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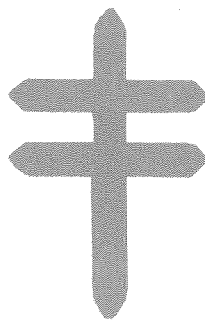
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PROVINCE OF BRITISH COLUMBIA

DIVISION
OF
TUBERCULOSIS CONTROL
HEALTH BRANCH
DEPARTMENT OF HEALTH SERVICES AND HOSPITAL INSURANCE

PART II - EPIDEMIOLOGY SECTION

ANNUAL REPORT
FOR THE YEAR
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F O R E W O R D

This section of the Annual Report presents the statistical information that shows the changing tuberculosis problem and analyses some of the trends that are becoming apparent. It is compiled from information provided through the Tuberculosis Case Register of the Division of Tuberculosis Control and from other information supplied to the Division of Vital Statistics from clinics and health units.

INDEX

	Page
FOREWORD	(i)
GENERAL PROVINCIAL STATISTICS SECTION "A" (Tables 1 - 12)	
Table 1. - Tuberculosis Mortality by Age Group and Sex, British Columbia, 1970 and Average 1966-1970 (Rate per 100,000 Population)	2
Table 2. - Incidence of Active Tuberculosis, by Age Group and Sex, British Columbia, 1970 (Rates per 100,000 Population). . .	3
Table 3a. - Principal Diagnosis of Active Tuberculosis, and Bacillary Cases, British Columbia, 1970	4
Table 3b. - Principal Diagnosis of Active Tuberculosis, Among Non-Indians and Indians, British Columbia, 1970	5
Table 4a. - Notifications of Active Tuberculosis by Age Group, Sex and Diagnosis, British Columbia, 1970 (Bacillary Only) . .	6
Table 4b. - Notifications of Active Tuberculosis by Age Group, Sex and Diagnosis, British Columbia, 1970 (All Active Cases) . .	7
Table 5. - Bacteriological Status of Active Cases of Pulmonary Tuberculosis, British Columbia, 1970	8
Table 6. - Extent of Post-Primary or Adult Pulmonary Tuberculosis, British Columbia, 1970	9
Table 7. - Contribution of Reactivations to Total Active Tuber- culosis Cases by Age Groups, British Columbia, 1970 . . .	10
Table 8. - Active Tuberculosis Arising in Persons in Various Diagnostic Categories Routinely Followed up by Tuberculosis Control Clinics, British Columbia, 1970 . . .	11
Table 9. - Tuberculin Status of Household Contacts and the Source of Infection, by Age Groups, British Columbia, 1970 . . .	12
Table 10. - Incidence of Active Tuberculosis Among Household Contacts and Among Tuberculin Positive Household Contacts, British Columbia, 1970	13
Table 11. - Tuberculin Testing Results by Age Group, Sex, and Percent Positive, British Columbia, 1970	15
Table 12. - Tuberculin Testing Results by Age Group and Size of Reaction, British Columbia, 1970	15

TUBERCULOSIS IN THE HEALTH UNIT AREAS
SECTION "B" (Tables 13 - 14)

Table 13. - Tuberculosis Mortality by Health Unit of Residence, British Columbia, 1961-1970 (Rates per 100,000 Population)	17
Table 14. - Active Tuberculosis by Health Unit of Residence for Bacillary Cases and All Active Cases, British Columbia, 1970	18

TUBERCULOSIS IN VARIOUS RACIAL GROUPS
SECTION "C" (Tables 15 - 17)

Table 15. - Tuberculosis Mortality for the Total Population, the Indian, Chinese and Japanese Population, and the Population Excluding Indians and Orientals, British Columbia, 1961-1970 (Rates per 100,000 Population) . . .	20
Table 16. - Incidence of Active Tuberculosis in Canadian and Non-Canadian Born Persons, British Columbia, 1970	21
Table 17. - Incidence of Active Tuberculosis Among the Indian Population by Age Group and Sex, British Columbia, 1970 (Rates per 100,000 Population)	22
Table 18. - Principal Diagnosis of Active Tuberculosis, and Bacillary Cases, British Columbia, 1970 (Indians Only) .	23

GENERAL PROVINCIAL STATISTICS

SECTION "A" (Tables 1 - 12)

The mortality from tuberculosis is low, as with the modern treatment tuberculosis is no longer a fatal disease. The incidence of active tuberculosis (cases reported in 1970) declined from a rate of 25.4 per 100,000 in 1969 to 21.2 in 1970. While tuberculosis affects all ages and both sexes, the rates are higher among middle-aged and elderly men.

