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TUBERCULOSIS IN CANADA



2006

PRE-RELEASE

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Cat. HP37-5/2006-1E-PDF
ISBN: 978-0-662-47143-1

This publication can be made available in alternative formats upon request.

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ACKNOWLEDGEMENTS

The authors acknowledge the members of the Canadian Tuberculosis Committee and the Provincial and Territorial Tuberculosis Programs for their contribution and participation in the Canadian Tuberculosis Reporting System:

Alberta Health and Wellness
Disease Control and Prevention Branch

Division of Tuberculosis Control
British Columbia Centre for Disease Control

Manitoba Tuberculosis Control Program

Department of Health and Wellness
New Brunswick

Department of Health and Community Services
Newfoundland and Labrador

Office of the Chief Medical Officer of Health
Nova Scotia Department of Health

Department of Health & Social Services
Government of Nunavut

Vaccine Preventable Diseases and TB Control Unit
Ontario Ministry of Health and Long-Term Care

Department of Health and Social Services
Prince Edward Island

Direction de la Protection de la Santé Publique
Ministère de la Santé et des Services Sociaux, Quebec

Tuberculosis Control Program
Saskatchewan Health

Department of Health and Social Services
Government of Northwest Territories

Department of Health and Social Services
Yukon

Association of Medical Microbiology and Infectious
Disease Canada

Canadian Lung Association

Canadian Public Health Laboratory Network

Canadian Thoracic Society

Citizenship and Immigration Canada

Correctional Service Canada

First Nations and Inuit Health Branch
Health Canada

National Microbiology Laboratory
Public Health Agency of Canada

Tuberculosis Prevention and Control
Public Health Agency of Canada

INTRODUCTION

To facilitate an earlier release of Canadian tuberculosis (TB) data, the following tables have been extracted from the Canadian Tuberculosis Reporting System (CTBRS) for the year 2006. Data included in this pre-release report should be considered provisional until publication of the full report, *Tuberculosis in Canada 2006*.

HIGHLIGHTS

In 2006, 1,621 cases (5.0 per 100,000 population) of new active and relapsed TB were reported to the CTBRS. The highest rate of 155.9 per 100,000 population was reported in Nunavut. There were no TB cases reported from Prince Edward Island for 2006. The three most populous provinces (British Columbia, Ontario and Quebec), which collectively made up 76% of Canada's population in 2006, accounted for 73% of the total number of reported cases (Table 1).

Individuals between the ages for 35 and 44 years made up the largest number of reported cases, accounting for 17% of the total (Table 2). TB among foreign-born individuals accounted for 64% of all reported cases in Canada. Canadian-born non-Aboriginal and Canadian-born Aboriginal cases made up 12% and 20%, respectively (Table 3).

Pulmonary TB, defined as tuberculosis of the lungs and conducting airways, was the most frequently reported main diagnostic site, representing 62% of all reported cases in 2006 (Table 4). TB of the peripheral lymph nodes accounted for 15% of all cases and was the second most commonly reported diagnostic site.

Table 1

Reported new active and relapsed tuberculosis cases and incidence rate per 100,000 – Canada and provinces/territories: 1996-2006

Year of diagnosis		CANADA	Province/territory												
			N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
1996	Cases	1,877	24	3	15	15	332	780	97	113	140	316	6	36	0
	Rate	6.3	4.3	2.2	1.6	2.0	4.6	7.0	8.6	11.1	5.0	8.2	19.1	86.2	0.0
1997	Cases	1,995	15	5	7	7	360	780	96	121	166	405	2	31	0
	Rate	6.7	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	1,809	8	2	18	9	289	742	116	98	158	329	2	38	0
	Rate	6.0	1.5	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	15	314	698	132	116	149	328	1	23	15
	Rate	6.0	2.2	1.5	1.6	2.0	4.3	6.1	11.6	11.4	5.0	8.2	3.2	56.6	55.9
2000	Cases	1,723	10	2	3	10	318	700	98	104	133	285	3	10	47
	Rate	5.6	1.9	1.5	0.3	1.3	4.3	6.0	8.5	10.3	4.4	7.1	9.9	24.7	170.9
2001	Cases	1,772	19	3	8	10	259	699	115	114	116	381	0	8	40
	Rate	5.7	3.6	2.2	0.9	1.3	3.5	5.9	10.0	11.4	3.8	9.3	0.0	19.6	142.2
2002	Cases	1,660	9	1	9	11	282	716	98	89	128	286	0	4	27
	Rate	5.3	1.7	0.7	1.0	1.5	3.8	5.9	8.5	8.9	4.1	6.9	0.0	9.6	93.9
2003	Cases	1,629	7	3	6	12	255	693	127	91	110	305	1	12	7
	Rate	5.1	1.4	2.2	0.6	1.6	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	10	219	700	144	70	109	299	4	10	32
	Rate	5.0	1.4	0.7	0.9	1.3	2.9	5.6	12.3	7.0	3.4	7.1	13.0	23.3	107.8
2005	Cases	1,642	9	1	7	6	255	644	114	139	146	265	3	8	45
	Rate	5.1	1.8	0.7	0.7	0.8	3.4	5.1	9.7	14.0	4.5	6.2	9.6	18.8	149.8
2006	Cases*	1,621	12	0	10	2	227	641	134	87	131	320	3	6	48
	Rate	5.0	2.4	0.0	1.1	0.3	3.0	5.1	11.4	8.8	3.9	7.4	9.6	14.3	155.9

*Cases and rates for 2006 are provisional until publication of the *Tuberculosis in Canada – 2006* Annual Report.

