per cent). This information was reported as unknown for eight cases (ten per cent).

## Comment

The increasing number of infectious syphilis cases in Victoria, particularly among MSM is concerning. Research demonstrates evidence that syphilis facilitates the transmission of HIV and may be important in contributing to HIV acquisition among high-risk groups where infection rates are high. The department continued efforts to increase community awareness of syphilis (and sexually transmissible infections in general) in 2004. This was done in collaboration with various stakeholders through campaigns such as 'Check it Out' to promote sexual health and testing among men who have sex with men, and syphilis awareness and outreach at sex-on-premises venues. The department also has an ongoing syphilis alert with information for general practitioners and other healthcare workers that can be accessed from the web at <http://www.health.vic.gov.au/chiefhealthofficer/alerts/syphilis.htm>