TABLE 1. - TUBERCULOSIS MORTALITY BY AGE GROUP AND SEX
 BRITISH COLUMBIA, 1970 AND AVERAGE 1966-1970
 (Rate Per 100,000 Population)

Year	Age Group and Sex																		
	0-9		10-19		20-29		30-39		40-49		50-59		60-69		70 & Over		TOTAL		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1966-1970																			
Total	1	1	-	-	2	2	-	8	8	1	5	12	34	7	33	11	83	42	
Average Rate.	*	*	-	-	*	*	-	1.3	1.3	*	1.0	2.4	10.5	2.2	11.1	3.2	1.6	0.9	
1970																			
Total	1	-	-	-	-	1	2	-	3	2	6	2	5	2	19	4	36	11	
Rate	0.5	-	-	-	-	0.6	1.4	-	2.3	1.6	5.8	1.9	7.2	2.9	32.0	5.6	3.3	1.0	

* Less than 0.01 per 100,000 population

TABLE 2. - INCIDENCE OF ACTIVE TUBERCULOSIS, BY AGE GROUP AND SEX
 BRITISH COLUMBIA, 1970
 (Rates per 100,000 Population¹)

Age Group	Males				Females				TOTAL			
	Bacillary Cases		All Active Cases		Bacillary Cases		All Active Cases		Bacillary Cases		All Active Cases	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0 - 4 . .	3	3.3	7	7.7	2	2.3	7	8.1	5	2.8	14	7.9
5 - 14 . .	2	0.9	10	4.5	5	2.4	9	4.3	7	1.6	19	4.4
15 - 24 . .	19	10.1	26	13.8	13	7.2	21	11.7	32	8.7	47	12.8
25 - 34 . .	25	16.7	36	24.1	21	15.0	32	22.9	46	15.9	68	23.5
35 - 44 . .	32	23.2	46	33.3	19	15.1	32	25.4	51	31.1	78	47.6
45 - 54 . .	46	39.5	52	44.7	18	14.9	27	22.4	64	27.0	79	33.3
55 - 64 . .	38	42.8	49	55.2	15	16.9	21	23.6	53	29.9	70	39.4
65 & Over .	53	59.2	60	67.0	15	14.7	18	17.6	68	35.4	78	40.6
TOTAL .	218	20.1	286	26.4	108	10.2	167	15.8	326	15.3	453	21.2

1. Rates per 100,000 Population estimated for 1970.

There were 453 active cases of tuberculosis diagnosed in British Columbia in 1970 giving a rate of 21.2 per 100,000. 326 (15.3 in 100,000) have been proven bacteriologically. The high rates among middle-aged and elderly men are one of the characteristics of tuberculous epidemiology in developed countries.

TABLE 3a. - PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AND BACILLARY CASES
BRITISH COLUMBIA, 1970

Diagnosis	Bacillary Only		All Active Cases		Bacillary as Percent of all Active Cases
	Number	Percent	Number	Percent	
<u>Pulmonary</u>					
Primary	7	2.2	25	5.5	28.0
Minimal	110	33.8	142	31.3	77.5
Moderately Advanced . . .	94	28.8	105	23.2	89.5
Far Advanced	59	18.1	63	13.8	93.7
Pleurisy	3	0.9	15	3.3	20.0
Miliary	4	1.2	7	1.6	57.1
Silico-TB	6	1.8	7	1.6	85.7
<u>Non-Pulmonary</u>					
Meninges & Central Nervous System	-	-	2	0.4	-
Gastro Intestinal	3	0.9	4	0.9	75.0
Bones and Joints	5	1.5	11	2.4	45.5
Skin & Subcutaneous Cell Tissue	2	0.6	3	0.7	66.7
Lymphatic System	12	3.7	37	8.2	32.4
Genito-Urinary System . .	21	6.5	29	6.4	72.4
Other Organs (eye, ear, etc.)	-	-	3	0.7	-
TOTAL	326	100.0	453	100.0	72.0

80 percent of all the active cases recorded in 1970 were pulmonary. Among the non-pulmonary cases the largest number are those with tuberculosis of the lymphatic system (cervical adenitis) and the genito-urinary system. There were 2 cases of tuberculous meningitis. The high proportion of bacteriological confirmation in many of the diagnostic groups is gratifying.

