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TUBERCULOSIS IN CANADA



2007

PRE-RELEASE

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INTRODUCTION

To facilitate an earlier release of *Tuberculosis in Canada, 2007*, the following five tables have been extracted from the Canadian Tuberculosis Reporting System (CTBRS) for the year 2007. Data included in this pre-release report should be considered provisional until publication of the full report, *Tuberculosis in Canada 2007*.

HIGHLIGHTS

In total, 1,547 new active and re-treatment tuberculosis (TB) cases (a rate of 4.7 per 100,000 population) were reported to the CTBRS in 2007. Both the number of cases reported and the case rate decreased; this represents a 6.3% and 7.2% decrease, respectively, compared with 2006. The TB case rate in 2007 was the lowest recorded since data collection began in Canada.

The three most populous provinces (British Columbia, Ontario and Quebec) which collectively made up 75% of Canada's population in 2007, accounted for 75% of the total number of reported cases. The highest rate, 99.6 per 100,000 population was reported in Nunavut. For New Brunswick and Nova Scotia the rate was less than 1 per 100,000 population. For Prince Edward Island, no TB cases were reported (Table 1).

Individuals between the ages of 35 and 44 years made up the largest number of reported cases, accounting for 18% of the total. The corresponding case rate of 5.6 per 100 000 for this age group, however, was surpassed by the age-specific rates of 6.4 and 10.1 per 100,000 for those in the older age groups of 65 to 74 years, and greater than 74 years, respectively (Table 2).

In 2007, foreign-born individuals accounted for 66% of all reported TB cases in Canada. Canadian-born non-Aboriginal and Canadian-born Aboriginal cases made up 11% and 20%, respectively (Table 3). However, the TB rate in the Canadian-born Aboriginal group continues to be the highest of the three groups, approximately five times the overall Canadian rate.

Pulmonary TB, defined as tuberculosis of the lungs and conducting airways, was the most frequently reported main diagnostic site, representing 65% of all reported cases in 2007 (Table 4). There were a total of 62 cases of primary TB with 77% of these reported in the Canadian-born Aboriginal population. Of the 202 peripheral lymph node TB cases, 87% were diagnosed in the foreign-born cases (Table 5).

Table 1**Reported new active and re-treatment tuberculosis cases and incidence rate per 100,000 – Canada and provinces/territories: 1997-2007**

Year of diagnosis	Province/territory													
	CANADA	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
1997	Cases	15	5	7	7	359	780	96	121	166	405	2	31	0
	Rate	2.7	3.7	0.8	0.9	4.9	6.9	8.4	11.9	5.9	10.3	6.3	74.5	0.0
1998	Cases	8	2	18	9	290	742	116	98	158	329	2	38	0
	Rate	6.0	1.5	1.9	1.2	4.0	6.5	10.2	9.6	5.4	8.3	6.4	93.1	0.0
1999	Cases	1,820	12	2	15	314	698	132	116	149	328	1	23	15
	Rate	6.0	2.2	1.5	1.6	4.3	6.1	11.6	11.4	5.0	8.2	3.2	56.6	55.9
2000	Cases	1,724	10	2	3	318	700	98	104	133	286	3	10	47
	Rate	5.6	1.9	1.5	0.3	4.3	6.0	8.5	10.3	4.4	7.1	9.9	24.7	170.9
2001	Cases	1,773	19	3	8	261	699	115	114	116	380	0	8	40
	Rate	5.7	3.6	2.2	0.9	3.5	5.9	10.0	11.4	3.8	9.3	0.0	19.6	142.2
2002	Cases	1,666	9	1	9	288	716	98	89	128	286	0	4	27
	Rate	5.3	1.7	0.7	1.0	3.9	5.9	8.5	8.9	4.1	6.9	0.0	9.6	93.9
2003	Cases	1,631	7	3	6	257	693	127	91	110	305	1	12	7
	Rate	5.1	1.4	2.2	0.6	3.4	5.7	10.9	9.1	3.5	7.3	3.3	28.4	24.0
2004	Cases	1,613	7	1	8	219	700	144	70	109	299	4	10	32
	Rate	5.0	1.4	0.7	0.9	2.9	5.6	12.3	7.0	3.4	7.1	13.0	23.4	108.0
2005	Cases	1,641	9	1	7	255	643	114	139	146	265	3	8	45
	Rate	5.1	1.8	0.7	0.7	3.4	5.1	9.7	14.0	4.5	6.2	9.7	18.7	149.9
2006	Cases	1,652	12	0	10	228	671	134	87	131	320	3	6	48
	Rate	5.1	2.4	0.0	1.1	3.0	5.3	11.4	8.8	3.9	7.4	9.6	14.2	157.9
2007*	Cases*	1,547	7	0	7	229	654	103	106	112	276	3	15	31
	Rate	4.7	1.4	0.0	0.7	3.0	5.1	8.7	10.6	3.2	6.3	9.7	35.2	99.6

*Cases and rates for 2007 are provisional until publication of the *Tuberculosis in Canada – 2007* Annual Report.

