

Manitoba Health

Manitoba Health Statistical Update on HIV/AIDS

1985 - Dec 2001

Communicable
Disease Control Unit
Public Health Branch

MANITOBA HEALTH STATISTICAL UPDATE ON HIV/AIDS 1985 TO DECEMBER 2001

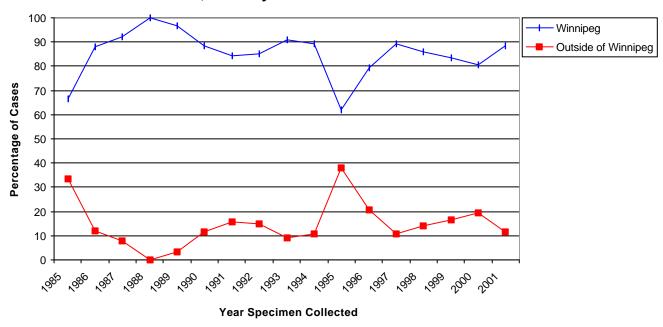
HIV - January 1, 1985 to December 31, 2001

Between January 1 and December 31, 2001, 70 newly diagnosed cases of HIV were reported in Manitoba; 40 males and 30 females, bringing the total number of cases to 920 since 1985 (Table 1, attached report). While females represent 18% of all HIV cases reported since 1985, 8% of HIV positive individuals were accounted for by females between 1985 and 1994 as compared to 29% between 1995 and December 2001 (Table 1, attached report). The majority of all new cases, both male and female, were between the ages of 20 and 39 years (Figure 2, attached report).

Between 1985 and 2001, 83% (n=766) of all HIV cases reported (at the time of testing) were residents of Winnipeg, while 13% (n=121) of cases resided outside of Winnipeg (Figure 3, attached report). Of the total cases, 3% (n=29) of individuals were from out of province while less than 1% (n=4) of individuals reported missing or unknown geographic information.

With the exception of 2001, there has been a gradual but consistent increase in the percentage of cases residing outside of Winnipeg (see figure below) over recent years. This observation has important implications regarding the availability of HIV prevention and education resources outside of the major urban centre. Further, this finding encourages health care providers to continue to offer HIV testing and counseling.

Percentage of HIV Positive Cases* by Region of Residence, Manitoba, January 1985 - December 2001



^{*}Cases residing out-of-province or of unknown residence (at the time of testing) are excluded from the denominator.

Self-Reported Ethnicity

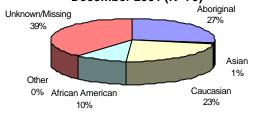
As presented in the charts below, 27% (19/70 cases) of newly diagnosed cases of HIV in 2001 were self-reported as Aboriginal at the time of follow-up, while 23% (16/70 cases) were self-reported as Caucasian. These numbers increase to 44% and 37% respectively when cases with unknown or missing ethnicity are excluded (n=27) due to incomplete or missing *Notification of HIV Infection* forms. When these groups are further examined by mode of transmission, the most commonly reported category for Caucasians includes MSM¹ (7/16 cases; 44%). For Aboriginals, the majority of individuals reported IDU² (12/19; 63%).

Between January 1999 and December 2000, the majority of new HIV cases self-reported as Caucasian (49/130 cases, 38%) and Aboriginal (48/130 cases, 37%). These values increase to 43% and 42%, respectively, when cases with missing or unknown ethnicity are excluded (n=17). Similar patterns regarding the predominant modes of transmission were observed between 1999 and 2000. For Caucasians, the two most common transmission categories includes heterosexual activity with person(s) at increased risk of HIV (20/49 cases; 41%) and MSM (18/49 cases; 37%). The most commonly reported categories for Aboriginals includes IDU (24/48 cases; 50%) and heterosexual activity with person(s) at increased risk of HIV (15/48 cases; 31%).

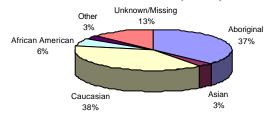
It is important to note that these data are self-reported and reflect individuals coming forward for testing. Misclassification may occur when the index case fails to self-identify, leading to under-representation. In addition, approximately 22% of HIV cases reported between January 1999 and December 2001 were incomplete due to missing or unknown information pertaining to ethnicity.