TABLE 3b. - PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS,
AMONG NON-INDIANS AND INDIANS
BRITISH COLUMBIA, 1970

Diagnosis	Non-Indian		Indian	
	Number	Percent	Number	Percent
<u>Pulmonary</u>				
Primary	16	4.1	9	14.8
Minimal	128	32.7	14	23.0
Moderately Advanced	90	23.0	15	24.6
Far Advanced	55	14.0	8	13.2
Pleurisy	12	3.1	3	4.9
Miliary	6	1.5	1	1.6
Silico Tuberculosis	7	1.8	-	-
<u>Non-Pulmonary</u>				
Meninges & Central Nervous System .	1	0.3	1	1.6
Gastro Intestinal	4	1.0	-	-
Bones and Joints	11	2.8	-	-
Skin & Subcutaneous Cell Tissue . .	2	0.5	1	1.6
Lymphatic System	31	7.8	6	9.8
Genito-Urinary System	26	6.6	3	4.9
Other Organs (eye, ear, etc.) . . .	3	0.8	-	-
TOTAL	392	100.0	61	100.0

Primary Tuberculosis is more frequently diagnosed among Indians than non-Indians, indicating that Tuberculosis infection is much more common in the Native population.

TABLE 4a. - NOTIFICATIONS OF ACTIVE¹ TUBERCULOSIS BY AGE GROUP, SEX AND DIAGNOSIS
BRITISH COLUMBIA, 1970
(Bacillary Only)

Diagnosis on Notification	Age-Group (Years)								TOTAL	
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+		
<u>Pulmonary</u> - Primary	M	2	1	-	-	-	-	-	-	3
	F	1	3	-	-	-	-	-	-	4
Minimal	M	-	1	7	7	10	12	13	19	69
	F	-	1	5	10	7	9	1	8	41
Mod. Advanced	M	-	-	6	5	12	15	14	16	68
	F	-	-	4	4	7	5	4	2	26
Far Advanced	M	-	-	4	6	9	13	4	11	47
	F	1	-	3	1	2	2	1	2	12
Silico-Tuberculosis	M	-	-	-	-	-	1	2	3	6
	F	-	-	-	-	-	-	-	-	-
Miliary	M	-	-	-	1	-	-	1	1	3
	F	-	1	-	-	-	-	-	-	1
Pleurisy	M	-	-	-	-	-	-	1	-	1
	F	-	-	-	-	1	1	-	-	2
Total Pulmonary	M	2	2	17	19	31	41	35	50	197
	F	2	5	12	15	17	17	6	12	86
	T	4	7	29	34	48	58	41	62	283
<u>Non-Pulmonary</u>										
Meninges	M	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-
Intestines	M	-	-	-	-	-	-	-	1	1
	F	-	-	1	-	-	-	1	-	-
Bones and Joints	M	-	-	-	1	-	2	-	-	3
	F	-	-	-	2	-	-	-	-	-
Skin	M	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	2	-	-
Lymphatic System	M	1	-	1	1	-	-	-	2	5
	F	-	-	-	2	-	-	3	2	-
Genito-Urinary System	M	-	-	1	4	1	3	3	-	12
	F	-	-	-	2	2	1	3	1	-
Other Non-Pulmonary	M	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-
Total Non-Pulmonary	M	1	-	2	6	1	5	3	3	21
	F	-	-	1	6	2	1	9	3	22
	T	1	-	3	12	3	6	12	6	43
TOTAL NOTIFICATIONS OF ACTIVE CASES	M	3	2	19	25	32	46	38	53	218
	F	2	5	13	21	19	18	15	15	108
	T	5	7	32	46	51	64	53	68	326

1. Includes active and reactivated cases.

TABLE 4b. - NOTIFICATIONS OF ACTIVE¹ TUBERCULOSIS BY AGE GROUP, SEX AND DIAGNOSIS
BRITISH COLUMBIA, 1970
(All Active Cases)