Table 2**Reported new active and relapsed tuberculosis cases and incidence rate per 100,000 by age group – Canada: 1996-2006**

Year of diagnosis		TOTAL	Age group										
			< 1	1 – 4	5 – 14	15 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 – 74	75 +	Age unk.
1996	Cases	1,877	14	66	63	216	361	305	191	195	251	215	0
	Rate	6.3	3.7	4.2	1.6	5.4	7.6	6.1	5.0	7.7	12.0	14.4	-
1997	Cases	1,995	8	50	57	222	391	291	216	232	250	278	0
	Rate	6.7	2.2	3.2	1.4	5.5	8.4	5.7	5.5	9.0	11.9	18.0	-
1998	Cases	1,809	20	60	72	187	314	307	184	174	235	256	0
	Rate	6.0	5.8	3.9	1.8	4.6	7.0	5.9	4.5	6.6	11.0	16.0	-
1999	Cases	1,820	32	55	61	204	339	254	193	173	244	265	0
	Rate	6.0	9.4	3.7	1.5	5.0	7.7	4.8	4.6	6.3	11.4	16.1	-
2000	Cases	1,723	17	50	44	207	316	278	208	160	204	239	0
	Rate	5.6	5.0	3.4	1.1	5.0	7.3	5.3	4.8	5.7	9.5	14.0	-
2001	Cases	1,772	11	33	70	180	322	290	208	184	219	255	0
	Rate	5.7	3.3	2.3	1.7	4.3	7.5	5.5	4.6	6.3	10.1	14.5	-
2002	Cases	1,660	10	42	45	210	312	263	201	161	199	217	0
	Rate	5.3	3.1	3.0	1.1	4.9	7.2	5.0	4.4	5.2	9.1	11.9	-
2003	Cases	1,629	7	34	41	198	332	277	206	153	178	203	0
	Rate	5.1	2.1	2.5	1.0	4.6	7.6	5.3	4.4	4.7	8.1	10.8	-
2004	Cases	1,613	6	33	45	198	322	273	196	167	177	194	2
	Rate	5.0	1.8	2.4	1.1	4.5	7.3	5.3	4.1	4.9	8.0	10.1	-
2005	Cases	1,642	10	38	72	254	279	279	212	142	168	188	0
	Rate	5.1	3.0	2.8	1.8	5.8	6.3	5.5	4.3	4.0	7.5	9.5	-
2006	Cases*	1,621	10	45	51	252	250	281	196	155	165	216	0
	Rate	5.0	2.9	3.3	1.3	5.7	5.6	5.6	3.9	4.2	7.3	10.6	-

* Cases and rates for 2006 are provisional until publication of the *Tuberculosis in Canada – 2006* Annual Report.

Table 3**Reported new active and relapsed tuberculosis cases by origin – Canada and provinces/territories: 2006**

Birthplace			CANADA	Province/territory											
				N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	North*	
Canadian-born	Aboriginal	Cases													
	North American Indian		230	0	0	0	0	4	8	96	54	15	46	7	
	Status Indian		223	0	0	0	0	0	8	95	54	14	45	7	
	Non-Status		7	0	0	0	0	4	0	1	0	1	1	0	
	Métis		29	0	0	0	0	0	0	0	23	6	0	0	
	Inuit		61	5	0	0	0	7	0	0	0	0	0	49	
	Total Aboriginal	Cases	320	5	0	0	0	11	8	96	77	21	46	56	
		Rate	27.4	22.8	0.0	0.0	0.0	10.5	3.5	54.4	49.7	11.2	23.8	96.7	
	Non-Aboriginal	Cases	198	6	0	5	1	73	39	14	4	18	37	1	
		Rate	0.8	1.3	0.0	0.6	0.1	1.1	0.5	1.7	0.5	0.7	1.3	2.6	
Total Canadian-born	Cases	518	11	0	5	1	84	47	110	81	39	83	57		
	Rate	2.0	2.2	0.0	0.6	0.1	1.3	0.5	10.9	8.8	1.4	2.7	59.1		
Foreign-born (WHO regions)	Africa, high HIV prevalence	Cases	104	0	0	1	1	33	44	7	1	11	6	0	
	Africa, low HIV prevalence		21	0	0	0	0	6	9	2	0	2	2	0	
	American region – Latin American and Caribbean countries		47	0	0	0	0	19	16	1	0	3	8	0	
	Established market economies and Central Europe		54	0	0	1	0	14	25	2	0	3	9	0	
	Eastern Europe		17	0	0	0	0	1	13	0	0	0	3	0	
	Eastern Mediterranean		121	0	0	1	0	15	72	2	0	12	19	0	
	South-East Asia		247	1	0	0	0	18	157	1	3	18	49	0	
	Western Pacific		404	0	0	1	0	30	184	9	2	43	135	0	
	Unknown		26	0	0	0	0	7	19	0	0	0	0	0	
	Total Foreign-born	Cases	1,041	1	0	4	1	143	539	24	6	92	231	0	
	Rate	14.8	7.3	0.0	6.7	3.0	14.7	13.9	14.1	9.8	15.9	18.0	0.0		
Unknown birthplace	Cases	62	0	0	1	0	0	55	0	0	0	6	0		
TOTAL **	Cases	1,621	12	0	10	2	227	641	134	87	131	320	57		
	Rate	5.0	2.4	0.0	1.1	0.3	3.0	5.1	11.4	8.8	3.9	7.4	54.9		

