

# annual update report

## HIV and AIDS

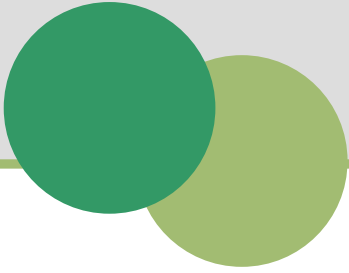
2008



BC Centre for Disease Control  
AN AGENCY OF THE BRITISH COLUMBIA HEALTH SERVICES AUTHORITY

STI  HIV

Prevention and Control



## **CONTACT INFORMATION**

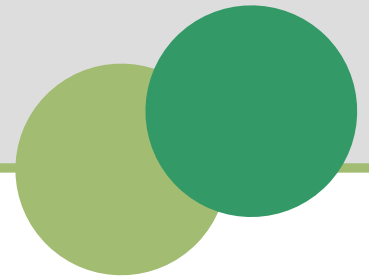
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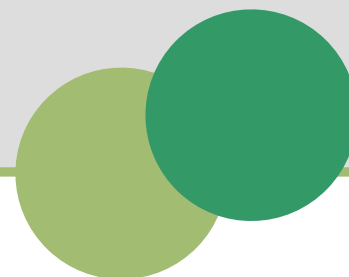
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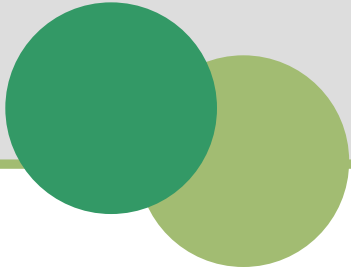
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### Other

Staff from the PHSA Laboratory Services, located at the BCCDC, for the collecting and compiling of HIV requisition data.

Designated public health nurses in the health service delivery areas for data collection and for offering support to persons testing positive for HIV.

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Physicians, healthcare providers, and public health staff in British Columbia for taking the time and effort to complete and submit AIDS case report forms.



## INTRODUCTION

This HIV and AIDS Annual Update is intended to supplement and provide more detailed information than contained within the STI/HIV Prevention and Control Division's Annual Surveillance Report ("STI/HIV Annual Report 2008" at <http://www.bccdc.ca/util/about/annreport/default.htm#heading3>). The format and content of this 2008 Annual Update has changed slightly from previous updates, in order to improve the comparability of these two reports.

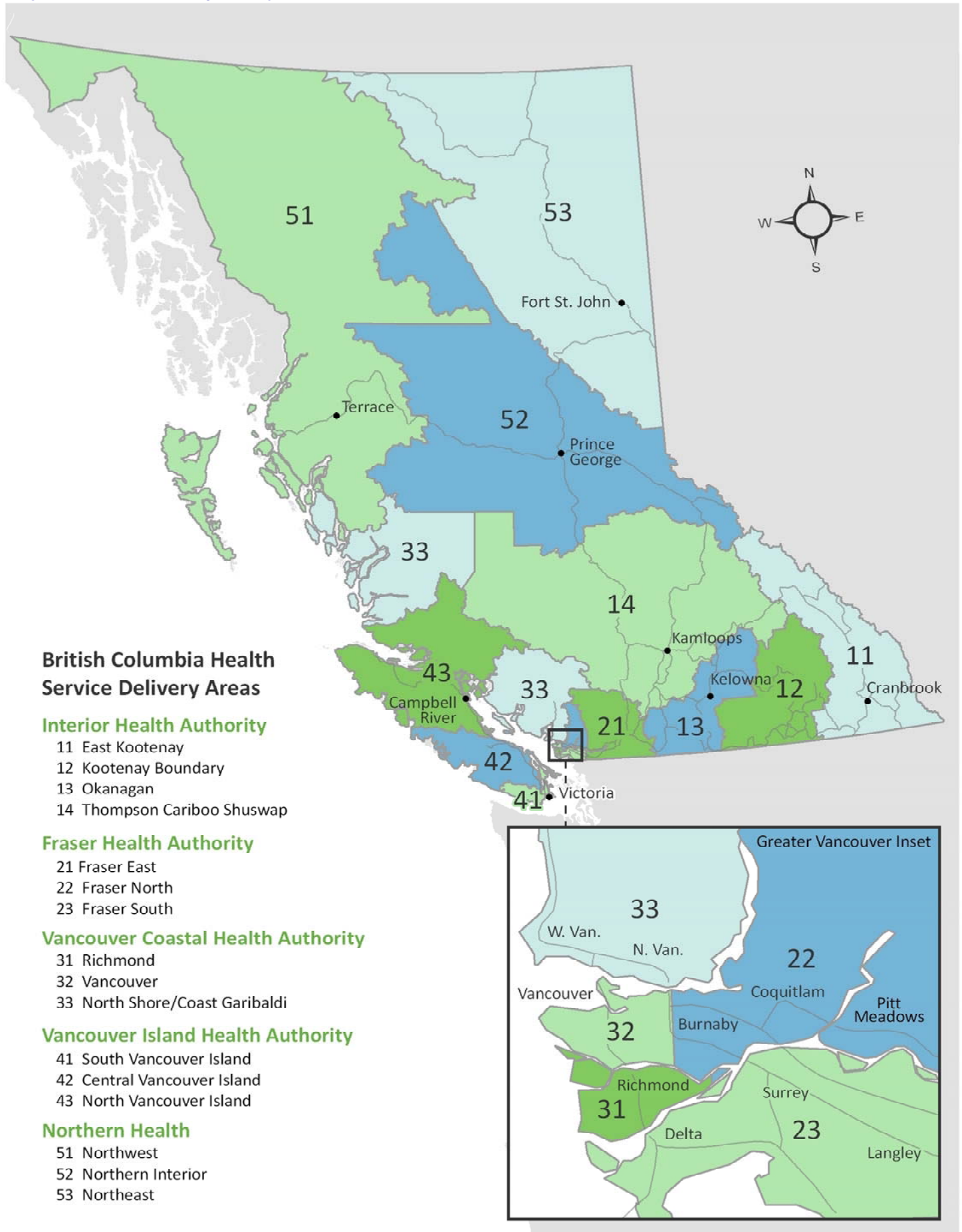
For this report, the following changes have been made from previous updates:

- To streamline the report we have removed commentary regarding the interpretation of observed trends. This information is contained within the Annual Surveillance Report and can be referred to if required.
- We have included a technical appendix which contains a description of data sources, notes regarding the interpretation of surveillance data, and case definitions.
- We have revised the analysis of HIV and AIDS data by exposure category to match those used in our Annual Surveillance Report (the classification and hierarchy used to assign exposure category is described in the Technical Appendix).

We hope that these changes will enhance the usefulness of this report and we will be continuing to look for ways to streamline and improve this update. Please do not hesitate to contact us with any questions or comments – feedback is always welcome.

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# HIV

## Notes Regarding the Interpretation of HIV Data

The number of new positive HIV tests is not a true reflection of the number of new HIV infections per year (i.e., HIV incidence), as an individual may have a new positive HIV test one or more years after they became infected with HIV.

HIV became a reportable disease in BC in 2003, which was accompanied by enhanced follow-up of new positive HIV tests by HIV designated nurses. This change has led to more complete follow-up of individuals having new positive HIV tests, and has had a demonstrable impact on the quality of HIV surveillance data through:

- The improved identification of individuals having a first positive HIV test in BC who have had a previous positive HIV test outside of BC. These previously positive individuals are excluded from surveillance reporting. The increased exclusion of individuals with a previous positive HIV test has contributed to a decline in new positive HIV tests observed in BC since 2004.
- The improved identification of exposure category and ethnicity, resulting in a decrease in the proportion of new positive HIV tests each year where exposure or ethnicity is unknown.

This data quality issue needs to be considered when comparing trends before and after 2003. In this report, we have added a line indicating when HIV became reportable to each figure to serve as a visual reminder of this major influence on observed trends.

For interpretation of ethnicity and exposure category data, the data presented in this report for 2008 is not final. There is an expected delay in collection of this information for individuals having a new positive HIV test, resulting in a proportion of individuals having unknown ethnicity or exposure category. This proportion will have decreased by the time of next year's report.



### 1.1 Persons testing newly positive for HIV in BC by year of testing, 1985 to 2008

Year	Cases	Rate	Tests
1985	220	7.4	1,362
1986	670	22.3	5,328
1987	929	30.5	35,783
1988	746	23.9	28,866
1989	726	22.7	30,392
1990	645	19.6	38,027
1991	704	20.9	54,595
1992	788	22.7	84,169
1993	706	19.8	92,687
1994	840	22.9	104,229
1995	681	18.0	129,941
1996	702	18.1	137,980
1997	519	13.1	140,092
1998	471	11.8	137,352
1999	416	10.4	134,916
2000	400	9.9	135,104
2001	420	10.3	134,902
2002	418	10.2	145,449
2003	409	9.8	142,400
2004	441	10.5	153,635
2005	400	9.4	160,554
2006	361	8.4	172,058
2007	389	8.9	176,224
2008	350	7.9	182,151
<b>Total</b>	<b>13,351</b>		<b>2,558,196</b>

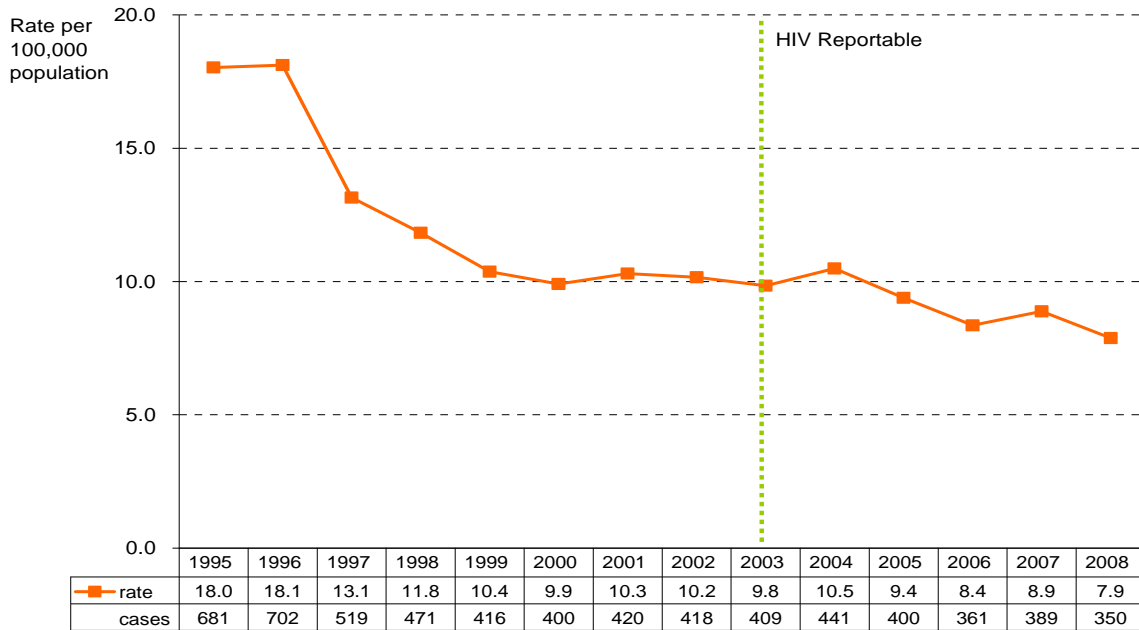
TESTS is the number of HIV tests, both positive and negative, performed by PHSA Laboratory Services, located at the BCCDC.