Diagnosis on Notification	Age-Group (Years)								TOTAL	
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+		
<u>Pulmonary</u> - Primary	M	5	6	1	-	-	-	-	-	12
	F	6	7	-	-	-	-	-	-	13
Minimal	M	-	2	9	11	15	12	17	20	86
	F	-	1	9	14	12	10	2	8	56
Mod. Advanced	M	-	-	6	6	14	17	17	17	77
	F	-	-	4	4	7	6	5	2	28
Far Advanced	M	-	-	4	7	9	14	4	12	50
	F	1	-	3	1	2	3	1	2	13
Silico-Tuberculosis	M	-	-	-	-	-	1	2	4	7
	F	-	-	-	-	-	-	-	-	-
Miliary	M	1	-	-	1	-	-	1	2	5
	F	-	1	-	-	-	-	-	1	2
Pleurisy	M	-	-	1	-	2	2	2	1	8
	F	-	-	1	2	2	2	-	-	7
Total Pulmonary	M	6	8	21	25	40	46	43	56	245
	F	7	9	17	21	23	21	8	13	119
	T	13	17	38	46	63	67	51	69	364
<u>Non-Pulmonary</u>										
Meninges	M	-	-	-	-	1	-	-	-	1
	F	-	-	-	1	-	-	-	-	1
Intestines	M	-	-	-	-	-	-	-	1	1
	F	-	-	1	-	-	1	1	-	3
Bones and Joints	M	-	-	-	2	-	2	2	-	6
	F	-	-	-	2	-	1	1	1	5
Skin	M	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	1	-	2	-	3
Lymphatic System	M	1	2	3	4	3	-	1	3	17
	F	-	-	3	5	3	1	5	3	20
Genito-Urinary System	M	-	-	2	4	2	4	3	-	15
	F	-	-	-	3	4	3	3	1	14
Other Non-Pulmonary	M	-	-	-	1	-	-	-	-	1
	F	-	-	-	-	1	-	1	-	2
Total Non-Pulmonary	M	1	2	5	11	6	6	6	4	41
	F	-	-	4	11	9	6	13	5	48
	T	1	2	9	22	15	12	19	9	89
TOTAL NOTIFICATIONS OF ACTIVE CASES	M	7	10	26	36	46	52	49	60	286
	F	7	9	21	32	32	27	21	18	167
	T	14	19	47	68	78	79	70	78	453

1. Includes active and reactivated cases.

TABLE 5. - BACTERIOLOGICAL STATUS OF ACTIVE CASES OF PULMONARY TUBERCULOSIS
BRITISH COLUMBIA, 1970

	Positive Smear	Positive Culture Only	Negative and Not Examined ¹	TOTAL
<u>TOTAL MALES AND FEMALES</u>				
Number of Cases .	193	133	127	453
Percent	42.6	29.4	28.0	100.0
<u>MALES</u>				
Number of Cases .	138	80	68	286
Percent	48.3	27.9	23.8	100.0
<u>FEMALES</u>				
Number of Cases .	55	53	59	167
Percent	33.0	31.7	35.3	100.0

1. This group consists of 95 cases with negative bacteriology and 32 with no examination.

More than 2/3 of the cases of active pulmonary tuberculosis in British Columbia have been confirmed bacteriologically. More than half of them showed acid-fast bacilli on microscopic examination.

TABLE 6. - EXTENT OF POST-PRIMARY
OR ADULT PULMONARY TUBERCULOSIS
BRITISH COLUMBIA, 1970

Extent of Disease	Number of Cases	Percentage
Minimal	142	45.8
Moderately Advanced	105	33.9
Far Advanced	63	20.3
TOTAL	311	100.0

TABLE 7. - CONTRIBUTION OF REACTIVATIONS TO
TOTAL ACTIVE TUBERCULOSIS CASES BY AGE GROUPS
BRITISH COLUMBIA, 1970

Type of Case	Age-Group (Years)				
	0-24	25-44	45-64	65+	TOTAL
<u>All Active Cases</u>					
Total Cases	80	146	149	78	453
Reactivations I	4	22	36	18	80
Percent of Reactivations I	5.0	15.1	24.2	23.1	17.7
Reactivations II	2	6	12	12	32
Percent of Reactivations II	2.5	4.1	8.1	15.4	7.1
<u>Bacteriologically Confirmed Cases Only</u>					
Total Cases	44	97	117	68	326
Reactivations I	3	12	26	17	58
Percent of Reactivations I	6.8	12.4	22.2	25.0	17.8
Reactivations II	2	6	11	12	31
Percent of Reactivations II	4.5	6.2	9.4	17.6	9.5

Reactivations I: Derived from Inactive tuberculosis cases previously documented active.