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 2006 are provisional until publication of the *Tuberculosis in Canada – 2006* Annual Report.

Table 4

Reported new active and relapsed tuberculosis cases and incidence rate per 100,000 by main diagnostic site - Canada: 1996-2006

Main diagnostic site			Year of diagnosis										
			1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Respiratory	Primary*	Cases	120	131	130	154	99	120	88	79	94	106	91
		Rate	0.4	0.4	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.3	0.3
	Pulmonary**	Cases	1,097	1,171	1,071	1,105	1,068	1,132	1,019	962	935	960	998
		Rate	3.7	3.9	3.5	3.6	3.5	3.6	3.3	3.0	2.9	3.0	3.1
	Other respiratory^	Cases	69	75	63	62	64	52	57	64	98	117	101
		Rate	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3
Nonrespiratory	Miliary	Cases	40	50	30	25	25	16	17	20	30	24	22
		Rate	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	CNS	Cases	18	25	24	15	16	17	18	25	19	20	21
		Rate	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Peripheral lymph node	Cases	241	268	276	244	258	235	242	249	251	246	238
		Rate	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7
	Other^^	Cases	270	259	189	189	163	180	194	193	185	169	150
		Rate	0.9	0.9	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5
Unknown	Cases	22	16	26	26	30	20	25	37	1	0	0	
	Rate	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	
TOTAL†		Cases	1,877	1,995	1,809	1,820	1,723	1,772	1,660	1,629	1,613	1,642	1,621
		Rate	6.3	6.7	6.0	6.0	5.6	5.7	5.3	5.1	5.0	5.1	5.0

* Primary includes primary respiratory tuberculosis and tuberculous plerisy 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 2006 are provisional until publication of the *Tuberculosis in Canada - 2006* Annual Report.

Table 5**Reported new active and relapsed tuberculosis cases by birthplace and main diagnostic site – Canada: 2006**

Birthplace		TOTAL	Main diagnostic site							Unknown
			Respiratory			Nonrespiratory				
			Primary*	Pulmonary**	Other respiratory^	Miliary	CNS	Peripheral lymph node	Other^^	
Canadian-born	Aboriginal									
	North American Indian	230	40	131	25	5	2	10	17	0
	Status Indian	223	40	129	23	5	2	9	15	0
	Non-Status	7	0	2	2	0	0	1	2	0
	Métis	29	9	11	3	2	0	1	3	0
	Inuit	61	7	49	2	1	0	0	2	0
	Total Aboriginal	320	56	191	30	8	2	11	22	0
	Non-Aboriginal	198	8	138	15	1	4	12	20	0
	Total Canadian-born	518	64	329	45	9	6	23	42	0
Foreign-born (WHO regions)	Africa, high HIV prevalence	104	7	55	7	1	3	19	12	0
	Africa, low HIV prevalence	21	2	14	0	0	0	4	1	0
	American region – Latin American and Caribbean countries	47	1	24	1	1	0	18	2	0
	Established market economies and Central Europe	54	1	38	2	2	1	5	5	0
	Eastern Europe	17	0	10	1	2	0	3	1	0
	Eastern Mediterranean	121	3	85	5	0	3	14	11	0
	South-East Asia	247	5	147	14	3	3	42	33	0
	Western Pacific	404	7	241	21	4	4	90	37	0
	Unknown	26	1	12	1	0	0	10	2	0
	Total Foreign-born	1,041	27	626	52	13	14	205	104	0
Unknown birthplace	62	0	43	4	0	1	10	4	0	
TOTAL†	1,621	91	998	101	22	21	238	150	0	

* Primary includes primary respiratory tuberculosis and tuberculous plerisy 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.

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