Despite these limitations, this information is important as it further characterizes at-risk populations to support targeted HIV prevention and planning initiatives. In addition, this information may be used to facilitate the allocation of resources for education and treatment programs within Regional Health Authorities, other health care jurisdictions and the province.

Percentage of New Positive HIV Cases by Ethnicity in Manitoba, January 2001 to December 2001 (N=70)



Percentage of New Positive HIV Cases by Ethnicity in Manitoba, January 1999 to December 2000 (N=130)



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¹ Men having sex with men.

² Injection drug use.

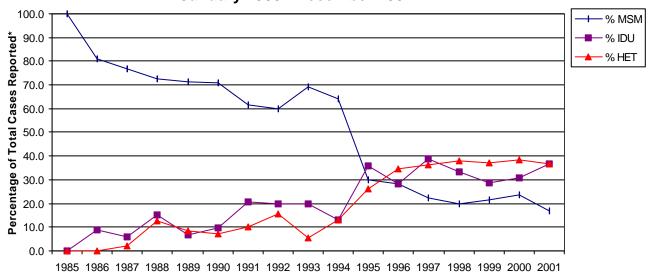
HIV Transmission Patterns

Of the 30 females testing HIV positive between January and December 2001, the predominant modes of transmission after excluding those with no identified risk (n=4; 13%), were heterosexual activity with a person(s) at risk of HIV infection (n=12; 46%) and injection drug use (n=9; 35%). Of the 40 males (excluding those with no identified risk), the predominant modes of transmission included IDU (n=12; 35%), MSM (n=10; 29%) and heterosexual activity with a person(s) at risk of HIV infection (n=10; 29%).

Table 4 (attached report) describes the mode of transmission for all HIV positive cases. When cases are reviewed from 1985 to December 2001, the most common transmission categories for females include heterosexual activity with person(s) at risk of HIV and IDU. For males, the primary modes of transmission include MSM, heterosexual activity with person(s) at risk of HIV and IDU (Figure 4, attached report).

Examined over time (refer to graph below), it is evident that the proportion of individuals reporting MSM has declined since 1985 and dropped substantially in 1995. However, the *number* of new cases reporting MSM has remained relatively constant over the last five years, with an average of 13 to 15 cases per year. The proportion of cases reporting heterosexual activity with person(s) at increased risk of HIV has increased steadily since 1995 reaching a high of nearly 40% in 2001. In total, MSM, IDU and heterosexual activity with person(s) at risk of HIV represent roughly 90% of all HIV antibody positive individuals diagnosed between January 1985 and December 2001 (excluding cases with missing/unknown mode of transmission; n=46).

Risk Profile for HIV Positive Cases in Manitoba, January 1985 - December 2001



Year of Specimen Collection

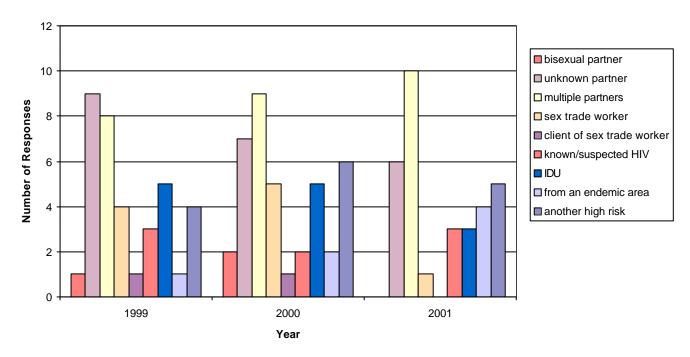
*Cases with no identified risk (NIR) were excluded from the denominator. MSM is men having sex with men. IDU is injection drug use and includes MSM/IDU. HET is heterosexual activity with person(s) at increased risk of HIV.

Heterosexual Contact with Person(s) at Risk of HIV

In 1999 and 2000, 26 and 21 cases, respectively, reported heterosexual contact with person(s) at risk of HIV as the primary mode of transmission (see figure below). In 1999, the majority of individuals reported heterosexual contact with an unknown partner (9/26 cases; 35%) and having heterosexual contact with multiple sex partners (8/26 cases; 31%). Similar patterns were observed in 2000 and 2001, where the majority of cases reported having heterosexual contact with multiple partners (9/21 cases; 43% and 10/22; 46%, respectively) and unknown partners (7/21; 33% and 6/22; 27%, respectively).

