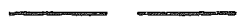


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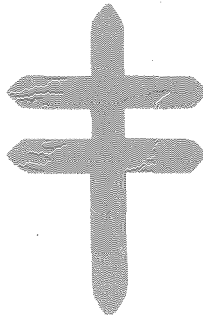
PROVINCE OF BRITISH COLUMBIA



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 analyzes 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.

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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 1968) is still high (25.9 per 100,000) but is lower than in 1966 and 1967 (30.6 and 31.1 per 100,000 respectively). 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, 1968 AND AVERAGE 1964 - 1968
 (Rate Per 100,000 Population)

Year	Age Group (Years) 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.
1964 - 1968																		
Total	1	1	-	1	3	3	2	10	14	7	24	18	56	10	83	18	183	68
Average Rate	*	*	-	*	*	*	*	1.8	2.5	1.2	5.1	3.9	18.3	3.3	27.9	5.6	3.9	1.5
1968																		
Total	-	-	-	-	-	-	1	3	1	2	3	6	15	2	11	4	31	17
Rate	-	-	-	-	-	-	0.8	2.5	0.8	1.6	3.0	6.0	23.1	3.1	18.5	5.9	3.0	1.7

* Less than 0.01 per 100,000 population

There were 48 deaths assigned to tuberculosis in 1968 in British Columbia. 32 - 66.7% of them occurred in people over 60 years of age. All but 4 of those 48 deaths were due to Pulmonary Tuberculosis; 2 were due to Genito-Urinary Tuberculosis, 1 to Tuberculous Meningitis, and 1 to Disseminated Tuberculosis.

TABLE 2. - INCIDENCE OF ACTIVE TUBERCULOSIS, BY AGE GROUP AND SEX
 BRITISH COLUMBIA, 1968
 (Rates per 100,000 Population¹)

Age Group	M A L E S				F E M A L E S				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 . . .	5	5.4	12	13.0	3	3.4	6	6.9	8	4.5	18	10.0
5 - 14 . . .	7	3.3	28	13.2	11	5.4	19	9.4	18	4.3	47	11.4
15 - 24 . . .	15	8.9	20	11.9	18	11.2	27	16.8	33	10.0	47	14.3
25 - 34 . . .	25	18.9	30	22.7	26	20.9	36	28.9	51	19.9	66	25.7
35 - 44 . . .	39	29.8	51	39.0	21	17.1	31	25.2	60	23.6	82	32.3
45 - 54 . . .	55	49.7	68	61.4	14	12.2	21	18.3	69	30.6	89	39.5
55 - 64 . . .	41	49.6	54	65.3	9	11.2	14	17.4	50	30.7	68	41.7
65 & Over . .	68	77.4	86	97.8	9	9.3	15	15.4	77	41.6	101	54.6
Not Stated .	1	-	1	-	-	-	-	-	1	-	1	-
TOTAL .	256	25.2	350	34.4	111	11.2	169	17.1	367	18.3	519	25.9

1. Rates per 100,000 Population estimated for 1968.

There were 519 active cases of tuberculosis diagnosed in British Columbia in 1968 giving a rate of 25.9 per 100,000. 367 (18.3 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 3

Almost 85 percent of all the active cases recorded in 1968 were pulmonary. Among the non-pulmonary cases by far the largest numbers are those with tuberculosis of the lymphatic system (cervical adenitis) and the genito-urinary system. There were 4 cases of tuberculous meningitis during 1968. The high proportion of bacteriological confirmation in many of the diagnostic groups is gratifying.

TABLE 3. - PRINCIPAL DIAGNOSIS OF ACTIVE TUBERCULOSIS, AND BACILLARY CASES
BRITISH COLUMBIA, 1968

Diagnosis	Bacillary Only		All Active Cases		Bacillary as Percent of all Active Cases
	Number	Percent	Number	Percent	
<u>Pulmonary</u>					
Primary	17	4.6	52	10.0	32.7
Minimal	107	29.2	154	29.7	69.5
Moderately Advanced . .	118	32.2	136	26.2	86.8
Far Advanced	50	13.6	53	10.2	94.3
Pleurisy	15	4.1	26	5.0	57.7
Miliary of Lung	8	2.2	12	2.3	66.7
Silico-TB	6	1.6	7	1.3	85.7
<u>Non-Pulmonary</u>					
Meninges & Central Nervous System	3	0.8	4	0.8	75.0
Gastro Intestinal	-	-	2	0.4	-
Bones and Joints	3	0.8	7	1.3	42.9
Skin & Subcutaneous Cell Tissue	1	0.3	1	0.2	100.0
Lymphatic System	9	2.4	25	4.8	36.0
Genito-Urinary System . .	29	7.9	38	7.4	76.3
Other Organs (eye, ear, etc.)	1	0.3	2	0.4	50.0
TOTAL	367	100.0	519	100.0	70.7