Reactivations II: Derived from Presumed Inactive tuberculosis cases.

About one quarter of all active cases of tuberculosis arise in patients with known inactive disease. As expected, this proportion is greatest among the patients over the age of 45.

TABLE 8. - ACTIVE TUBERCULOSIS ARISING IN PERSONS
IN VARIOUS DIAGNOSTIC CATEGORIES ROUTINELY FOLLOWED UP
BY TUBERCULOSIS CONTROL CLINICS
BRITISH COLUMBIA, 1970

Diagnosis	Number in this Category in TB Control Files	Number of Cases	Risk
<u>Reactivation I</u>			
Inactive Tuberculosis (Previously Documented) . . .	11,150*	80	1:139
<u>Reactivation II</u>			
Presumed Tuberculosis Inactive.	12,800*	32	1:400
Pneumoconiosis	775	4	1:194
Pulmonary Fibrosis			
Localized and Diffuse	5,738	14	1:410
Old Pleurisy	4,928	15	1:329
Healed Primary Complex	7,482	8	1:935

* Estimated

For patients with inactive tuberculosis, presumed tuberculosis inactive, and pulmonary fibrosis, the risk of developing active disease is high.

TABLE 9. - TUBERCULIN STATUS OF HOUSEHOLD CONTACTS
AND THE SOURCE OF INFECTION, BY AGE GROUPS
BRITISH COLUMBIA, 1970

	Age-Group (Years)								TOTAL
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	
<u>Positive Smear,</u> <u>Positive Culture</u>									
Total Contacts	56	122	95	56	65	59	29	31	513 ²
Tuberculin Tested	49	114	79	46	48	45	15	16	412
Positive	8	44	32	28	37	33	7	7	196
Percent Positive	16.3	38.6	40.5	60.9	77.1	73.3	46.7	43.8	47.6
<u>Positive Culture Only</u> ¹									
Total Contacts	22	66	52	36	35	29	23	21	284 ³
Tuberculin Tested	21	61	41	20	18	17	17	7	202
Positive	3	9	9	10	15	7	9	2	64
Percent Positive	14.3	14.8	22.0	50.0	83.3	41.2	52.9	28.6	31.7
<u>Negative Smear,</u> <u>Negative Culture</u>									
Total Contacts	15	44	22	18	16	13	5	5	138 ⁴
Tuberculin Tested	15	39	15	15	12	10	3	2	111
Positive	-	7	8	5	5	5	1	1	32
Percent Positive	-	18.0	53.3	33.3	41.7	50.0	33.3	50.0	28.3

1. Includes positive culture, negative or no smear.

2. Excludes 23 cases age not given.

3. Excludes 21 cases age not given.

4. Excludes 3 cases age not given.

Contacts of those patients with active tuberculosis who excrete large enough numbers of bacilli to be visible on microscopic smear show a higher rate of positive reactors than do the contacts of patients with only positive culture. Nevertheless, less than half of the household contacts of smear positive cases become infected.

TABLE 10. - INCIDENCE OF ACTIVE TUBERCULOSIS AMONG HOUSEHOLD CONTACTS
AND AMONG TUBERCULIN POSITIVE HOUSEHOLD CONTACTS
BRITISH COLUMBIA, 1970

Source Bacteriology ¹	Under 25			25 & Over			TOTAL		
	Total Contacts	Number Active	Morbidity Percent	Total Contacts	Number Active	Morbidity Percent	Total Contacts	Number Active	Morbidity Percent
<u>Positive Smear & Culture</u>									
All Contacts . .	273	9	3.3	240	6	2.5	513	15	2.9
Tuberculin Pos. Contacts . . .	84	8	9.5	112	4	3.6	196	12	6.1
<u>Positive Culture Only</u>									
All Contacts . .	140	2	1.4	144	-	-	284	2	0.7
Tuberculin Pos. Contacts . . .	21	2	9.5	43	-	-	64	2	3.1
<u>Negative Smear & Culture</u>									
All Contacts . .	81	-	-	57	-	-	138	-	-
Tuberculin Pos. Contacts . . .	15	-	-	17	-	-	32	-	-

Excludes active contact cases not tuberculin tested.