Although these data reflect individuals coming forward for testing and are subject to over- or under-reporting, they are helpful in identifying current trends. This information is critical to support and direct planning and prevention services within and across health care jurisdictions in Manitoba. Finally, the consistent increase in HIV among heterosexuals over recent years may suggest that HIV testing is becoming more acceptable among this population. As a result, it may be timely to increase the targeted promotion of HIV testing among this group. Further, it is important that health care professionals offer HIV testing and counseling to individuals infected with a bacterial sexually transmitted disease (STD) or to those named as a contact to someone infected with a STD. Both the Provincial AIDS Strategy and Provincial STD Strategy provide goals and objectives to facilitate program planning and prevention strategies to reduce the risk and transmission of HIV and STD.

Heterosexual Contact with Person(s) at Risk of HIV, Manitoba, January 1999 - December 2001

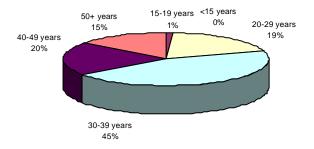


Note: Number of responses may not add up to the total number of individuals reporting heterosexual contact since all categories within this variable that apply for each case are recorded.

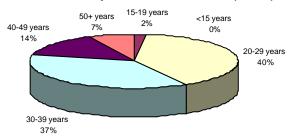
Age of HIV Positive Cases Among MSM Risk Profile

Between January 1995 and December 2001, there was an increase in the age of HIV positive cases reporting MSM as the primary mode of transmission as compared to the earlier time period of 1985-1994. This is particularly evident for those individuals 30 years of age and older, where there was an observed increase, from 58% to 80%. Alternatively, there has been a decrease in those aged 20 and 29, from 40% during 1985 to 1994 to 19% for the period 1995 to December 2001.

Age of HIV Positive Cases with MSM Risk Profile in Manitoba, January 1995 - December 2001 (N=95)



Age of HIV Positive Cases with MSM Risk Profile in Manitoba, January 1985 - December 1994 (N=321)



AIDS – January 1985 to December 31, 2001

Between January 1 and December 31, 2001, 8 new cases of AIDS were reported; 6 cases were male and 2 cases were female. These reports bring the total number of cases to 198 since 1985 (Table 5, attached report). The number of reported AIDS cases has declined somewhat since the early 1990's, due in part to early diagnosis and improved treatment of individuals with HIV infection. Seventy-eight percent of individuals reported with AIDS have died. However, delays in reporting of both cases and deaths make it difficult to determine precisely the incidence and mortality rate.

APPENDIX A

Reporting of HIV and AIDS in Manitoba

In Manitoba, HIV testing is non-nominal. A prescribed patient code is assigned when a physician completes the appropriate requisition. This code includes the last two letters of the mother's maiden name, the patient's year of birth, day of birth, gender, regional health authority (as defined by number) and first three characters of the patient's postal code. Prior to August 1998, the former Manitoba Health region (as defined by letter) was assigned to identify the patient's region of residence. As well, postal code was not included.

All HIV antibody testing is carried out at the Cadham Provincial Laboratory (CPL). Positive test results are subsequently reported to the Director of Communicable Disease Control as required by the *Diseases and Dead Bodies Regulation, Public Health Act.* It has been the practice of Communicable Disease Control (CDC) Unit to enter case information into the HIV Database *after* the physician (requesting the test) has verified the test result as a new or existing case. However, there have been delays in the completion of and return of the *Notification of HIV Infection Form* (Appendix B) by health care professionals. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional. This practice will avoid the underreporting of HIV in Manitoba, although, duplicate cases may be included. The CDC Unit continues to work with Regional Health Authorities towards a satisfactory resolution in this regard. A collaborative effort between the Winnipeg Regional Health Authority and the CDC Unit, Manitoba Health has decreased the number of outstanding *Notification of HIV Forms* for 1999, 2000 and 2001.