TABLE 4. - NOTIFICATIONS OF ACTIVE¹ TUBERCULOSIS BY AGE GROUP, SEX AND DIAGNOSIS
BRITISH COLUMBIA, 1968

Diagnosis on Notification	Age Group (Years)											TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60-69	70+	
<u>Pulmonary</u> - Primary M	11	17	-	1	1	-	1	-	-	1	-	32
F	6	7	5	1	1	-	-	-	-	-	-	20
Minimal M	-	-	1	3	3	-	18	13	23	19	20	100
F	-	-	4	4	6	6	9	6	9	7	3	54
Mod. Advanced . M	-	-	2	-	2	1	14	17	23	14	23	97 ²
F	-	-	-	2	5	5	11	8	3	3	2	39
Far Advanced . M	-	-	-	1	1	2	5	8	10	4	9	40
F	-	-	-	1	3	1	4	2	1	-	1	13
Silico-tuberculosis . . . M	-	-	-	-	-	-	-	1	1	4	1	7
F	-	-	-	-	-	-	-	-	-	-	-	-
Miliary M	1	1	1	-	-	-	1	-	-	1	3	8
F	-	-	-	-	2	-	-	-	2	-	-	4
Pleurisy M	-	3	1	2	2	-	2	3	2	2	2	19
F	-	-	-	1	1	-	1	3	-	-	1	7
Total Pulmonary . . M	12	21	5	7	9	3	41	42	59	45	58	303
F	6	7	9	9	18	12	25	19	15	10	7	137
T	18	28	14	16	27	15	66	61	74	55	65	440

<u>Non-Pulmonary</u>														
Meninges	M	-	-	-	-	-	-	1	1	-	-	-	2	
	F	-	-	-	-	-	-	1	1	-	-	-	2	
Intestines	M	-	-	-	-	-	-	-	-	-	-	-	-	
	F	-	-	-	-	-	-	1	-	1	-	-	2	
Bones and Joints	M	-	1	-	-	-	-	2	-	-	-	-	3	
	F	-	-	-	-	-	1	2	-	-	-	1	4	
Skin	M	-	-	-	-	-	-	-	-	-	-	-	-	
	F	-	-	-	-	-	1	-	-	-	-	-	1	
Lymphatic System	M	-	1	-	-	2	4	4	1	-	1	-	13	
	F	-	1	2	-	-	2	2	3	1	1	-	12	
Genito-Urinary System	M	-	-	-	-	1	1	4	8	6	5	3	28	
	F	-	-	-	-	-	3	3	3	-	-	1	10	
Other Non-Pulmonary	M	-	-	-	1	-	-	-	-	-	-	-	1	
	F	-	-	-	-	-	-	1	-	-	-	-	1	
Total Non-Pulmonary		M	-	2	-	1	3	5	11	10	6	6	3	47
	F	-	1	2	-	-	7	10	7	2	1	2	32	
	T	-	3	2	1	3	12	21	17	8	7	5	79	
TOTAL NOTIFICATIONS OF ACTIVE CASES		M	12	23	5	8	12	8	52	52	65	51	61	350
	F	6	8	11	9	18	19	35	26	17	11	9	169	
	T	18	31	16	17	30	27	87	78	82	62	70	519	

1. Includes active and reactivated cases.

2. Includes 1 male, age unknown.

TABLE 5. - BACTERIOLOGICAL STATUS OF ACTIVE CASES OF PULMONARY TUBERCULOSIS
BRITISH COLUMBIA, 1968

	Positive Smear	Positive Culture Only	Negative and Not Examined	TOTAL
<u>TOTAL MALES AND FEMALES</u>				
Number of Cases .	159	163	118 ¹	440
Percent	36.2	37.0	26.8	100.0
<u>MALES</u>				
Number of Cases .	115	107	80	302
Percent	38.1	35.4	26.5	100.0
<u>FEMALES</u>				
Number of Cases .	44	56	38	138
Percent	31.9	40.6	27.5	100.0

1. This group consists of 80 cases with negative bacteriology and 38 with no examination.

About 2/3 of the cases of active pulmonary tuberculosis in British Columbia have been confirmed bacteriologically. Half of them showed acid-fast bacilli on microscopic examination, while half were positive on culture only.