1. This table excludes cases not bacteriologically examined and for whom age was not given.

2. Excludes 23 cases age not given.

3. Excludes 21 cases age not given.

4. Excludes 3 cases age not given. (see Table 9)

The morbidity among household contacts of cases of active tuberculosis is high. It is highest among those exposed to sources with positive sputum smears.

TABLE 11

There has been a minor fluctuation of the percentage of positive reactors in all age groups compared with 1969 findings. This may in part reflect the fact that testing in 1970 was done in different geographical areas than in the two previous years.

TABLE 12

As in previous years the positive reactions tend to be smaller among the persons under the age of 20 and those over 50 than those seen between 20 and 49.

TABLE 11. - TUBERCULIN TESTING RESULTS BY AGE GROUP, SEX AND PERCENT POSITIVE
BRITISH COLUMBIA, 1970

Age Group	Total Tested			Number Positive			Percent Positive		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 9 . .	10,470	10,120	20,590	123	116	239	1.2	1.1	1.2
10 - 19 . .	15,425	16,185	31,610	424	530	954	2.7	3.3	3.0
20 - 29 . .	8,198	9,436	17,634	965	1,190	2,155	11.8	12.6	12.2
30 - 39 . .	5,917	6,758	12,675	1,472	1,411	2,883	24.9	20.9	22.7
40 - 49 . .	4,776	5,735	10,511	1,868	1,479	3,347	39.1	25.8	31.8
50 - 59 . .	3,486	4,209	7,695	1,586	1,096	2,682	45.5	26.0	34.9
60 - 69 . .	2,332	2,402	4,734	1,027	723	1,750	44.0	30.1	37.0
70 & Over .	1,574	1,577	3,151	586	369	955	37.2	23.4	30.3
Not Stated.	384	414	798	23	27	50	6.0	6.5	6.3
TOTAL .	52,562	56,836	109,398	8,074	6,941	15,015	15.4	12.2	13.7

Excludes 43 cases for which sex was not stated.

TABLE 12. - TUBERCULIN TESTING RESULTS BY AGE GROUP AND SIZE OF REACTION,
BRITISH COLUMBIA, 1970

Age Group	Size of Reaction (mm)							
	0	1-5	6-10	11-15	16-20	21-25	26+	TOTAL
0 - 9 . .	20,187	178	101	71	37	14	16	20,604
10 - 19 . .	30,367	299	361	231	225	64	73	31,620
20 - 29 . .	15,306	179	713	644	420	186	193	17,641
30 - 39 . .	9,624	169	650	781	652	302	499	12,677
40 - 49 . .	7,025	141	703	857	752	406	629	10,513
50 - 59 . .	4,852	163	630	720	638	302	392	7,697
60 - 69 . .	2,825	162	505	506	383	159	197	4,737
70 & Over .	2,092	105	362	297	153	71	73	3,153
Not Stated.	740	9	10	14	14	3	9	799
TOTAL .	93,018	1,405	4,035	4,121	3,274	1,507	2,081	109,441
Percent . .	85.0	1.3	3.7	3.7	3.0	1.4	1.9	

TUBERCULOSIS IN THE HEALTH UNIT AREAS

SECTION "B" (Tables 13 - 14)

In this section the mortality rate and the incidence of tuberculosis in 1970 is shown for individual health units.

Table 13

The number of deaths from tuberculosis in 1970 is too small to serve as a good epidemiological index. The average annual mortality rate in 1961-1970 shows the highest rates in Cariboo, Skeena, and South Okanagan.

Table 14

There are noticeable differences between the incidence of active tuberculosis in different health units. As this disease is more common among Indians, these differences reflect to an appreciable extent the varying proportion of Indians in the population.