Table 2**Reported new active and re-treatment tuberculosis cases and incidence rate per 100,000 by age group – Canada: 1997-2007**

Year of diagnosis	TOTAL	Age group											Age unk.
		<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+		
1997	Cases	8	50	57	222	391	290	216	232	250	278	0	
	Rate	2.2	3.2	1.4	5.5	8.4	5.7	5.5	9.0	11.9	18.0	-	
1998	Cases	20	60	72	187	314	308	184	174	235	256	0	
	Rate	5.8	3.9	1.8	4.6	7.0	5.9	4.5	6.6	11.0	16.0	-	
1999	Cases	32	55	61	204	340	253	193	173	244	265	0	
	Rate	6.0	3.7	1.5	5.0	7.7	4.8	4.6	6.3	11.4	16.1	-	
2000	Cases	17	50	44	207	316	279	208	160	204	239	0	
	Rate	5.6	3.4	1.1	5.0	7.3	5.3	4.8	5.7	9.5	14.0	-	
2001	Cases	11	33	70	180	322	289	208	184	219	255	2	
	Rate	5.7	2.3	1.7	4.3	7.5	5.5	4.6	6.3	10.1	14.5	-	
2002	Cases	10	42	45	210	312	263	201	161	199	217	6	
	Rate	5.3	3.0	1.1	4.9	7.2	5.0	4.4	5.2	9.1	11.9	-	
2003	Cases	7	34	41	198	332	277	206	153	178	203	2	
	Rate	5.1	2.5	1.0	4.6	7.6	5.3	4.4	4.7	8.1	10.8	-	
2004	Cases	6	33	45	198	324	272	198	167	177	193	0	
	Rate	5.0	2.4	1.1	4.5	7.4	5.3	4.1	4.9	8.0	10.0	-	
2005	Cases	10	38	71	254	279	278	212	143	168	188	0	
	Rate	5.1	2.8	1.8	5.8	6.3	5.4	4.3	4.1	7.5	9.5	-	
2006	Cases*	10	46	51	260	255	285	201	158	168	218	0	
	Rate	5.1	3.4	1.3	5.9	5.7	5.6	4.0	4.3	7.4	10.7	-	
2007*	Cases*	12	33	53	197	247	281	205	159	148	212	0	
	Rate	4.7	2.4	1.4	4.4	5.5	5.6	4.0	4.2	6.4	10.1	-	

* Cases and rates for 2007 are provisional until publication of the *Tuberculosis in Canada – 2007 Annual Report*.

Table 3
Reported new active and re-treatment tuberculosis cases by origin – Canada and provinces/territories: 2007

Birthplace	CANADA	Province/territory										North*					
		N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.						
Canadian-born																	
Aboriginal																	
North American Indian	227	0	0	0	0	10	68	70	13	41	15						
Status Indian	223	0	0	0	0	10	68	70	13	37	15						
Non-Status	4	0	0	0	0	0	0	0	0	4	0						
Métis	32	0	0	0	0	0	0	29	2	0	1						
Inuit	46	1	0	0	0	12	1	0	0	0	32						
Total Aboriginal	305	1	0	0	0	22	68	99	15	41	48						
Rate	25.7	4.5	0.0	0.0	0.0	20.8	37.8	62.4	7.9	21.0	81.0						
Cases	166	5	0	4	1	55	7	3	13	32	0						
Rate	0.7	1.1	0.0	0.5	0.1	0.8	0.5	0.4	0.5	1.1	0.0						
Total Canadian-born	471	6	0	4	1	77	75	102	28	73	48						
Rate	1.8	1.2	0.0	0.5	0.1	1.2	0.6	10.9	1.0	2.4	49.3						
Foreign-born (WHO regions)																	
Africa, high HIV prevalence	91	0	0	2	1	16	47	2	15	8	0						
Africa, low HIV prevalence	32	0	0	0	1	11	12	5	3	0	0						
American region – Latin American and Caribbean countries	74	0	0	0	0	33	30	1	2	8	0						
Established market economies and Central Europe	60	0	0	0	0	16	33	0	1	10	0						
Eastern Europe	25	0	0	0	1	5	13	2	1	3	0						
Eastern Mediterranean	107	0	0	0	0	11	74	5	9	8	0						
South-East Asia	228	1	0	0	0	15	145	1	17	49	0						
Western Pacific	400	0	0	1	0	35	202	4	36	109	1						
Unknown	3	0	0	0	0	0	1	0	0	2	0						
Total Foreign-born	1,020	1	0	3	3	142	557	28	84	197	1						
Rate	14.1	6.6	0.0	4.8	8.6	14.1	14.1	6.3	14.1	15.1	13.6						
Cases	56	0	0	0	0	10	40	0	0	6	0						
TOTAL**	1,547	7	0	7	4	229	654	106	112	276	49						
Rate	4.7	1.4	0.0	0.7	0.5	3.0	5.1	8.7	3.2	6.3	46.8						

NOTE: Provincial/territorial data are suppressed and reported in aggregate form if the P/T population denominator for the cell is less than 40.