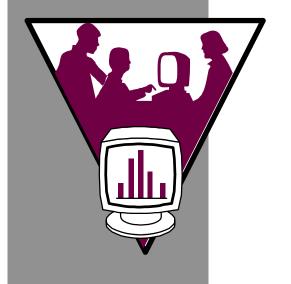
Twice a year, line-listed data from the HIV Database are extracted and forwarded to the Centre for Infectious Disease Prevention and Control, Health Canada in Ottawa for inclusion within the national report, HIV and AIDS in Canada. Although non-nominal, the prescribed patient code is stripped prior to release. Instead, a sequential case number is assigned.

Provincially and nationally, AIDS cases and deaths are reportable by physicians. A federal reporting form, the *AIDS Case Reporting Form*, is used for this purpose. New AIDS cases and deaths are reported to the Director of Communicable Disease Control and subsequently forwarded to the Centre for Infectious Disease Prevention and Control. The Centre works diligently with other provinces to ensure that there are no duplications in the counting of cases. The variations seen from previous reports with respect to the number of AIDS cases and deaths may be accounted for by delays in reporting as well as the fact that in Manitoba, the database is updated immediately once surveillance staff are notified that a particular case has been accounted for in another province.

APPENDIX B

NOTIFICATION OF HIV INFECTION (Form prescribed pursuant to subsection 43(2) The Public Health Act: P210)

DESIGNATED PATIENT CODE	·	PHYSICIAN NAME		•	
(As per CPL requisition: Last two initials of mother's ma name; year of birth; day of birth; gender; RHA of residen code; 3-digit forward sortation postal code)		THIOIOIAN NAME			_
LABORATORY REQUISITION NUMBER		SPECIMEN DATE/_	1		
		yyyy mn		ld	
PRINCIPAL REASON FOR TEST (ONE ONLY) Requested by patient (no risk identified) Pick factor prepart (paymetametic)		SK INFORMATION Since 1978; check all client character	istics th	nat app	oly)
☐ Risk factor present (asymptomatic) ☐ Symptomatic ☐ STD work-up	43		Yes	No	Unk.
☐ Travel ☐ Insurance ☐ Prenatal ☐ Other (specify)	1)	Has had sex with: A male A female			
GENDER	2)	Has had heterosexual sex with:			
If female, pregnant? Receiving anti-retroviral drug(s)? Yes No		A bisexual partner An unknown partner Multiple sex partners A sex trade worker			
M/S ☐ Unmarried ☐ Married/CL ☐ S/D/W		A client of a sex trade worker (i.e. patient is a sex trade worker)			
COUNTRY OF BIRTH Canada Other If other, year of arrival in Canada		A person with known/suspected HIV An injection drug user A person from an HIV endemic area Another high risk partner			
ETHNICITY Caucasian African/African-American Aboriginal Asian Other	3)	Has used needles for recreational (non-medical) drug injection			
If aboriginal, treaty status: Treaty Non-treaty Band number:	4)	Has received blood or blood products a) Prior to Nov. 1985 b) After Nov. 1985			
CLINICAL STATUS	5)	Has received blood or blood			
Are HIV-related symptoms present? ☐ Yes ☐ No		products for treatment of a coagulation disorder			
Does the patient have AIDS? Yes No		a) Prior to Nov. 1985 b) After Nov. 1985			
PAST HISTORY	6)	Has been exposed to HIV in			
1) Previous HIV testing?		an occupational setting (e.g. needlestick injury)			
If yes: Date of most recent negative test: Date of first positive test:	7)	Born to an HIV positive mother			
2) History of STD ever Yes No	8)	Born in or resident of an HIV-endemic country			
3) STD in past 3 months	9)	Has had: tattoo			
4) Previous blood or tissue donation		☐ body piercing ☐ acupuncture	h:4a al4		4
If yes, most recent date	40)	☐ blood contact from			
Location	-	Other exposure which could have ection, specify			
	11)) No identifiable risk factor			
Interview for partners at risk to be done by: Physician	Y	res No Public Health Nur	se Ye	es 🗌 I	No 🗌
If by public health nurse, physician must first obtain informed obtained?	d con	sent from client. Has informed con	sent be	en	
CONTACT INFORMATION ON PARTNERS TO BE FOLLOWED	BY PL	JBLIC HEALTH:			
NameHo	ome tel			_	
Alias Postal (Code	Sex ☐ F ☐ M Age/Birth date			
Occupation Place o	of Emp	oloyment/School		_	
Live-In Partner Single Other Lives with Characteristics: Height Wt. Eye Colour					
	enteral((First)To	_(Last)	_	