RATE is per 100,000 population

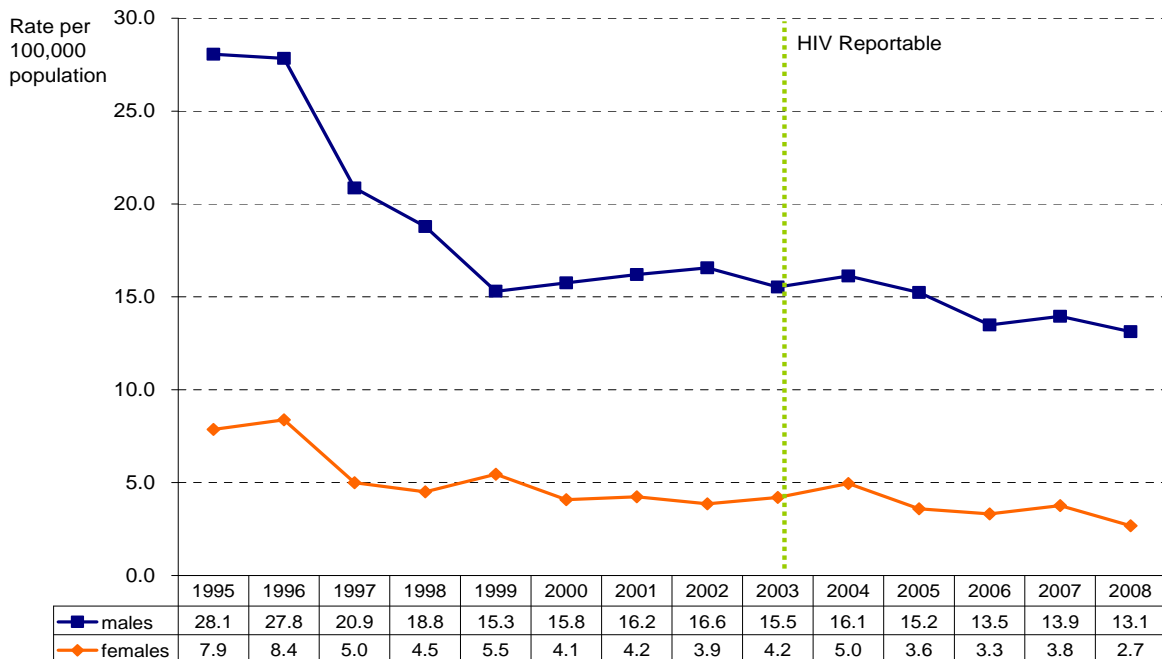
1985 annual total is for the months of October, November and December only.



1.A Persons testing newly positive for HIV in BC by year of testing, 1995 to 2008



1.B Persons testing newly positive for HIV in BC by sex and year of testing, 1995 to 2008



1.2 Males testing newly positive for HIV in BC by age group and year of testing, 2002 to 2008

Age	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
<1 yr	persons	-	-	-	-	1	-	-	1
	rate	-	-	-	-	5	-	-	-
1 to 14	tests	102	106	120	113	173	202	174	990
	persons	-	1	-	-	1	-	-	2
15 to 19	rate	-	0	-	-	0	-	-	-
	tests	473	442	407	427	500	504	513	3,266
20 to 29	persons	1	2	2	2	3	1	1	12
	rate	1	1	1	1	2	1	1	1
30 to 39	tests	2,325	2,142	2,229	2,324	2,573	2,373	2,445	16,411
	persons	46	44	49	41	54	55	61	350
40 to 49	rate	17	16	17	14	18	18	19	19
	tests	16,188	15,781	16,715	18,452	19,694	19,882	20,803	127,515
50+	persons	124	105	99	110	87	104	83	712
	rate	39	34	33	37	29	34	27	27
unknown	tests	15,574	14,345	15,045	15,930	16,228	16,707	17,481	111,310
	persons	105	99	121	107	82	89	87	690
Total	rate	31	29	35	31	23	25	25	25
	tests	11,227	10,943	12,010	12,337	12,855	12,970	13,370	85,712
50+	persons	61	69	65	62	61	54	57	429
	rate	10	11	10	9	9	8	8	8
Total	tests	8,735	8,549	10,008	10,488	11,999	12,918	13,983	76,680
	persons	1	-	-	-	-	-	-	1
Total	tests	204	157	120	135	103	100	58	877
	persons	338	320	336	322	289	303	289	2,197
Total	rate	16.7	15.7	16.3	15.4	13.7	14.1	13.3	13.3
	tests	54,828	52,465	56,654	60,206	64,125	65,656	68,827	422,761

TOTAL column to far right is cumulative from 2002 to 2008 December 31.

RATE is per 100,000 population.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.



1.3 Females testing newly positive for HIV in BC by age group and year of testing, 2002 to 2008

Age	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
<1 yr	persons	-	-	-	-	-	-	1	1
	rate tests	150	105	133	142	195	205	110	1040
1 to 14	persons	1	-	4	1	1	-	2	9
	rate tests	0.3	529	1.2	0.3	0.3	552	0.6	3851
15 to 19	persons	4	2	3	3	2	1	-	15
	rate tests	2.9	1.5	2.2	2.2	1.5	0.7	5,759	40,480
20 to 29	persons	22	26	29	18	25	36	15	171
	rate tests	8.2	9.5	10.4	6.3	8.5	12.1	4.9	261,246
30 to 39	persons	35	33	38	19	23	20	13	181
	rate tests	11.0	10.6	12.4	6.2	7.5	6.5	4.2	242,617
40 to 49	persons	15	19	26	25	11	14	20	130
	rate tests	4.4	5.4	7.3	7.0	3.1	3.9	5.6	80,281
50+	persons	3	8	5	11	10	12	9	58
	rate tests	0.5	1.2	0.7	1.5	1.3	1.5	1.1	50,529
unknown	persons	-	1	-	-	-	-	-	1
	rate tests	282	604	1,326	239	149	154	83	2,837
<b>Total</b>	<b>persons</b>	<b>80</b>	<b>89</b>	<b>105</b>	<b>77</b>	<b>72</b>	<b>83</b>	<b>60</b>	<b>566</b>
	<b>rate tests</b>	<b>3.9</b>	<b>4.3</b>	<b>5.0</b>	<b>3.6</b>	<b>3.4</b>	<b>3.8</b>	<b>2.7</b>	<b>682,881</b>

TOTAL column to far right is cumulative from 2002 to 2008 December 31.

RATE is per 100,000 population.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.



1.4 Persons of unknown gender testing newly positive for HIV in BC by age group and year of testing, 2002 to 2008

Age	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
< 1 yr	persons	-	-	-	-	-	-	-	-
	tests	13	3	6	11	45	12	5	95
1 to 14	persons	-	-	-	-	-	-	-	-
	tests	43	44	55	51	62	26	13	294
15 to 19	persons	-	-	-	-	-	-	-	-
	tests	203	246	270	297	216	265	238	1,735
20 to 29	persons	-	-	-	-	-	-	-	-
	tests	893	1,007	1,099	1,241	941	1,060	693	6,934
30 to 39	persons	-	-	-	-	-	-	-	-
	tests	671	793	847	803	604	639	363	4,720
40 to 49	persons	-	-	-	-	-	-	-	-
	tests	387	548	610	586	438	409	180	3,158
50+	persons	-	-	-	-	-	-	-	-
	tests	467	685	808	786	501	538	224	4,009
unknown	persons	-	1	-	-	-	-	-	1
	tests	960	734	757	960	719	793	938	5,861
<b>Total</b>	<b>persons</b>	-	<b>1</b>	-	-	-	-	<b>1</b>	<b>2</b>
	<b>tests</b>	<b>3,637</b>	<b>4,060</b>	<b>4,452</b>	<b>4,735</b>	<b>3,526</b>	<b>3,742</b>	<b>2,654</b>	<b>26,806</b>

TOTAL column to far right is cumulative from 2002 to 2008 December 31.

RATE is per 100,000 population.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.



1.5 Total persons testing newly positive for HIV in BC by age group and year of testing, 2002 to 2008

Age	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
< 1 yr	persons	-	-	-	-	1	-	1	2
	rate tests	265	214	259	266	413	419	289	2,125
1 to 14	persons	1	1	4	1	2	-	2	11
	rate tests	1,051	1,015	1,032	969	1,159	1,082	1,103	7,411
15 to 19	persons	5	4	5	5	5	2	1	27
	rate tests	8,655	8,042	8,272	8,196	8,703	8,317	8,442	58,627
20 to 29	persons	68	70	78	59	79	92	76	522
	rate tests	50,345	49,687	52,756	56,816	60,905	61,638	63,559	395,706
30 to 39	persons	159	138	137	130	110	124	96	894
	rate tests	46,743	45,585	48,519	50,728	53,697	55,542	57,840	358,654
40 to 49	persons	120	118	147	132	93	105	107	822
	rate tests	22,046	21,632	23,709	24,189	25,445	25,793	26,338	169,152
50+	persons	64	77	70	73	71	66	67	488
	rate tests	14,898	14,730	16,885	18,056	20,765	22,385	23,501	131,220
unknown	persons tests	1,446	1,495	2,203	1,334	971	1,048	1,079	9,576
<b>Total*</b>	<b>persons</b>	<b>418</b>	<b>409</b>	<b>441</b>	<b>400</b>	<b>360</b>	<b>389</b>	<b>349</b>	<b>2,766</b>
	<b>rate tests</b>	<b>10.2</b>	<b>9.9</b>	<b>10.6</b>	<b>9.5</b>	<b>8.5</b>	<b>9.0</b>	<b>8.0</b>	<b>8.0</b>
	<b>tests</b>	<b>145,184</b>	<b>142,186</b>	<b>153,376</b>	<b>160,288</b>	<b>171,645</b>	<b>175,805</b>	<b>181,862</b>	<b>1,130,346</b>

Total\* includes transgendered persons.

TOTAL column to far right is cumulative from 2002 to 2008 December 31.

RATE is per 100,000 population.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.