* The origin for cases in the three territories (Yukon, Northwest Territories and Nunavut) has been aggregated to "North" to respect patient confidentiality. For a more detailed breakdown contact the respective territorial TB program.

** Cases for 2007 are provisional until publication of the *Tuberculosis in Canada – 2007* Annual Report.

Table 4

Reported new active and re-treatment tuberculosis cases and incidence rate per 100,000 by main diagnostic site - Canada: 1997-2007

Main diagnostic site	Year of diagnosis											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007†	
Respiratory	Cases	131	130	154	99	120	88	79	94	106	91	62
	Rate	0.4	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.2
Pulmonary**	Cases	1171	1071	1105	1068	1132	1019	962	935	960	1015	1002
	Rate	3.9	3.6	3.6	3.5	3.6	3.2	3.0	2.9	3.0	3.1	3.0
Other respiratory^	Cases	75	63	62	64	52	57	64	98	117	102	96
	Rate	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3
Nonrespiratory	Cases	50	30	25	26	15	17	20	30	24	22	22
	Rate	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
CNS	Cases	25	24	15	16	17	18	25	19	20	22	20
	Rate	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Peripheral lymph node	Cases	268	276	244	258	235	242	249	251	246	241	202
	Rate	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.6
Other^^	Cases	258	190	189	163	180	194	193	185	168	158	143
	Rate	0.9	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.4
Unknown	Cases	16	26	26	30	22	31	39	1	0	1	0
	Rate	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
TOTAL†	Cases	1,994	1,810	1,820	1,724	1,773	1,666	1,631	1,613	1,641	1,652	1,547
	Rate	6.7	6.0	6.0	5.6	5.7	5.3	5.1	5.0	5.1	5.1	4.7

* Primary includes primary respiratory tuberculosis and tuberculous pleurisy in primary progressive tuberculosis, (ICD-9 codes 010.0-010.9; ICD-10 A15.7 and A16.7).

** Pulmonary includes tuberculosis of the lungs and conducting airways which includes tuberculous fibrosis of the lung, tuberculous bronchiectasis, tuberculous pneumonia, tuberculous pneumothorax, isolated tracheal or bronchial tuberculosis and tuberculous laryngitis; (ICD-9 codes 011-011.9, 012.2, 012.3; ICD-10 codes A15.0-A15.3, A15.5, A15.9, A16.0-A16.2, A16.4, A16.9).

^ Other Respiratory includes tuberculous pleurisy (non-primary) and tuberculosis of: intrathoracic lymph nodes, mediastinum, nasopharynx, nose (septum), and sinus (any nasal) (ICD-9 codes: 012.0, 012.1 and 012.8; ICD-10 codes: A15.4, A15.6, A15.8, A16.3, A16.5, A16.8).

^^ Other includes tuberculosis of intestines, peritoneum and mesenteric glands, bones and joints, genitourinary system, skin, eye, ear, thyroid, adrenal and spleen.

† Cases and rates for 2007 are provisional until publication of the *Tuberculosis in Canada – 2007* Annual Report.

Population estimates : 2007

Origin group	Total	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Canadian-born Aboriginal	1,188,348	22,378	1,825	20,852	19,596	105,911	234,078	179,969	158,664	190,526	195,269	8,176	23,524	27,580
Canadian-born Non-Aboriginal	24,570,538	468,682	130,641	850,700	695,353	6,587,988	8,628,154	830,773	774,869	2,686,313	2,878,977	19,107	15,980	3,001
Total Canadian-born	25,758,886	491,060	132,466	871,552	714,949	6,693,999	8,862,232	1,010,742	933,533	2,876,839	3,074,246	27,283	39,504	30,581
Foreign-born	7,217,140	15,215	6,161	62,595	34,833	1,006,908	3,941,629	175,937	63,336	597,145	1,306,010	3,706	3,133	532
Total population*	32,976,026	506,275	138,627	934,147	749,782	7,700,907	12,803,861	1,186,679	996,869	3,473,984	4,380,256	30,989	42,637	31,113

* Source: Statistics Canada, Demography Division, Population by age and sex, Canada and provinces/territories: July 1, 1971 to 2007, updated February 2008.