Manitoba Health Statistical Update on HIV/AIDS

1985 - 2001

CDC Unit Public Health Branch Manitoba Health



MANITOBA HEALTH

Table 1 NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE, 1985-2001

Year	Male	Female	Total
1985	3	0	3
1986	70	0	70
1987	50	3	53
1988	37	4	41
1989	57	3	60
1990	40	3	43
1991	33	6	39
1992	39	6	45
1993	54	4	58
1994	50	7	57
1995	42	9	51
1996	37	16	53
1997	59	17	76
1998	53	18	71
1999	53	20	73
2000	38	19	57
2001	40	30	70
Total	755	165	920

Figure 1. NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE, 1985-2001

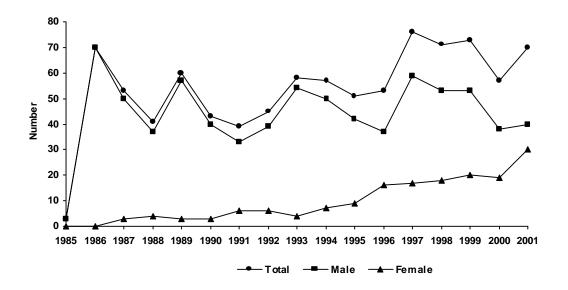


Table 2: NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY AGE AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Age	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
<15	М	0	0	6	6
	F	0	0	4	4
15-19	М	0	1	13	14
	F	0	1	8	9
20-29	М	3	7	239	249
	F	11	12	52	75
30-39	М	22	17	266	305
	F	11	3	35	49
40-49	М	4	8	101	113
	F	6	2	11	19
50+	М	11	5	52	68
	F	2	1	6	9
Total	М	40	38	677	755
	F	30	19	116	165

Figure 2. NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY AGE AND GENDER, 1985-2001

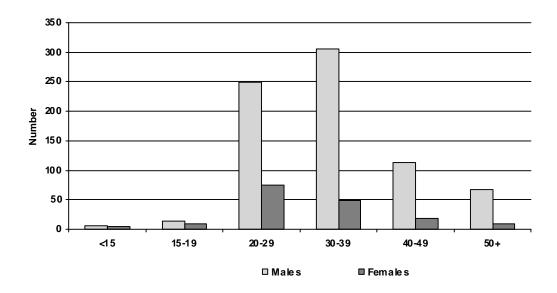


Table 3. NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY GEOGRAPHIC RESIDENCE AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Geographic Residence	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
Winnipeg	М	34	31	563	628
	F	27	15	96	138
Brandon	М	0	1	0	1
Marquette	М	0	1	0	1
Brandon, Marquette, S. Westman	М	0	0	18	18
	F	0	0	1	1
N. Eastman	М	1	0	1	2
	F	0	0	1	1
S. Eastman	М	0	0	1	1
N. Eastman, S. Eastman	М	0	0	11	11
	F	0	0	2	2
Interlake	М	2	1	23	26
	F	0	1	2	3
Central	М	1	3	23	27
	F	3	2	3	8
Parkland	М	0	0	5	5
	F	0	0	1	1
Norman	М	1	0	3	4
	F	0	1	0	1
Burntw ood	М	0	1	5	6
	F	0	0	2	2
Unknown	М	1	0	2	3
	F	0	0	1	1
Out of Province	М	0	0	22	22
	F	0	0	7	7
Total	М	40	38	677	755
	F	30	19	116	165