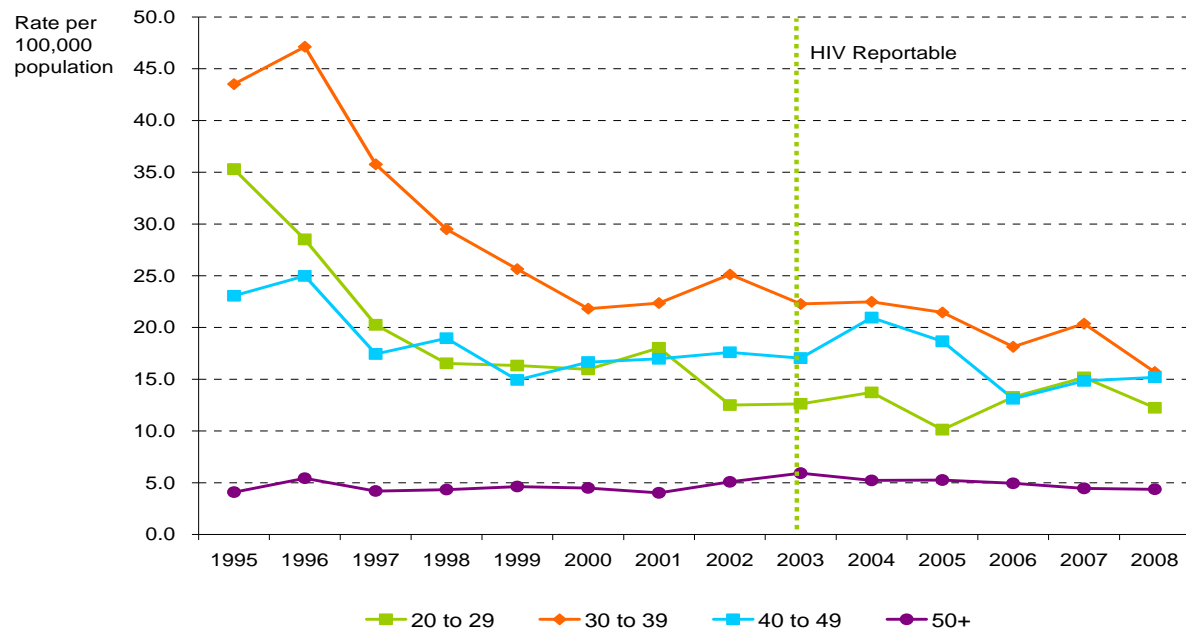
1.6 Cumulative number of persons testing newly positive for HIV in BC by age group, 1985\* to 2008

Age	HIV	Males	Females	Unspecified	TOTAL
< 1 yr	persons	11	6	-	17
	tests	2,316	2,514	192	5,022
1 to 14	persons	42	21	2	65
	tests	9,649	11,033	782	21,464
15 to 19	persons	120	79	6	205
	tests	39,390	105,193	4,224	148,652
20 to 29	persons	2,734	647	74	3,456
	tests	304,010	574,641	20,935	899,546
30 to 39	persons	4,342	686	98	5,129
	tests	285,498	508,374	16,447	810,486
40 to 49	persons	2,481	333	51	2,867
	tests	191,237	171,838	8,372	371,529
50+	persons	1,132	108	21	1,261
	tests	147,360	96,248	8,048	251,714
unknown	persons	231	89	89	351
	tests	12,758	16,790	19,555	49,102
<b>Total</b>	<b>persons</b>	<b>11,093</b>	<b>1,969</b>	<b>341</b>	<b>13,336</b>
	<b>tests</b>	<b>992,602</b>	<b>1,486,907</b>	<b>78,576</b>	<b>2,553,174</b>

TOTAL column to far right is cumulative from **1985 to 2008**, and includes transgendered persons. TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services. For case data prior to 1995, the <1yr age group includes infants ≤18 months of age.

\* For the <1 yr and 1-14 yr age groups, the total number of tests is cumulative from 1989 to 2008.

1.C Persons testing newly positive for HIV in BC by age and year of testing, 1995 to 2008







1.7 Persons testing newly positive for HIV by Health Service Delivery Area and year of testing, 2002 to 2008

HA	HSDA	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL	
Fraser	Fraser East	persons	11	6	18	14	9	15	7	80	
		rate	4.4	2.4	6.9	5.3	3.3	5.5	2.5		
	Fraser North	tests	7,729	7,562	7,980	8,255	9,028	9,691	9,958	60,203	
		persons	51	54	55	41	32	34	42	309	
		rate	9.3	9.8	9.9	7.3	5.6	5.9	7.1		
		tests	19,474	19,247	20,857	20,711	21,565	23,101	23,692	148,647	
Fraser South	persons	39	36	36	33	31	32	20	227		
	rate	6.4	5.8	5.7	5.1	4.7	4.8	2.9			
Interior	East Kootenay	tests	17,332	16,842	18,034	18,917	20,681	21,875	22,774	136,455	
		persons	1	1	1	1	2	-	-	6	
		rate	1.3	1.3	1.3	1.3	2.6				
	Kootenay Boundary	tests	1,499	1,865	1,886	1,926	2,117	2,303	2,350	13,946	
		persons	-	2	-	5	4	3	7	21	
		rate		2.5		6.3	5.1	3.7	8.8		
	Okanagan	tests	1,917	1,845	2,164	2,336	2,434	2,561	2,750	16,007	
		persons	8	13	12	10	4	8	11	66	
		rate	2.5	4.1	3.7	3.1	1.2	2.3	3.1		
	Thompson Cariboo Shuswap	tests	8,162	8,178	8,825	9,556	10,371	11,138	11,443	67,673	
		persons	4	12	6	4	7	6	9	48	
		rate	1.9	5.6	2.8	1.8	3.2	2.7	4.0		
Northern	Northeast	tests	5,970	5,769	5,927	6,515	6,585	6,751	6,801	44,318	
		persons	1	1	4	1	-	1	-	8	
		rate	1.6	1.6	6.0	1.5		1.5			
	Northern Interior	tests	1,721	1,737	1,958	2,163	2,240	2,509	2,753	15,081	
		persons	10	17	14	21	19	23	10	114	
		rate	6.8	11.6	9.5	14.4	13.1	15.8	6.9		
	Northwest	tests	4,525	4,416	4,824	5,096	5,681	5,887	5,797	36,226	
		persons	-	3	8	6	10	4	13	44	
		rate		3.7	10.0	7.6	12.8	5.2	16.9		
			tests	2,412	2,330	2,403	2,673	2,651	2,872	3,020	18,361

1.7 Persons testing newly positive for HIV by Health Service Delivery Area and year of testing, 2002 to 2008  
(continued from previous page)

HA	HSDA	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
Vancouver Coastal	North Shore/Coast Garibaldi	persons	9	12	12	11	8	13	10	75
		rate	3.4	4.5	4.5	4.1	2.9	4.7	3.6	
		tests	8,245	8,241	8,440	8,843	9,586	9,873	10,135	63,363
Richmond		persons	11	6	8	7	1	4	4	41
		rate	6.3	3.4	4.5	3.9	0.5	2.1	2.1	
		tests	4,258	4,012	4,387	4,583	4,846	5,404	5,425	32,915
Vancouver		persons	222	198	192	195	179	190	178	1,354
		rate	37.8	33.3	31.9	32.0	28.9	30.4	28.0	
		tests	37,655	36,115	40,463	41,480	43,485	43,191	46,186	288,575
Central Vancouver Island		persons	9	8	19	11	9	10	13	79
		rate	3.7	3.3	7.6	4.3	3.5	3.8	4.9	
		tests	6,914	6,948	7,230	7,740	7,801	8,050	8,092	52,775
Vancouver Island	North Vancouver Island	persons	6	4	6	2	4	7	4	33
		rate	5.3	3.5	5.2	1.7	3.4	5.8	3.3	
		tests	3,512	3,194	3,351	3,479	3,296	3,467	3,112	23,411
South Vancouver Island		persons	36	36	46	32	38	36	21	245
		rate	10.5	10.4	13.1	8.9	10.5	9.8	5.7	
		tests	12,008	12,036	12,718	13,826	14,858	14,373	15,525	95,344
unknown										
non-BC	unknown	persons	-	-	-	-	-	-	1	1
		tests	148	155	246	378	2,701	925	116	4,669
		persons	-	-	4	6	4	3	-	17
non-BC	non-BC	tests	1,968	1,908	1,942	2,077	2,132	2,253	2,222	14,502
		persons	418	409	441	400	361	389	350	2,768
		rate	10.2	9.8	10.5	9.4	8.4	8.9	7.9	
<b>Total</b>	<b>Total</b>	<b>tests</b>	<b>145,449</b>	<b>142,400</b>	<b>153,635</b>	<b>160,554</b>	<b>172,058</b>	<b>176,224</b>	<b>182,151</b>	<b>1,132,471</b>

TOTAL column to far right is cumulative from 2002 to 2008 December 31.

RATE is per 100,000 population.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.

HA – Health Authority

HSDA – Health Service Delivery Area



### 1.8 Cumulative number of persons testing newly positive for HIV in BC by Health Service Delivery Area, 1995 to 2008

HA	HSDA	TOTAL Cases	TOTAL Tests
Fraser	Fraser East	194	111,020
	Fraser North	654	261,881
	Fraser South	527	243,543
Interior	East Kootenay	19	23,302
	Kootenay Boundary	44	29,249
	Okanagan	155	122,498
	Thompson Cariboo Shuswap	121	85,423
Northern	Northeast	14	27,067
	Northern Interior	154	67,416
	Northwest	59	35,834
Vancouver Coastal	North Shore/Coast Garibaldi	206	117,762
	Richmond	80	58,589
	Vancouver	3,391	533,815
Vancouver Island	Central Vancouver Island	174	102,398
	North Vancouver Island	62	48,935
	South Vancouver Island	480	178,090
Unknown	Unknown	25	8,156
Non-BC	Non-BC	18	27,780
<b>Total</b>		<b>6,377</b>	<b>2,082,758</b>

TOTAL columns to far right are cumulative from **1995 to 2008** December 31.

TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.

HA – Health Authority

HSDA – Health Service Delivery Area

A person testing newly positive for HIV is designated to the appropriate HSDA according to the person's city of residence. If the person's city of residence is not available then the person is designated to the city of the clinic or physician where the person was tested.

1.9 Persons testing newly positive for HIV in BC by specimen source and year of testing, 2002 to 2008

Specimen Source	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
Private Physician	persons	203	192	207	175	161	147	165	1,250
	tests	102,062	98,513	106,405	112,624	127,885	132,528	139,400	819,417
Hospital	persons	69	64	80	66	60	83	59	481
	tests	24,129	25,008	26,407	27,775	26,730	27,817	26,881	184,747
West 12th STD Clinic (1)	persons	9	11	18	19	15	9	11	92
	tests	4,072	3,521	3,118	3,399	3,592	3,626	3,748	25,076
Street Nurse Program (2)	persons	29	25	35	38	21	39	42	229
	tests	2,403	2,501	2,979	3,188	3,180	3,158	3,470	20,879
Health Unit	persons	6	4	8	4	10	15	11	58
	tests	5,872	5,636	5,548	5,875	6,267	6,102	6,334	41,634
Canadian Blood Services	persons	-	1	-	-	-	-	-	1
	tests	21	12	4	18	6	9	8	78
Study/Research (3)	persons	40	52	54	51	47	47	23	314
	tests	739	959	3,074	1,552	506	369	50	7,249
Vancouver Coastal Clinics (4)	persons	48	44	26	29	23	26	27	223
	tests	4,000	4,252	4,316	4,581	2,703	1,636	1,388	22,876
Treatment/Prevention Programs (5)	persons	11	6	7	11	17	12	3	67
	tests	1,088	1,121	1,001	893	562	422	410	5,497
Corrections (6)	persons	3	10	5	5	6	8	4	41
	tests	1,055	838	728	592	417	353	336	4,319
Other	persons	-	-	1	2	1	3	4	11
	tests	2	0	1	9	0	5	1	18
Unknown	persons	0	0	0	0	0	0	1	1
	tests	6	9	18	15	172	156	98	474
<b>Total</b>	<b>persons</b>	<b>418</b>	<b>409</b>	<b>441</b>	<b>400</b>	<b>361</b>	<b>389</b>	<b>350</b>	<b>2,768</b>
	<b>tests</b>	<b>145,449</b>	<b>142,370</b>	<b>153,599</b>	<b>160,521</b>	<b>172,020</b>	<b>176,181</b>	<b>182,124</b>	<b>1,132,264</b>

TOTAL column to far right is cumulative from 2002 to 2008 December 31.  
 TESTS is number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.  
 (1), (2), (3), (4), (5) and (6)— refer to footnotes on page 21.



### 1.10 Cumulative number of persons testing newly positive for HIV in BC by specimen source, 1989 to 2008

Specimen Source	TOTAL Persons	TOTAL Tests
Private Physician	5,758	1,812,182
Hospital	1,968	372,693
West 12th STD Clinic (1)	390	61,012
Street Nurse Program (2)	951	53,472
Health Unit	212	100,971
Canadian Blood Services	8	290
Study/Research (3)	765	10,861
Vancouver Coastal Clinics (4)	495	47,457
Treatment/Prevention Programs (5)	83	10,844
Corrections (6)	135	16,286
Other	14	60
Unknown	7	519
<b>Total</b>	<b>10,786</b>	<b>2,486,647</b>

TOTAL columns to far right are cumulative from **1989 to 2008** December 31.