TABLE 13. - TUBERCULOSIS MORTALITY BY HEALTH UNIT OF RESIDENCE
 BRITISH COLUMBIA, 1961-1970
 (Rates per 100,000 Population)

Health Unit	Total Number of Deaths 1961-1970	Number of Deaths 1970	Mean Annual Rate 1961-1970	Rate 1970
East Kootenay	8	-	1.8	-
Selkirk	1	-	0.4	-
West Kootenay	3	-	0.7	-
North Okanagan	15	4	3.2	7.3
South Okanagan	25	2	3.6	2.6
South Central	19	2	3.2	2.8
Upper Fraser Valley	8	2	1.4	2.7
Central Fraser Valley	7	-	2.0	-
Boundary	16	2	1.2	1.4
Simon Fraser	14	-	1.4	-
Coast-Garibaldi	2	-	0.6	-
Central Vancouver Island	17	1	1.7	0.9
Upper Island	9	2	2.0	3.9
Cariboo	14	1	4.6	2.7
Skeena	21	1	4.2	1.4
Peace River	6	-	1.5	-
Northern Interior	7	2	1.1	2.4
Metropolitan Board of Health of Greater Vancouver	238	23	3.5	3.0
Greater Victoria Metropolitan Board of Health	36	3	2.0	1.5
Areas Not Served by Health Units.	22	2	-	-
TOTAL	488	47	2.7	2.2

Rates are based on estimated populations for the areas shown.

TABLE 14. - ACTIVE TUBERCULOSIS¹ BY HEALTH UNIT OF RESIDENCE
FOR BACILLARY CASES AND ALL ACTIVE CASES
BRITISH COLUMBIA, 1970

Health Unit	Bacillary Only		All Active Cases			
			Total Population		Other Than Indian	
	Number	Rate ²	Number	Rate ²	Number	Rate ²
East Kootenay	6	12.1	7	14.1	6	12.2
Selkirk	2	7.9	3	11.8	3	11.8
West Kootenay	1	2.2	1	2.2	1	2.2
North Okanagan	5	9.2	6	11.0	5	9.3
South Okanagan	13	17.0	16	17.0	13	17.2
South Central	9	12.6	13	18.2	9	13.2
Upper Fraser Valley	4	5.4	9	12.2	6	8.2
Central Fraser Valley	6	9.6	12	19.2	11	17.9
Boundary	11	8.0	16	11.6	15	10.9
Simon Fraser	14	11.4	17	13.9	16	13.1
Coast Garibaldi	4	10.2	6	15.3	5	13.3
Central Vancouver Island	15	13.4	16	14.2	12	11.0
Upper Island	4	7.8	7	13.6	7	14.1
Cariboo	6	16.0	10	26.7	5	14.1
Skeena	17	23.9	22	31.0	11	16.9
Peace River	12	25.0	17	35.5	10	21.2
Northern Interior	9	10.7	20	23.8	13	15.8
Metropolitan Board of Health of Greater Vancouver	155	20.5	210	27.8	202	26.8
Greater Victoria Metropolitan Board of Health	26	12.8	34	16.7	32	15.8
Areas Not Served by Health Units.	7	-	11	-	10	-
TOTAL	326	15.3	453	21.2	392	18.6

1. Active and Reactivated cases.

2. Rates per 100,000 estimated population.

TUBERCULOSIS IN VARIOUS RACIAL GROUPS

SECTION "C" (Tables 15-17)

Tuberculosis rates are at least five times greater among the Indian population than among the white population. This is shown by every epidemiological index such as mortality, incidence of active tuberculosis and prevalence of inactive tuberculosis. The problem among the British Columbians of Chinese origin now exceeds that of the Indians.

Table 15

Although the mortality rate is no longer a very precise epidemiological index the differences between races are both large and consistent over the past 10 years. Tuberculosis mortality rate is considerably higher among native Indians and the Chinese population than in the white group.

Table 16

The incidence of active tuberculosis among the Indians is gradually decreasing but in the Chinese population it is increasing due to large numbers of immigrants. The incidence among the white people born outside Canada is two times greater than among those born in Canada. Undoubtedly some of these differences are a reflection of varied age structures of various groups.