Figure 3. PERCENTAGE OF HIV POSITIVE INFECTIONS IN MANITOBA BY REGION OF RESIDENCE AND GENDER, 1985-2001

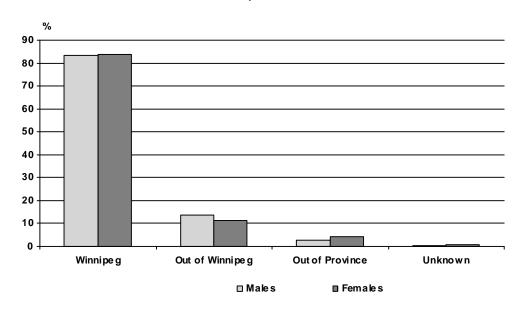


Table 4 NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY TRANSMISSION CATEGORY AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Transmission Category	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
MSM	М	10	13	393	416
MSM/IDU	М	1	1	45	47
Heterosexual'	М	10	15	90	115
	F	12	6	51	69
IDU	М	12	8	74	94
	F	9	8	40	57
Perinatal	М	0	0	2	2
	F	0	0	1	1
Recp B/B products	М	0	0	28	28
	F	2	0	6	8
Endemic"	М	1	1	19	21
	F	3	3	10	16
NIR	М	6	0	26	32
_	F	4	2	8	14
Total	М	40	38	677	755
	F	30	19	116	165

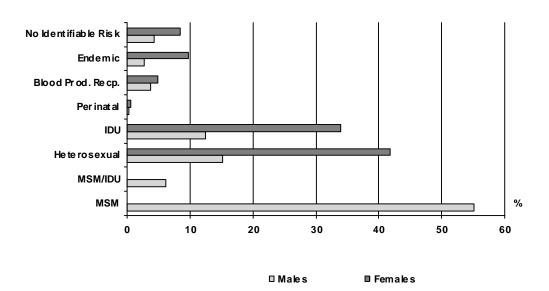
MSM = men having sex with men

IDU = injection drug use

Recp B/B products = recipient of blood/blood product

NIR = No Identified Risk

Figure 4. PERCENTAGE OF HIV POSITIVE INFECTIONS IN MANITOBA BY TRANSMISSION CATEGORY, 1985-2001



^{&#}x27; Heterosexual activity includes persons reporting heterosexual activity with person(s) at risk of HIV infection

[&]quot; Endemic includes persons originating from or residing in countries with a high prevalence of HIV

Table 5: NUMBER OF REPORTED AIDS CASES AND DEATHS, 1985-2001

Year	Cases Reported"	Deaths Reported"
1985	2	0
1986	14	5
1987	8	7
1988	5	5
1989	17	11
1990	11	9
1991	21	9
1992	16	14
1993	15	19
1994	12	16
1995	18	15
1996	9	7
1997	7	6
1998	11	5
1999	12	8
2000	12	11
2001	8	7
Total	198	154

[&]quot; Because of delays in reporting, the number of reported cases and deaths does not necessarily represent the number c cases diagnosed or deaths occuring during the period.

Figure 5. NUMBER OF REPORTED AIDS CASES AND DEATHS, 1985-2001

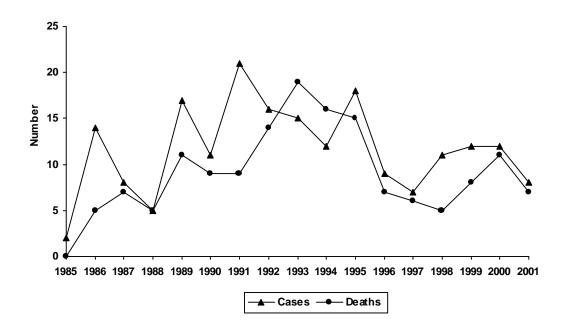


Table 6: NUMBER OF REPORTED CASES OF AIDS BY AGE AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Age	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
<15	М	0	0	2	2
	F	0	0	1	1
15-19	М	0	0	1	1
20-29	М	1	1	30	32
	F	1	0	2	3
30-39	М	1	3	78	82
	F	0	1	5	6
40-49	М	2	4	32	38
	F	1	0	3	4
50+	М	2	3	22	27
	F	0	0	2	2
Total	М	6	11	165	182
	F	2	1	13	16