TESTS is the number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.

**The total number of tests is less than reported in previous tables as quality control tests have been excluded.**

#### Footnotes:

(1) – Located at 655 West 12th Avenue, Vancouver, BC.

(2) – HIV testing is done by the outreach nurses at various sites in the Lower Mainland, including outreach clinics, city jails, and detoxification centres.

(3) – HIV testing is conducted as part of research studies that are currently underway in BC to study the outbreak of HIV among injection drug users (open cohort studies include: VIDUS, CEDAR, ESIS).

(4) – HIV testing is conducted by various community health clinics in Vancouver and Richmond.

(5) – HIV testing is generally a requirement for admission to detoxification centres and drug-alcohol treatment centres.

(6) – Many inmates choose to get an HIV test done at the time of intake or discharge, or when they perceive that they have been at risk of acquiring HIV.

## 1.11 Males testing newly positive for HIV in BC by ethnicity and year of testing, 2002 to 2008

Ethnicity	2002	2003	2004	2005	2006	2007	2008	TOTAL
Caucasian	227	214	243	224	205	206	154	1,473
First Nations	34	32	30	28	27	28	20	199
Inuit	1	1	-	-	-	-	-	2
Metis	3	5	6	4	1	2	1	22
Asian	16	12	12	18	15	15	28	116
South Asian	21	14	8	12	3	8	6	72
Black	10	15	9	12	9	6	8	69
Hispanic	19	11	11	16	14	17	24	112
Arab/West Asian	2	-	2	-	1	2	1	8
Other/Mixed Race	1	1	3	-	1	2	5	13
Unknown	4	15	12	8	13	17	42	111
<b>Total</b>	<b>338</b>	<b>320</b>	<b>336</b>	<b>322</b>	<b>289</b>	<b>303</b>	<b>289</b>	<b>2,197</b>

## 1.12 Females testing newly positive for HIV in BC by ethnicity and year of testing, 2002 to 2008

Ethnicity	2002	2003	2004	2005	2006	2007	2008	TOTAL
Caucasian	40	42	53	40	22	34	20	251
First Nations	25	25	30	25	26	29	14	174
Inuit	-	-	-	-	-	-	-	-
Metis	1	3	4	2	1	4	1	16
Asian	3	2	2	1	2	2	2	14
South Asian	2	2	3	2	7	4	1	21
Black	5	9	10	5	6	4	8	47
Hispanic	2	2	-	-	1	1	-	6
Arab/West Asian	1	-	-	1	1	-	-	3
Other/Mixed Race	-	-	1	1	1	2	1	6
Unknown	1	3	2	-	5	3	13	27
<b>Total</b>	<b>80</b>	<b>88</b>	<b>105</b>	<b>77</b>	<b>72</b>	<b>83</b>	<b>60</b>	<b>565</b>

## 1.13 Persons of unknown gender testing newly positive for HIV in BC by ethnicity and year of testing, 2002 to 2008

Ethnicity	2002	2003	2004	2005	2006	2007	2008	TOTAL
Caucasian	-	-	-	-	-	-	1	1
First Nations	-	-	-	-	-	-	-	-
Inuit	-	-	-	-	-	-	-	-
Metis	-	-	-	-	-	-	-	-
Asian	-	-	-	-	-	-	-	-
South Asian	-	-	-	-	-	-	-	-
Black	-	-	-	-	-	-	-	-
Hispanic	-	-	-	-	-	-	-	-
Arab/West Asian	-	-	-	-	-	-	-	-
Other/Mixed Race	-	-	-	-	-	-	-	-
Unknown	-	1	-	-	-	-	-	1
<b>Total</b>	-	<b>1</b>	-	-	-	-	<b>1</b>	<b>2</b>



#### 1.14 Total persons testing newly positive for HIV in BC by ethnicity and year of testing, 2002 to 2008

Ethnicity	2002	2003	2004	2005	2006	2007	2008	TOTAL
Caucasian	267	256	296	264	227	241	175	1,726
First Nations	59	57	60	54	53	57	34	374
Inuit	1	1	-	-	-	-	-	2
Metis	4	8	10	6	2	6	2	38
Asian	19	14	14	19	17	17	30	130
South Asian	23	16	11	14	10	12	7	93
Black	15	24	19	17	15	10	16	116
Hispanic	21	13	11	16	15	19	24	119
Arab/West Asian	3	-	2	1	2	2	1	11
Other/Mixed Race	1	1	4	1	2	4	6	19
Unknown	5	19	14	8	18	21	55	140
<b>Total*</b>	<b>418</b>	<b>409</b>	<b>441</b>	<b>400</b>	<b>361</b>	<b>389</b>	<b>350</b>	<b>2,768</b>

Total\* includes transgendered persons.

TOTAL column to far right on all preceding tables is cumulative from 2002 to 2008 December 31.

#### 1.15 Cumulative number of persons testing newly positive for HIV in BC by ethnicity, 1995 to 2008

Ethnicity	Males	Females	Unknown	TOTAL
Caucasian	3,250	621	11	3,885
First Nations	502	411	5	919
Inuit	4	1	-	5
Metis	38	23	-	61
Asian	209	22	-	231
South Asian	137	35	1	173
Black	143	98	1	242
Hispanic	195	14	1	211
Arab/West Asian	15	4	-	19
Other/Mixed Race	15	7	-	22
Unknown	485	110	13	609
<b>Total</b>	<b>4,993</b>	<b>1,346</b>	<b>32</b>	<b>6,377</b>

TOTAL column to far right is cumulative from 1995 to 2008 December 31, and includes transgendered persons.

For 2008, not all ethnicity data was available at the time of this publication and thus these HIV cases were noted as "unknown" in the appropriate tables. As this ethnicity data becomes available it will be published in future reports.

Since 2002, ethnicity is no longer captured on the HIV requisition form. For this reason, the number of HIV tests performed is no longer published in the HIV tables associated with ethnicity.

### 1.16 Males testing newly positive for HIV in BC by exposure category and year of testing, 2002 to 2008

Risk Category	2002	2003	2004	2005	2006	2007	2008	TOTAL
MSM	157	158	187	181	160	173	174	1,190
IDU	102	88	84	77	72	68	32	523
Blood/Product Recipient	3	-	1	-	2	-	-	6
Heterosexual Contact	65	67	57	56	47	53	49	394
Occupational Exposure	2	-	-	-	-	1	2	5
Perinatal	-	-	-	-	2	-	-	2
Other	1	4	4	5	4	6	-	24
NIR/Unknown	8	3	3	3	2	2	32	53
<b>Total</b>	<b>338</b>	<b>320</b>	<b>336</b>	<b>322</b>	<b>289</b>	<b>303</b>	<b>289</b>	<b>2,197</b>

### 1.17 Females testing newly positive for HIV in BC by exposure category and year of testing, 2002 to 2008

Risk Category	2002	2003	2004	2005	2006	2007	2008	TOTAL
IDU	54	46	54	46	41	47	17	305
Blood/Product Recipient	-	-	-	-	-	-	-	-
Heterosexual Contact	24	39	46	27	28	35	26	225
Occupational Exposure	-	-	-	-	-	-	-	-
Perinatal	1	-	4	1	1	-	2	9
Other	-	1	-	2	2	-	3	8
NIR/Unknown	1	2	1	1	-	1	12	18
<b>Total</b>	<b>80</b>	<b>88</b>	<b>105</b>	<b>77</b>	<b>72</b>	<b>83</b>	<b>60</b>	<b>565</b>

TOTAL column to far right is cumulative from **2002 to 2008** December 31.

MSM = men who have sex with men (includes males who self-identify as bisexual)

IDU = injection drug user

NIR = no identified reason

Refer to the Exposure Group Hierarchy section on page 47 for a description of each risk category.





**1.18 Persons of unknown gender testing newly positive for HIV in BC by exposure category and year of testing, 2002 to 2008**

Risk Category	2002	2003	2004	2005	2006	2007	2008	TOTAL
MSM	-	-	-	-	-	-	-	-
IDU	-	1	-	-	-	-	-	1
Blood/Product Recipient	-	-	-	-	-	-	-	-
Heterosexual Contact	-	-	-	-	-	-	1	1
Occupational Exposure	-	-	-	-	-	-	-	-
Perinatal	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
NIR/Unknown	-	-	-	-	-	-	-	-
<b>Total</b>	-	<b>1</b>	-	-	-	-	<b>1</b>	<b>2</b>

**1.19 Total number of persons testing newly positive for HIV in BC by exposure category, 2002 to 2008**

Risk Category	2002	2003	2004	2005	2006	2007	2008	TOTAL
MSM	157	158	187	181	160	173	174	1,190
IDU	156	135	138	124	113	117	49	832
Blood/Product Recipient	3	-	1	-	2	-	-	6
Heterosexual Contact	89	106	103	83	75	89	76	621
Occupational Exposure	2	-	-	-	-	1	2	5
Perinatal	1	-	4	1	3	-	2	11
Other	1	5	4	7	6	6	3	32
NIR/Unknown	9	5	4	4	2	3	44	71
<b>Total*</b>	<b>418</b>	<b>409</b>	<b>441</b>	<b>400</b>	<b>361</b>	<b>389</b>	<b>350</b>	<b>2,768</b>

Total\* includes transgendered persons.

TOTAL column to far right is cumulative from **2002 to 2008** December 31.

MSM = men who have sex with men (includes males who self-identify as bisexual)

IDU = injection drug user

NIR = no identified reason

Refer to the Exposure Group Hierarchy section on page 47 for a description of each risk category.

### 1.20 Cumulative number of persons testing newly positive for HIV in BC by exposure category, 1985 to 2008

Risk Category	Males	Females	Unknown	TOTAL
MSM	6,162	-	93	6,255
IDU	1,973	953	31	2,961
Blood/Product Recipient	124	36	4	164
Heterosexual Contact	983	572	17	1,574
Occupational Exposure	7	-	-	7
Perinatal	23	20	2	45
Other	70	45	3	118
NIR/Unknown	1,751	285	191	2,227
<b>Total</b>	<b>11,093</b>	<b>1,911</b>	<b>341</b>	<b>13,351</b>

TOTAL column to far right is cumulative from **1985 to 2008** December 31, and includes transgendered persons.