TABLE 15. - TUBERCULOSIS MORTALITY FOR THE TOTAL POPULATION,
THE INDIAN, CHINESE AND JAPANESE POPULATION,
AND THE POPULATION EXCLUDING INDIANS AND ORIENTALS
BRITISH COLUMBIA, 1961-1970

(Rates per 100,000 Population)*

Racial Origin	1961-1965		1966-1970		1970	
	Total Number	Average Annual Rate	Total Number	Average Annual Rate	Total Number	Average Annual Rate
Total Province	273	3.1	212	2.1	47	2.2
Indians	45	21.9	35	15.7	5	10.3
Excluding Indians .	218	2.7	177	1.8	42	2.0
Chinese	27	19.3	24	17.0	5	17.1
Japanese	5	9.0	4	8.3	-	-
Excluding Indians & Orientals	186	2.3	149	1.6	37	1.8

* Rates per 100,000 population based on estimated population only.

TABLE 16. - INCIDENCE OF ACTIVE¹ TUBERCULOSIS
IN CANADIAN AND NON-CANADIAN BORN PERSONS
BRITISH COLUMBIA, 1970

Ethnic Group and Racial Origin	Bacteriologically Confirmed Cases		Total Active Tuberculosis	
	Number of Cases	Rate ²	Number of Cases	Rate ²
Canadian Born	186	11.6	270	16.8
Non-Canadian Born	137	25.6	183	34.3
<u>Total</u>				
White and Others	249	12.2	346	16.9
Indian	44	90.3	61	125.3
Chinese	31	97.8	43	135.7
Japanese	2	15.2	3	22.7

1. Active and reactivated cases.

2. Rates per 100,000 population based on estimated population only.

TABLE 17. - INCIDENCE OF ACTIVE TUBERCULOSIS AMONG THE INDIAN POPULATION
 BY AGE GROUP AND SEX, BRITISH COLUMBIA, 1970
 (Rates per 100,000 Population)

Age Group	M a l e				F e m a l e				T O T A L			
	Bacillary Cases		All Active Cases		Bacillary Cases		All Active Cases		Bacillary Cases		All Active Cases	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0 - 4 . .	2	52.5	3	78.8	2	53.4	4	106.7	4	52.9	7	92.6
5 - 14 . .	2	27.4	2	27.4	1	13.4	2	26.8	3	20.2	4	27.0
15 - 24 . .	4	83.1	6	124.6	6	131.6	8	175.5	10	106.6	14	149.3
25 - 34 . .	5	161.6	7	226.2	4	147.8	6	221.6	9	155.1	13	224.0
35 - 44 . .	1	47.9	3	143.6	6	328.2	8	437.6	7	178.7	11	280.8
45 - 54 . .	1	72.7	2	145.3	1	84.7	1	84.7	2	78.2	3	192.8
55 - 64 . .	1	99.3	1	99.3	2	246.9	2	246.9	3	165.1	3	165.1
65 & Over .	4	370.4	4	370.4	2	234.1	2	234.1	6	310.2	6	310.2
TOTAL .	20	79.7	28	111.6	24	101.6	33	139.7	44	90.3	61	125.3

Rates per 100,000 population estimated for 1970

TABLE 18. - PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AND BACILLARY CASES
BRITISH COLUMBIA, 1970
(Indians Only)

Diagnosis	Bacillary Only		All Active Cases		Bacillary as Percent of all Active Cases
	Number	Percent	Number	Percent	
<u>Pulmonary</u>					
Primary	4	9.1	9	14.8	44.4
Minimal	11	25.0	14	23.0	78.6
Moderately Advanced . . .	13	29.5	15	24.6	86.7
Far Advanced	7	15.9	8	13.2	87.5
Pleurisy	1	2.3	3	4.9	33.3
Miliary	1	2.3	1	1.6	100.0
Silico-TB	-	-	-	-	-
<u>Non-Pulmonary</u>					
Mininges & Central Nervous System	-	-	1	1.6	-
Gastro Intestinal	-	-	-	-	-
Bones and Joints	-	-	-	-	-
Skin & Subcutaneous Cell Tissue	-	-	1	1.6	-
Lymphatic System	4	9.1	6	9.8	66.7
Genito-Urinary System . . .	3	6.8	3	4.9	100.0
Other Organs (eye, ear, etc.)	-	-	-	-	-
TOTAL	44	100.0	61	100.0	72.1