Figure 6. NUMBER OF REPORTED CASES OF AIDS BY AGE AND GENDER, 1985-2001

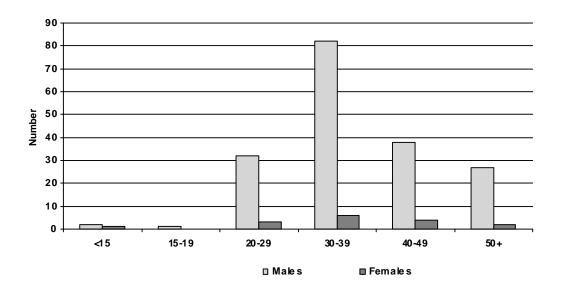


Table 7: NUMBER OF REPORTED CASES OF AIDS BY GEOGRAPHIC RESIDENCE AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Geographic Residence	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
Winnipeg	М	5	9	133	147
	F	1	1	11	13
Brandon	М	0	0	4	4
Marquette	М	0	0	2	2
S. Westman	М	0	0	1	1
Interlake	М	0	0	4	4
Central	М	0	0	1	1
Parkland	М	1	1	2	4
	F	0	0	1	1
Norman	М	0	0	1	1
Burntw ood	М	0	0	2	2
Chirchill	F	1	0	0	1
Unknown	M	0	1	12	13
	F	0	0	1	1
Out of Province	M	0	0	3	3
Total	M	6	11	165	182
	F	2	1	13	16

Figure 7. PERCENTAGE OF AIDS CASES IN MANITOBA BY REGION OF RESIDENCE AND GENDER, 1985-2001

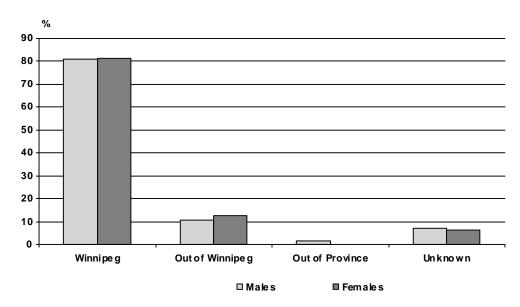


Table 8: NUMBER OF REPORTED CASES OF AIDS BY TRANSMISSION CATEGORY AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Transmission Category	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
MSM	М	1	3	122	126
Heterosexual'	М	4	5	8	17
	F	2	1	6	9
IDU	М	0	2	13	15
	F	0	0	2	2
Perinatal	М	0	0	1	1
	F	0	0	1	1
Recp B/B products	М	0	0	15	15
	F	0	0	2	2
Endemic"	М	0	0	3	3
	F	0	0	2	2
NIR	М	1	1	3	5
Total	М	6	11	165	182
	F	2	1	13	16

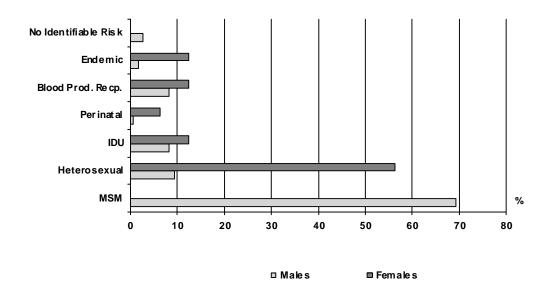
MSM = men having sex with men

IDU = injection drug use

Recp B/B products = recipient of blood/blood product

NIR = No Identified Risk

Figure 8. PERCENTAGE OF AIDS CASES IN MANITOBA BY TRANSMISSION CATEGORY AND GENDER, 1985-2001



^{&#}x27; Heterosexual activity includes persons reporting heterosexual activity with person(s) at risk of HIV infection

[&]quot; Endemic includes persons originating from or residing in countries with a high prevalence of HIV

Table 9 NUMBER OF REPORTED CASES OF AIDS BY PRIMARY DIAGNOSIS AND GENDER, 2001, 2000, CUMULATIVE 1985-1999 AND 1985-2001

Primary Diagnosis	Gender	2001	2000	1985-1999	1985-2001
		Total	Total	Total	Total
PCP	М	1	1	59	61
	F	0	0	1	1
Kaposi's Sarcoma	М	1	1	19	21
Tuberculosis	М	0	2	10	12
	F	0	0	1	1
Other Opportunistic Diseases	М	3	2	53	58
	F	2	1	10	13
Other Malignancy	M	1	1	5	7
HIV Wasting	M	0	3	17	20
	F	0	0	1	1
Unknown	М	0	1	2	3
Total	М	6	11	165	182
_	F	2	1	13	16

PCP = pneumocystis carinii pneumonia

Figure 9. PERCENTAGE OF AIDS CASES IN MANITOBA BY PRIMARY DIAGNOSIS, 1985-2001