MSM = men who have sex with men (includes males who self-identify as bisexual)

IDU = injection drug user

NIR = no identified risk

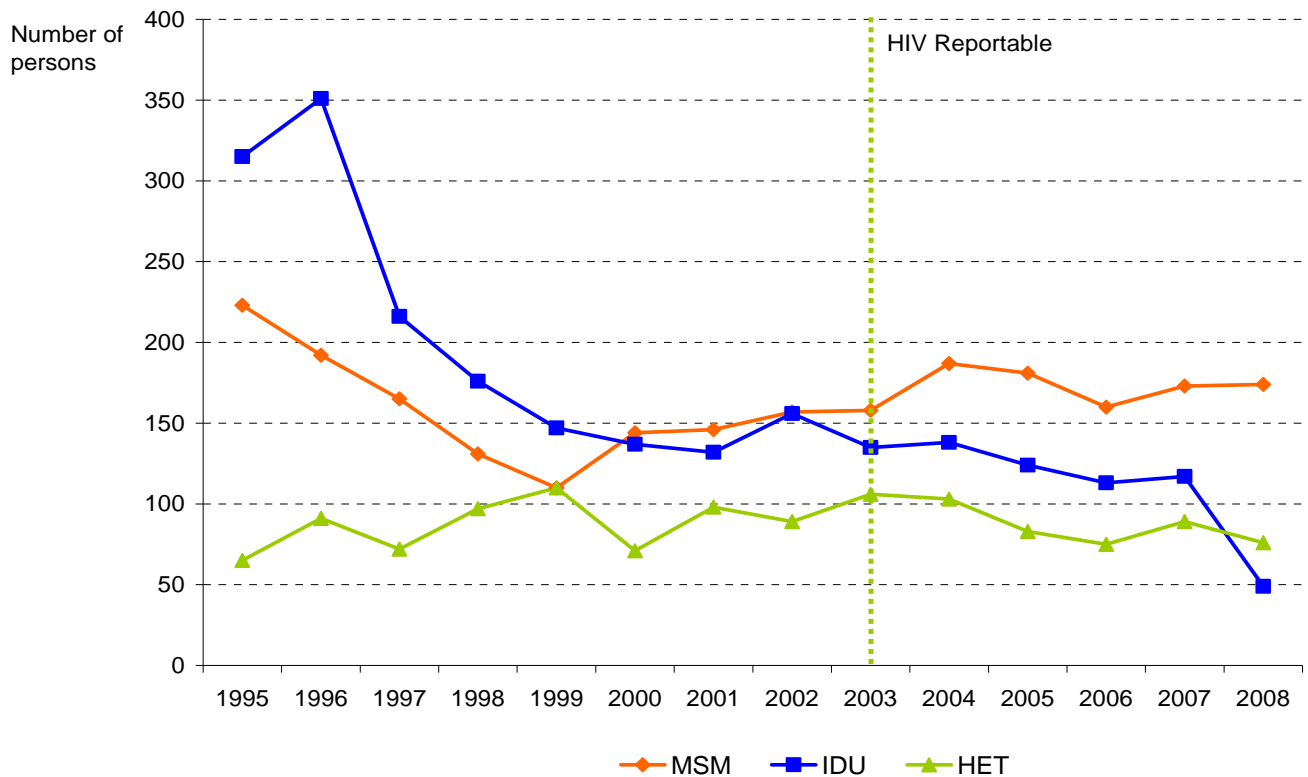
Refer to the Exposure Group Hierarchy section on page 47 for a description of each risk category.

For 2008, not all risk data was available at the time of this publication and thus these HIV cases were noted as “unknown” in the appropriate tables. As this risk data becomes available it will be published in future reports.

Since 2002, risk data are no longer captured on the HIV requisition form. For this reason, the number of HIV tests performed is no longer published in the HIV tables associated with risk.



**1.D Persons testing newly positive for HIV in BC by major exposure group and year of testing, 1995 to 2008\***



\* 2008 numbers will change as case follow-up is completed

MSM = men who have sex with men (includes males who self-identify as bisexual)  
 IDU = injection drug user  
 HET = heterosexual contact

For 2008, not all risk data was available at the time of this publication and thus these HIV cases were noted as “unknown” in the appropriate tables. As this risk data becomes available it will be published in future reports.

Since 2002, risk data are no longer captured on the HIV requisition form. For this reason, the number of HIV tests performed is no longer published in the HIV tables associated with risk.

## Prenatal Screening

This table presents the number of pregnant women whose HIV test requisition stated that the test was being done as a prenatal assessment and of these women, the number who have tested positive for HIV. Males who test for HIV under the Prenatal Screening reason for testing, and who are partners of pregnant women who test for HIV, are also included in this table.

Prenatal HIV tests are assigned to the year in which the HIV test was performed, and this data includes all pregnant women (including women who do not have a live birth). This data comes from laboratory and surveillance data, which have established limitations to data quality (see Technical Appendix).

Prenatal HIV test volume is not yet available for 2008. The total number of prenatal HIV tests conducted by PHSA Laboratory Services increased in 2004 and has remained relatively steady at approximately 40,000 tests per year. The increase in 2004 was due to improved identification of prenatal HIV tests through a revised laboratory requisition form. Between 2002 and 2008 in HIV surveillance data, 46 women were newly diagnosed as HIV positive through prenatal screening (i.e., "Prenatal testing" indicated as the reason for testing during follow-up of new positive HIV tests). No new diagnoses are known to have occurred as part of prenatal screening in 2008.

### 1.21 Persons testing newly positive for HIV through prenatal screening, 2002 to 2008

Gender	HIV	2002	2003	2004	2005	2006	2007	2008	TOTAL
male	persons	-	-	-	-	-	-	-	-
	tests	148	210	97	95	53	322	n/a	925
female	persons	7	7	9	5	10	8	-	46
	tests	24,807	27,672	38,674	39,824	39,556	40,620	n/a	211,153
unknown	persons	-	-	-	-	-	-	-	-
	tests	475	509	515	606	350	496	n/a	2,951
<b>Total</b>	<b>persons</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>5</b>	<b>10</b>	<b>8</b>	<b>-</b>	<b>46</b>
	<b>tests</b>	<b>25,430</b>	<b>28,391</b>	<b>39,286</b>	<b>40,525</b>	<b>39,959</b>	<b>41,438</b>	<b>n/a</b>	<b>215,029</b>

TOTAL column to far right is cumulative from **2002 to 2008** December 31.

TESTS is the number of HIV tests performed, both positive and negative, by PHSA Laboratory Services.



# AIDS

Due to expected delays associated with AIDS case reports, this report includes cases through 2007 only.

Historically, collection of BC AIDS data has proven challenging as AIDS Case Report forms are not always submitted when a healthcare provider diagnoses a client with AIDS.

Prior to 1997, AIDS case reports were compiled courtesy of the Vancouver Health Department. From 1997 – 2000, the BCCDC Division of STI/HIV Prevention and Control compiled AIDS case reports in collaboration with the Division of HIV/AIDS Surveillance, Bureau of HIV/AIDS and STD, Laboratory Centre for Disease Control, Health Protection Branch Health Canada. From 2000 onward, AIDS case reports have been compiled by the BCCDC Division of STI/HIV Prevention and Control in collaboration with the BC Centre for Excellence in HIV/AIDS.

Since HIV became a reportable disease in BC in 2003, all new cases of HIV are reported to the BCCDC Division of STI/HIV Prevention and Control and followed up by Regional Health Authority Public Health staff. If an AIDS diagnosis is made at the time of the first positive HIV test, this diagnosis is reported to BCCDC. Healthcare providers, when making a diagnosis of AIDS, are to complete an AIDS Case Report form and submit it to HIV Surveillance at the BCCDC.

In 2007, the AIDS Case Report form was revised; it is available for download from the BCCDC website (<http://www.bccdc.ca/dis-cond/CDSurveillanceForms/default.htm#heading5>).

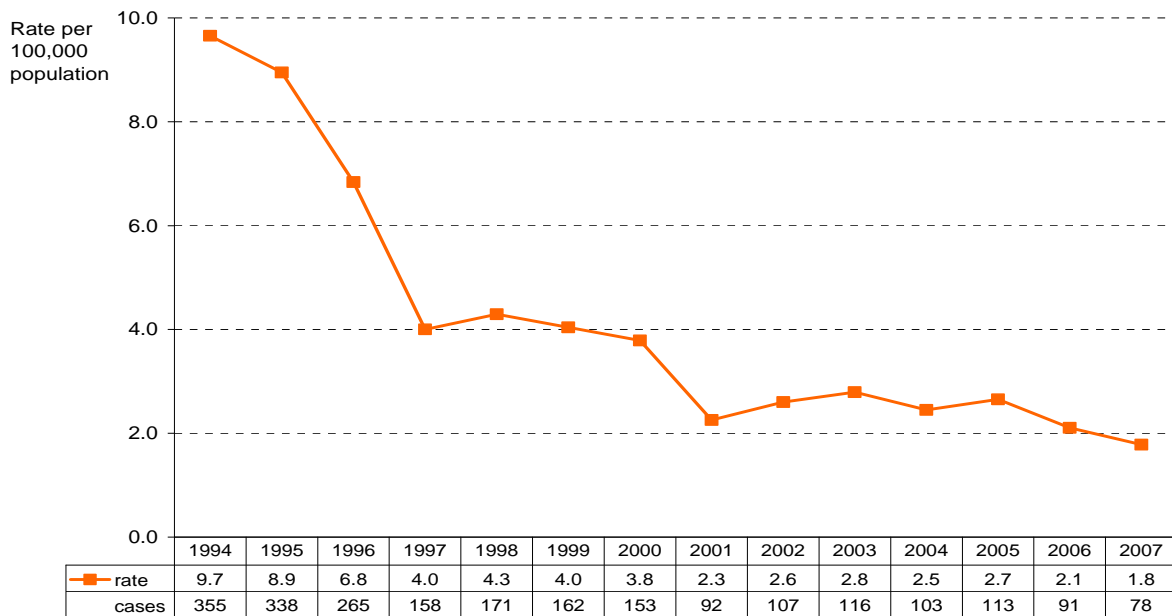


### 2.1 AIDS case reports by year of diagnosis, 1983 to 2007

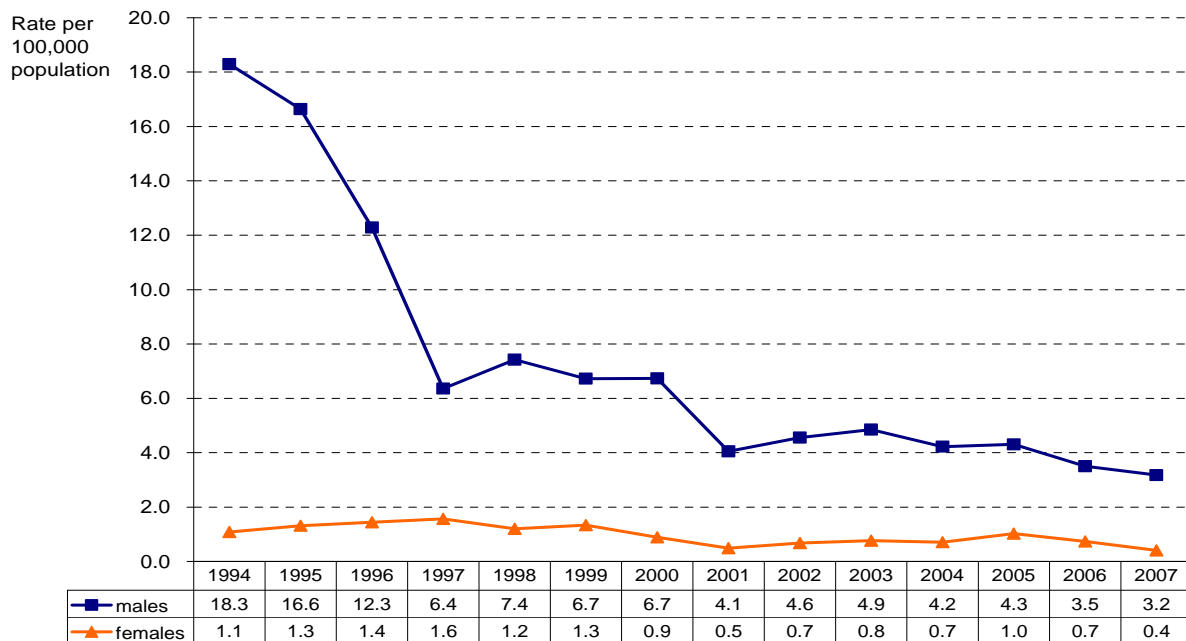
Year of Diagnosis	Cases	Rate	Cumulative Cases
1983	7	0.2	7
1984	29	1.0	36
1985	62	2.1	98
1986	106	3.5	204
1987	134	4.4	338
1988	175	5.6	513
1989	223	7.0	736
1990	227	6.9	963
1991	263	7.8	1,226
1992	325	9.4	1,551
1993	359	10.1	1,910
1994	355	9.7	2,265
1995	338	8.9	2,603
1996	265	6.8	2,868
1997	158	4.0	3,026
1998	171	4.3	3,197
1999	162	4.0	3,359
2000	153	3.8	3,512
2001	92	2.3	3,604
2002	107	2.6	3,711
2003	116	2.8	3,827
2004	103	2.5	3,930
2005	113	2.7	4,043
2006	91	2.1	4,134
2007	78	1.8	4,212
<b>TOTAL</b>	<b>4,212</b>		



## 2.A AIDS case reports and rates in BC by year of diagnosis, 1994 to 2007



## 2.B AIDS rates in BC by sex and year of diagnosis, 1994 to 2007



## 2.2 Male AIDS case reports and rates by age group and year of diagnosis, 2001 to 2007

Age	AIDS	2001	2002	2003	2004	2005	2006	2007	TOTAL
<15	cases	1	-	-	-	-	1	-	2
	rate	0.3	-	-	-	-	0.3	-	-
15 to 19	cases	-	-	-	-	-	-	-	-
	rate	-	-	-	-	-	-	-	-
20 to 29	cases	5	4	8	6	5	6	-	34
	rate	1.8	1.5	2.8	2.1	1.7	2.0	-	-
30 to 39	cases	29	34	41	27	18	19	21	189
	rate	9.0	10.8	13.3	8.9	6.0	6.3	6.9	-
40 to 49	cases	22	29	24	33	41	29	32	210
	rate	6.6	8.6	7.0	9.5	11.7	8.2	9.1	-
50+	cases	24	26	27	22	27	20	16	162
	rate	4.1	4.3	4.4	3.4	4.1	2.9	2.3	-
<b>Total</b>	<b>cases</b>	<b>82</b>	<b>93</b>	<b>100</b>	<b>88</b>	<b>91</b>	<b>75</b>	<b>69</b>	<b>598</b>
	<b>rate</b>	<b>4.1</b>	<b>4.6</b>	<b>4.9</b>	<b>4.2</b>	<b>4.3</b>	<b>3.5</b>	<b>3.2</b>	-

## 2.3 Female AIDS case reports and rates by age group and year of diagnosis, 2001 to 2007

Age	AIDS	2001	2002	2003	2004	2005	2006	2007	TOTAL
<15	cases	-	1	-	-	-	-	-	1
	rate	-	0.3	-	-	-	-	-	-
15 to 19	cases	-	-	1	-	-	-	-	1
	rate	-	-	0.7	-	-	-	-	-
20 to 29	cases	5	4	2	3	-	2	2	18
	rate	1.9	1.5	0.7	1.1	-	0.7	0.7	-
30 to 39	cases	5	3	3	4	7	5	2	29
	rate	1.5	0.9	1.0	1.3	2.3	1.6	0.7	-
40 to 49	cases	-	6	5	7	11	6	3	38
	rate	-	1.7	1.4	2.0	3.1	1.7	0.8	-
50+	cases	-	-	5	1	4	3	2	15
	rate	-	-	0.7	0.1	0.6	0.4	0.3	-
<b>Total</b>	<b>cases</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>15</b>	<b>22</b>	<b>16</b>	<b>9</b>	<b>102</b>
	<b>rate</b>	<b>0.5</b>	<b>0.7</b>	<b>0.8</b>	<b>0.7</b>	<b>1.0</b>	<b>0.7</b>	<b>0.4</b>	-

TOTAL column to far right is cumulative from 2001 to 2007 December 31.  
RATE is per 100,000 population.





#### 2.4 Total AIDS case reports and rates by age group and year of diagnosis, 2001 to 2007

Age	AIDS	2001	2002	2003	2004	2005	2006	2007	TOTAL
<15	cases	1	1	-	-	-	1	-	3
	rate	0.1	0.1				0.1		
15 to 19	cases	-	-	1	-	-	-	-	1
	rate			0.4					
20 to 29	cases	10	8	10	9	5	8	2	52
	rate	1.9	1.5	1.8	1.6	0.9	1.3	0.3	
30 to 39	cases	34	37	44	31	25	24	23	218
	rate	5.3	5.8	7.1	5.1	4.1	4.0	3.8	
40 to 49	cases	22	35	29	40	52	35	35	248
	rate	3.3	5.1	4.2	5.7	7.4	4.9	4.9	
50+	cases	24	26	32	23	31	23	18	177
	rate	2.0	2.1	2.5	1.7	2.2	1.6	1.2	
<b>Total*</b>	<b>cases</b>	<b>92</b>	<b>107</b>	<b>116</b>	<b>103</b>	<b>113</b>	<b>91</b>	<b>78</b>	<b>700</b>
	<b>rate</b>	<b>2.3</b>	<b>2.6</b>	<b>2.8</b>	<b>2.5</b>	<b>2.7</b>	<b>2.1</b>	<b>1.8</b>	

Total\* includes transgendered persons.

TOTAL column to far right is cumulative from 2001 to 2007 December 31.

RATE is per 100,000 population.

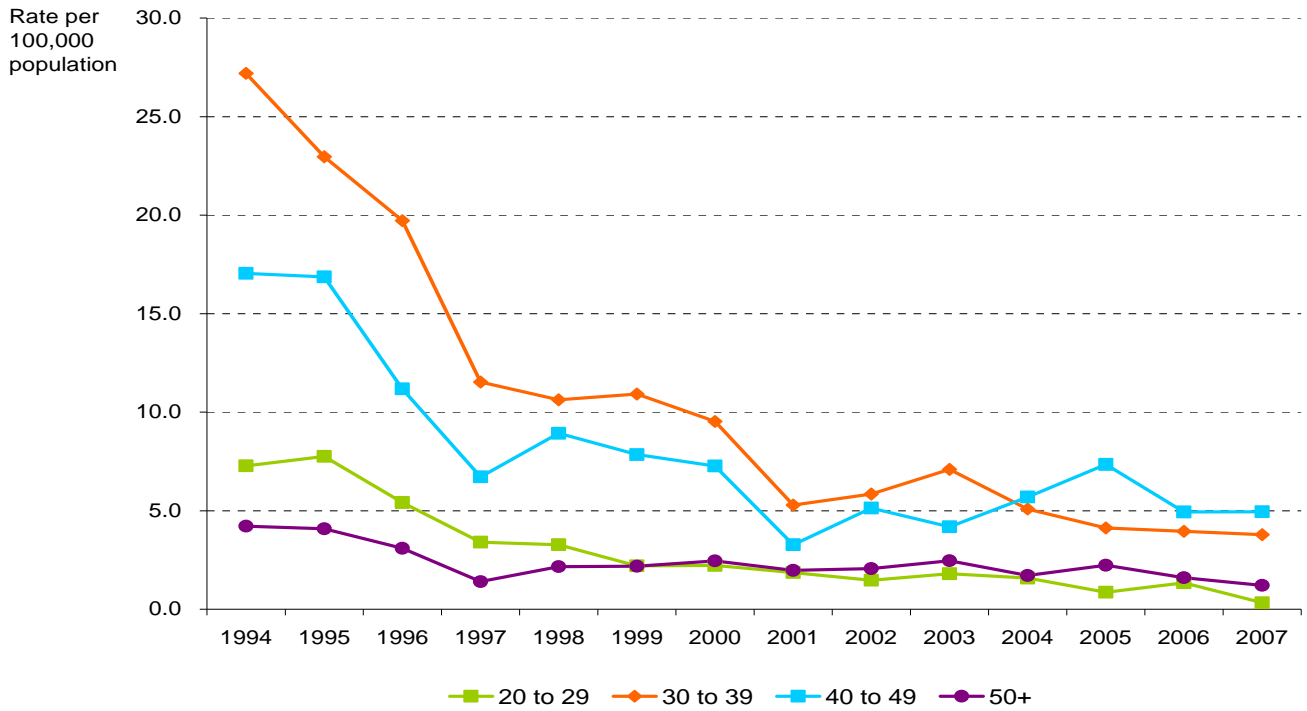
#### 2.5 Cumulative AIDS case reports by age group, 1983 to 2007

Age	Males	Females	TOTAL
<15	14	10	24
15 to 19	10	3	13
20 to 29	464	71	535
30 to 39	1,663	132	1,797
40 to 49	1,196	90	1,286
50+	524	32	556
<b>Total</b>	<b>3,872</b>	<b>338</b>	<b>4,212</b>

TOTAL column to far right is cumulative from 1983 to 2007, and includes transgendered persons.



2.C AIDS rates in BC by age and year of diagnosis, 1994 to 2007





2.6 AIDS case reports and rates by Health Service Delivery Area and year of diagnosis, 2001 to 2007

HA	HSDA	AIDS	2001	2002	2003	2004	2005	2006	2007	TOTAL	
Fraser	Fraser East	cases	1	4	1	2	5	-	2	15	
		rate	0.4	1.6	0.4	0.8	1.9	-	0.7		
		cases	8	12	8	10	14	10	10	7	69
Fraser North	Fraser North	cases	1.5	2.2	1.4	1.8	2.5	1.8	1.2		
		rate	4	8	6	6	8	5	6	6	43
		rate	0.7	1.3	1.0	0.9	1.2	0.8	0.9		
Interior	East Kootenay	cases	2	-	-	-	2	2	-	6	
		rate	2.5	-	-	-	2.6	2.6	-		
	Kootenay Boundary	cases	-	2	1	-	-	-	1	1	5
		rate	-	2.5	1.3	-	-	-	1.3	1.2	
	Okanagan	cases	3	4	4	1	3	4	4	4	23
		rate	1.0	1.3	1.3	0.3	0.9	1.2	1.2	1.2	
Thompson Cariboo Shuswap	cases	2	1	3	2	2	2	1	1	12	
	rate	0.9	0.5	1.4	0.9	0.9	0.9	0.5	0.5		
Northern	Northeast	cases	-	-	-	1	-	-	-	1	
		rate	-	-	-	1.5	-	-	-	-	
	Northern Interior	cases	4	1	3	4	2	3	3	3	20
		rate	2.7	0.7	2.0	2.7	1.4	2.1	2.1	2.1	
Northwest	cases	-	-	-	4	-	-	-	1	5	
	rate	-	-	-	5.0	-	-	-	1.3		

2.6 AIDS case reports and rates by Health Service Delivery Area and year of diagnosis, 2001 to 2007 (continued from previous page)

HA	HSDA	AIDS	2001	2002	2003	2004	2005	2006	2007	TOTAL
Vancouver Coastal	North Shore/Coast Garibaldi	cases	4	2	4	3	5	1	5	24
		rate	1.5	0.7	1.5	1.1	1.8	0.4	1.8	1.8
Vancouver Coastal	Richmond	cases	3	3	5	1	4	2	-	18
		rate	1.7	1.7	2.8	0.6	2.2	1.1	-	-
Vancouver Coastal	Vancouver	cases	33	44	52	43	50	31	36	289
		rate	5.7	7.5	8.7	7.1	8.2	5.0	5.8	5.8
Vancouver Island	Central Vancouver Island	cases	3	1	4	3	-	5	2	18
		rate	1.3	0.4	1.6	1.2	-	1.9	0.8	-
Vancouver Island	North Vancouver Island	cases	-	1	3	1	-	-	2	7
		rate	-	0.9	2.6	0.9	-	-	1.7	1.7
Vancouver Island	South Vancouver Island	cases	8	8	12	11	8	18	3	68
		rate	2.4	2.3	3.5	3.1	2.2	5.0	0.8	0.8
Unknown	Unknown	cases	17	16	10	11	10	8	5	77
Non-BC residents	Non-BC residents	cases	-	-	-	-	-	-	-	-
<b>Total</b>		<b>cases</b>	<b>92</b>	<b>107</b>	<b>116</b>	<b>103</b>	<b>113</b>	<b>91</b>	<b>78</b>	<b>700</b>
		<b>rate</b>	<b>2.3</b>	<b>2.6</b>	<b>2.8</b>	<b>2.5</b>	<b>2.7</b>	<b>2.1</b>	<b>1.8</b>	<b>1.8</b>

TOTAL column to far right is cumulative from 2001 to 2007 December 31.  
RATE is per 100,000 population.

HA—health authority  
HSDA—health service delivery area



## 2.7 Cumulative AIDS case reports by Health Service Delivery Area, 1983 to 2007

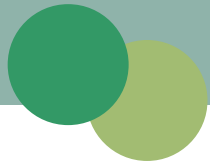
HA	HSDA	TOTAL
Fraser	Fraser East	65
	Fraser North	246
	Fraser South	182
Interior	East Kootenay	14
	Kootenay Boundary	27
	Okanagan	87
	Thompson Cariboo Shuswap	43
Northern	Northeast	7
	Northern Interior	46
	Northwest	20
Vancouver Coastal	North Shore/Coast Garibaldi	170
	Richmond	65
	Vancouver	2,591
Vancouver Island	Central Vancouver Island	84
	North Vancouver Island	25
	South Vancouver Island	330
Unknown	Unknown	207
Non-BC residents	Non-BC residents	3
<b>Total</b>		<b>4,212</b>

TOTAL column to far right is cumulative from **1983 to 2007** December 31.

HA—health authority

HSDA—health service delivery area

An AIDS case report, by year of diagnosis, is designated to the appropriate HSDA according to the patient's place of residence at the time of his/her diagnosis of AIDS (i.e., first disease indicative of AIDS). The HSDA is unknown when the patient address, physician address and/or clinic address are all missing from the data.



### 2.8 Male AIDS case reports by ethnicity and year of diagnosis, 2001 to 2007

Ethnicity	2001	2002	2003	2004	2005	2006	2007	TOTAL
Caucasian	55	52	53	47	53	46	40	346
First Nations	6	6	13	9	9	9	10	62
Inuit	1	1	-	-	-	-	-	2
Metis	-	-	1	1	2	-	-	4
Asian	1	3	6	6	4	-	3	23
South Asian	2	2	4	2	1	1	2	14
Black	1	3	5	5	2	3	1	20
Hispanic	4	6	2	-	4	3	3	22
Arab/West Asian	-	1	-	1	-	1	-	3
Other/Mixed Race	-	-	1	-	-	-	-	1
Unknown	12	19	15	17	16	12	10	101
<b>Total</b>	<b>82</b>	<b>93</b>	<b>100</b>	<b>88</b>	<b>91</b>	<b>75</b>	<b>69</b>	<b>598</b>

### 2.9 Female AIDS case reports by ethnicity and year of diagnosis, 2001 to 2007

Ethnicity	2001	2002	2003	2004	2005	2006	2007	TOTAL
Caucasian	2	3	7	6	8	7	4	37
First Nations	4	2	3	4	5	4	2	24
Inuit	-	-	-	-	-	-	-	-
Metis	1	1	1	-	-	-	-	3
Asian	-	-	-	1	-	-	-	1
South Asian	-	-	-	-	1	-	-	1
Black	1	3	2	-	2	2	1	11
Hispanic	1	-	1	-	-	-	-	2
Arab/West Asian	-	-	-	-	-	-	-	-
Other/Mixed Race	-	-	-	1	-	-	1	2
Unknown	1	5	2	3	6	3	1	21
<b>Total</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>15</b>	<b>22</b>	<b>16</b>	<b>9</b>	<b>102</b>

TOTAL column to far right is cumulative from 2001 to 2007 December 31.



### 2.10 Total AIDS case reports by ethnicity and year of diagnosis, 2001 to 2007

Ethnicity	2001	2002	2003	2004	2005	2006	2007	TOTAL
Caucasian	57	55	60	53	61	53	44	383
First Nations	10	8	16	13	14	13	12	86
Inuit	1	1	-	-	-	-	-	2
Metis	1	1	2	1	2	-	-	7
Asian	1	3	6	7	4	-	3	24
South Asian	2	2	4	2	2	1	2	15
Black	2	6	7	5	4	5	2	31
Hispanic	5	6	3	-	4	3	3	24
Arab/West Asian	-	1	-	1	-	1	-	3
Other/Mixed Race	-	-	1	1	-	-	1	3
Unknown	13	24	17	20	22	15	11	122
<b>Total*</b>	<b>92</b>	<b>107</b>	<b>116</b>	<b>103</b>	<b>113</b>	<b>91</b>	<b>78</b>	<b>700</b>

Total\* includes transgendered persons.

TOTAL column to far right is cumulative from 2001 to 2007 December 31.

### 2.11 Cumulative AIDS case reports by ethnicity, 1983 to 2007

Ethnicity	Males	Females	TOTAL
Caucasian	2,865	155	3,021
First Nations	206	75	282
Inuit	6	1	7
Metis	10	3	13
Asian	77	5	82
South Asian	40	4	44
Black	65	23	88
Hispanic	64	5	69
Arab/West Asian	12	-	12
Other/Mixed Race	23	3	26
Unknown	504	63	568
<b>Total</b>	<b>3,872</b>	<b>337</b>	<b>4,212</b>

TOTAL column to far right is cumulative from 1983 to 2007, and includes transgendered persons.

### 2.12 Male AIDS case reports by exposure category and year of diagnosis, 2001 to 2007

Risk Category	2001	2002	2003	2004	2005	2006	2007	TOTAL
MSM	38	36	33	28	32	23	21	211
IDU	15	20	25	20	22	20	19	141
Blood/Product Recipient	2	1	-	-	1	-	-	4
Heterosexual Contact	9	12	17	20	18	18	19	113
Occupational Exposure	-	1	-	-	-	-	-	1
Perinatal	1	-	-	-	-	-	-	1
Other	-	1	2	2	3	4	3	15
NIR/Unknown	17	22	23	18	15	10	7	112
<b>Total</b>	<b>82</b>	<b>93</b>	<b>100</b>	<b>88</b>	<b>91</b>	<b>75</b>	<b>69</b>	<b>598</b>

### 2.13 Female AIDS case reports by exposure category and year of diagnosis, 2001 to 2007

Risk Category	2001	2002	2003	2004	2005	2006	2007	TOTAL
IDU	4	8	7	8	11	9	6	53
Blood/Product Recipient	-	-	1	-	-	-	-	1
Heterosexual Contact	4	3	6	4	7	6	3	33
Occupational Exposure	-	-	-	-	-	-	-	-
Perinatal	-	1	-	-	-	-	-	1
Other	-	1	-	-	2	-	-	3
NIR/Unknown	2	1	2	3	2	1	-	11
<b>Total</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>15</b>	<b>22</b>	<b>16</b>	<b>9</b>	<b>102</b>

TOTAL column to far right is cumulative from **2001 to 2007** December 31.

MSM = men who have sex with men

IDU = injection drug user

NIR = no identified reason

Refer to the Exposure Group Hierarchy section on page 47 for a description of each risk category.





#### 2.14 Total AIDS case reports by exposure category and year of diagnosis, 2001 to 2007

Risk Category	2001	2002	2003	2004	2005	2006	2007	TOTAL
MSM	38	36	33	28	32	23	21	211
IDU	19	28	32	28	33	29	25	194
Blood/Product Recipient	2	1	1	-	1	-	-	5
Heterosexual Contact	13	15	23	24	25	24	22	146
Occupational Exposure	-	1	-	-	-	-	-	1
Perinatal	1	1	-	-	-	-	-	2
Other	-	2	2	2	5	4	3	18
NIR/Unknown	19	23	25	21	17	11	7	123
<b>Total*</b>	<b>92</b>	<b>107</b>	<b>116</b>	<b>103</b>	<b>113</b>	<b>91</b>	<b>78</b>	<b>700</b>

Total\* includes transgendered persons.

TOTAL column to far right is cumulative from 2001 to 2007 December 31.

#### 2.15 Cumulative AIDS case reports by exposure category, 1983 to 2007

Risk Category	Males	Females	TOTAL*
MSM	2,866	-	2,866
IDU	421	160	582
Blood/Product Recipient	25	8	33
Heterosexual Contact	278	124	402
Occupational Exposure	1	-	1
Perinatal	10	6	16
Other	18	6	25
NIR/Unknown	253	33	287
<b>Total</b>	<b>3,872</b>	<b>337</b>	<b>4,212</b>

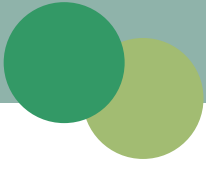
TOTAL column to far right is cumulative from 1983 to 2007, and includes transgendered persons.

MSM = men who have sex with men

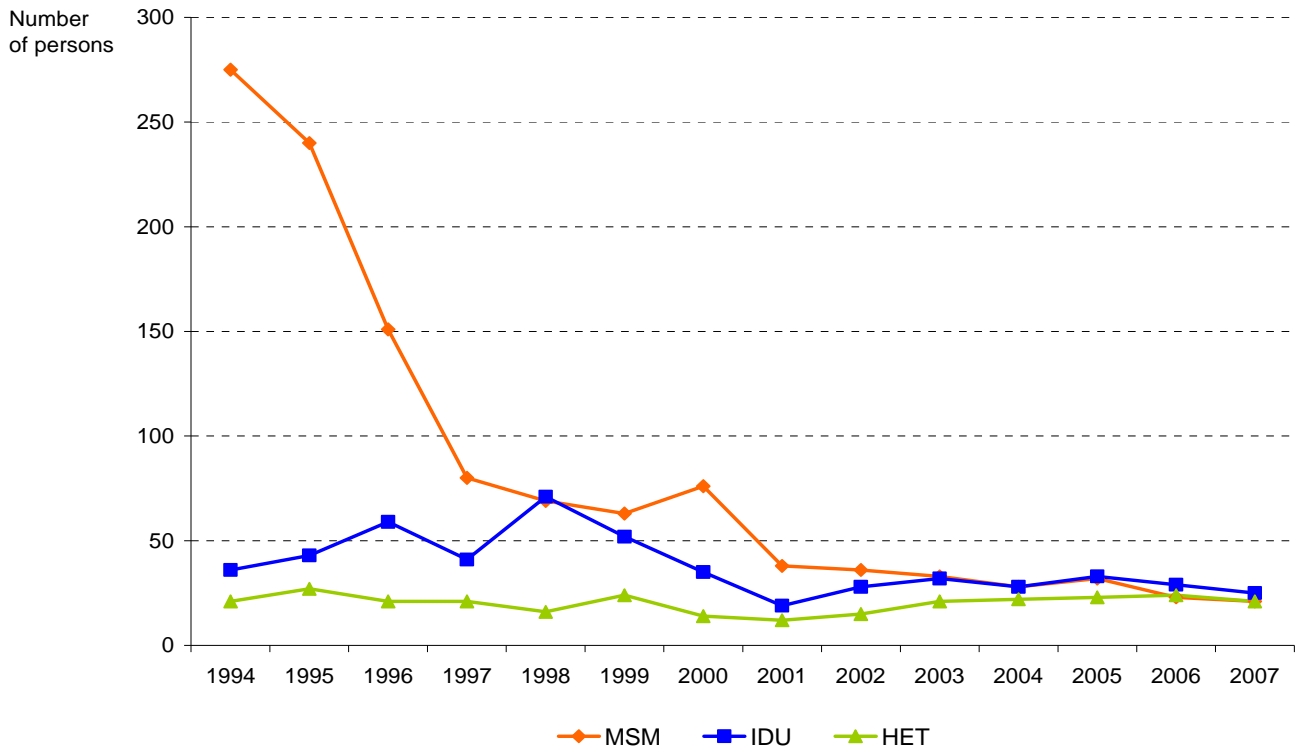
IDU = injection drug user

NIR = no identified reason

Refer to the Exposure Group Hierarchy section on page 47 for a description of each risk category.



2.D AIDS case reports in BC by major exposure group and year of diagnosis, 1994 to 2007



MSM = men who have sex with men  
 IDU = injection drug user  
 HET= heterosexual contact



## 2.16 AIDS case reports by first disease indicative of AIDS and year of diagnosis, 2001 to 2007

Year of Diagnosis	KS	PCP	OI	OM	HIV WS	HIV ENC	PED	TOTAL
1983	1	3	3	-	-	-	-	7
1984	15	8	6	-	-	-	-	29
1985	15	29	12	6	-	-	-	62
1986	27	52	21	6	-	-	-	106
1987	25	76	22	8	2	1	-	134
1988	33	91	29	10	6	6	-	175
1989	51	117	40	6	6	3	-	223
1990	39	97	57	15	7	12	-	227
1991	46	118	73	7	12	7	-	263
1992	52	131	105	12	14	11	-	325
1993	46	118	136	18	27	13	1	359
1994	51	121	127	15	26	15	-	355
1995	48	113	125	5	28	18	1	338
1996	34	82	111	11	19	8	-	265
1997	16	42	71	11	10	8	-	158
1998	15	64	59	6	25	2	-	171
1999	14	62	61	5	13	7	-	162
2000	17	62	48	10	11	5	-	153
2001	7	27	37	4	13	3	1	92
2002	11	37	39	9	7	4	-	107
2003	7	40	55	4	7	3	-	116
2004	7	49	33	4	8	2	-	103
2005	14	41	38	5	10	5	-	113
2006	6	30	43	5	6	1	-	91
2007	6	30	37	1	4	0	-	78
<b>Total</b>	<b>603</b>	<b>1,640</b>	<b>1,388</b>	<b>183</b>	<b>261</b>	<b>134</b>	<b>3</b>	<b>4,212</b>

KS – Kaposi’s sarcoma

PCP – Pneumocystis carinii pneumonia

OI – other opportunistic infections

OM – other malignancies

HIV WS – Wasting syndrome due to HIV

HIV ENC – Encephalopathy, HIV-related

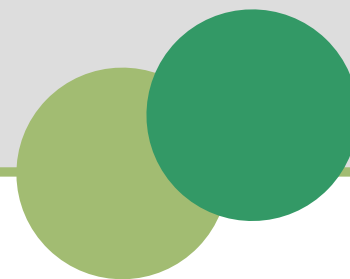
PED – diseases affecting pediatric cases only

# technical appendix

## DATA LIMITATIONS

There are several key limitations to surveillance data which are important to understand in order to interpret surveillance data appropriately:

- The majority of surveillance data presented in this report is extracted from case report forms completed by either health care providers or public health nurses as part of the follow-up process (which includes ensuring appropriate treatment, patient education, and referral to appropriate services). There is an expected reporting delay to receipt of these forms. For HIV data, this affects the classification of cases according to exposure category and ethnicity, resulting in a number of cases for the most recent year where this information is unknown. These numbers are not considered final until the following year's annual report.
- Surveillance trends can be affected by factors which do not represent a true increase or decrease in infection rates. For example, trends are influenced by patient or provider testing behaviours, which may result in changes to the number of tests performed each year (e.g., an increasing number of HIV tests are performed each year by the PHSA Laboratory).
- Surveillance data is only reflective of the proportion of the population who test for HIV. Individuals with asymptomatic infection or who have not tested would not be represented in surveillance data.
- Cases are classified by exposure category and ethnicity according to information elicited during follow-up from either the client or their health care provider, and under-reporting of this information due to social desirability bias may lead to misclassification.
- HIV is reported as the number of new positive HIV tests, and does not reflect the number of new HIV infections (or HIV incidence) as individuals may test positive years after the time of HIV infection.
- The system of enhanced follow-up for HIV established following the addition of HIV to the reportable diseases list in 2003 has resulted in improved data quality in subsequent years (see text of report for details).



## CASE DEFINITIONS FOR HIV and AIDS

Diseases included in this annual report are listed as reportable diseases in the *Communicable Disease Regulation* (Schedule A) of the *Public Health Act*.

### Human Immunodeficiency Virus (HIV)

#### Adults, adolescents and children $\geq$ 18 months:

Detection of HIV antibody by screening test (i.e., ELISA or Point of Care HIV test) followed by positive confirmatory test (i.e., Western Blot or Nucleic Acid Amplification Test), or detection of HIV nucleic acid (RNA or DNA) or detection of p24 antigen with confirmation by neutralization assay, or isolation of HIV in culture.

**Children < 18 months:** Detection of HIV DNA by nucleic acid amplification testing on two separate samples collected at different times.

### Acquired Immune Deficiency Syndrome (AIDS)

One or more of the specified indicator diseases, and meeting the case definition for HIV infection.

#### Indicator diseases for adult and pediatric cases

- Bacterial pneumonia (recurrent)\*
- Candidiasis (bronchi, trachea or lungs)
- Candidiasis (esophageal)\*
- Cervical cancer (invasive)
- Coccidioidomycosis (disseminated or extrapulmonary)
- Cryptococcosis (extrapulmonary)
- Cryptosporidiosis chronic intestinal (> 1 month duration)
- Cytomegalovirus diseases (other than in liver, spleen or nodes)
- Cytomegalovirus retinitis (with loss of vision)\*
- Encephalopathy, HIV-related (dementia)
- Herpes simplex: chronic ulcer(s) (> 1 month duration) or bronchitis, pneumonitis or esophagitis
- Histoplasmosis (disseminated or extrapulmonary)
- Isosporiasis, chronic intestinal (> 1 month duration)
- Kaposi's sarcoma\*
- Lymphoma, Burkitt's (or equivalent term)
- Lymphoma, immunoblastic (or equivalent term)
- Lymphoma (primary in brain)
- Mycobacterium avium complex or M. kansasii (disseminated or extrapulmonary)\*

- Mycobacterium of other species or unidentified species\*
- M. tuberculosis (disseminated or extrapulmonary)
- M. tuberculosis (pulmonary)\*
- Pneumocystis jirovecii (formerly Pneumocystis carinii) pneumonia (PCP)\*
- Progressive multifocal leukoencephalopathy
- Salmonella septicemia (recurrent)
- Toxoplasmosis of brain\*
- Wasting syndrome due to HIV

#### Indicator diseases that apply only to pediatric cases (< 15 years old):

- Bacterial infections (multiple or recurrent, excluding recurrent bacterial pneumonia)
- Lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia\*

\*These conditions may be diagnosed presumptively; otherwise, definitive diagnosis is required.

## DATA SOURCES

### HIV data

All confirmatory laboratory testing for HIV antibodies is done by the Provincial Health Services Authority (PHSA) Laboratory Services located at the BC Centre for Disease Control (BCCDC). BCCDC determines which of these individuals are testing positive for HIV for the first time then informs the appropriate regional designated public health nurse. The designated PHN provides follow-up for these individuals that includes completing surveillance case forms. The completed forms are then forwarded to BCCDC where the collected information is entered into the provincial HIV/AIDS database.

### AIDS data

When an individual is diagnosed with an AIDS defining illness, the care provider completes an AIDS Case Report form then forwards it to BCCDC where the information is entered into the provincial database. A twice-yearly review of clinical records maintained by the BC Centre for Excellence in HIV/AIDS is also conducted to identify new diagnoses of AIDS defining illness and the information is entered into the provincial database.

### Population data

Population data and associated rates were based on the P.E.O.P.L.E. 33 Population Estimates and Projections released by BC STATS, BC Ministry of Labour and Citizens' Services (September 2008).

## ADDITIONAL NOTES

### Classification of health region

Cases are assigned to health regions (i.e., health authority, health service delivery area (HSDA)) by patient residence. If residence is unknown, the case is assigned to the health region where the individual was tested.

### Classification of ethnicity

Cases are classified by ethnicity according to information elicited from the case or health care provider during follow-up:

**Aboriginal:** includes First Nations, Inuit, Métis.

**Arab/West Asian:** e.g., Armenian, Egyptian, Iranian, Moroccan, Lebanese, Afghani.

**Asian:** e.g., Chinese, Japanese, Vietnamese, Cambodian, Indonesian, Filipino, Korean, Laotian

**Black:** e.g., African, Haitian, Jamaican, Somali

**Caucasian (White):** e.g., Irish, Scottish, English, Portuguese, Italian, Russian

**Hispanic:** e.g., Mexican, Central/South American

**South Asian:** e.g., East Indian, Pakistani, Sri Lankan, Punjabi, Bangladeshi

**Other / Mixed ethnicity:** Ethnicity is known but is not included in one of the above categories, or case has dual ethnicity.

**Unspecified:** If information about ethnicity is not elicited from case or health care provider.

### New or previous positive HIV test

If a report of a new positive HIV test is identified in an individual having a history of a previous positive test (i.e., previous positive test result identified in the PHSa Laboratory database, or elicited during case follow-up), this is considered a previous positive HIV test and excluded from surveillance reporting. If no such history is elicited, the report is considered to represent a new positive HIV diagnosis and included in surveillance reporting.

### Exposure group hierarchy

Individuals having a new positive HIV test may belong to more than one exposure category (for example, a person may have a history of using injection drugs and heterosexual sex). These individuals are assigned to the exposure category listed first (or highest) in the following hierarchy.

1. **MSM:** Male who reports having male sex partner(s),

with or without female sex partners.

2. **IDU:** Person who reports current or prior history of injection drug use.
3. **Blood / blood product recipient:** Person who reports receipt of whole blood or blood product (e.g., packed red cells, plasma, platelets, cryoprecipitate, pooled concentrates of clotting factor).
4. **Heterosexual contact:** Male who reports having female sex partner(s) only, and females who report having male sex partner(s).
5. **Occupational exposure:** Exposure to HIV contaminated blood or body fluids, or concentrated virus in an occupational setting.
6. **Perinatal transmission:** Transmission of HIV from an HIV-infected mother to her child either in utero, during childbirth, or through breastfeeding.  
 Since HIV antibody testing is not diagnostic prior to 18 months of age, HIV infections documented in this age group are confirmed by Oak Tree Clinic through direct identification of HIV by PCR, P24 antigen testing and/or HIV culture on 2 or more consecutive assays. This category also includes children infected through perinatal transmission who have not been previously identified prior to the age of 18 months by a direct HIV detection method.
7. **Other risk factor:** Likely route of exposure to HIV is known but cannot be classified into any of the major exposure categories listed here. Includes: receipt of semen from an HIV positive donor; females reporting female sex partner(s) only; needle puncture; blood contact from bite, fight, etc.; organ donors; non-injection drug use; and unspecified parenteral exposure.
8. **No identified risk (NIR):** Route of exposure to HIV is not identified at the time of completion of case follow-up (e.g., route of exposure not provided by case).
9. **Unknown:** Route of exposure to HIV is unknown.