TABLE 6. - EXTENT OF POST-PRIMARY
OR ADULT PULMONARY TUBERCULOSIS
BRITISH COLUMBIA, 1968

Extent of Disease	Number of Cases	Percentage
Minimal	154	44.8
Moderately Advanced	136	39.7
Far Advanced	53	15.5
TOTAL	343	100.0

The post primary pulmonary tuberculosis is the most important form of tuberculosis. The fact that the percentage of minimal cases is greater than the percentage of far advanced cases is a measure of an earlier diagnosis.

TABLE 7. - CONTRIBUTION OF REACTIVATIONS TO
TOTAL ACTIVE TUBERCULOSIS CASES BY AGE GROUPS
BRITISH COLUMBIA, 1968

Type of Case	Age-Group (Years)				TOTAL
	0-19	20-39	40-59	60 and Over	
<u>All Active Cases</u>					
Total Cases	82	144	160	132	519 ¹
Reactivations	1	28	47	32	108
Percent of Reactivations	1.2	19.4	27.8	24.2	20.8
<u>Bacteriologically Confirmed Cases Only</u>					
Total Cases	37	110	119	100	367 ¹
Reactivations	1	21	28	25	75
Percent of Reactivations	2.7	19.1	23.5	25.0	20.4

1. Includes 1 age not stated.

About one fifth 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 40.

TABLE 8. - ACTIVE TUBERCULOSIS ARISING IN PERSONS
IN VARIOUS DIAGNOSTIC CATEGORIES ROUTINELY FOLLOWED UP
BY TUBERCULOSIS CONTROL CLINICS
BRITISH COLUMBIA, 1968

Diagnosis	Number in this Category in TB Control Files	Number of Cases	Risk
<u>Reactivation I</u>			
Inactive Tuberculosis (Previously Documented) . .	11,609*	64	1:181
<u>Reactivation II</u>			
Inactive Tuberculosis (Not Previously Documented)	8,303*	25	1:332
Apical Scarring	4,794	19	1:252
Pneumoconiosis	832	6	1:139
Pulmonary Fibrosis			
Localized and Diffuse	4,891	14	1:349
Old Pleurisy	5,408	8	1:676
Healed Primary Complex	7,768	8	1:971

* Estimated

Patients with inactive tuberculosis, apical scarring and pneumoconiosis prove a very fruitful source of active cases. The risk in these cases is so appreciable that chemoprophylaxis may be indicated. In other diagnostic categories the risk is lower.

TABLE 9. - TUBERCULIN STATUS OF HOUSEHOLD CONTACTS AND THE SOURCE OF INFECTION, BY AGE GROUPS
BRITISH COLUMBIA, 1968

	Age Group (Years)							TOTAL
	0-4	5-9	10-14	15-19	20-29	30-39	40 & Over	
<u>Positive Smear, Positive Culture</u>								
Total Contacts	67	66	50	43	67	47	113	453 ²
Tuberculin Tested	64	66	45	33	55	30	77	370
Positive	23	29	25	20	26	17	41	181
Percent Positive	35.9	43.9	55.6	60.6	47.3	56.7	53.2	48.9
<u>Positive Culture Only¹</u>								
Total Contacts	52	59	63	36	36	46	99	391 ³
Tuberculin Tested	47	54	55	28	25	28	56	293
Positive	7	7	19	6	6	15	30	90
Percent Positive	14.9	13.0	34.5	21.4	24.0	53.6	53.6	30.7
<u>Negative Smear, Negative Culture</u>								
Total Contacts	23	25	32	21	18	23	49	191 ⁴
Tuberculin Tested	23	25	31	16	15	18	35	163
Positive	-	4	8	4	8	8	18	50
Percent Positive	-	16.0	25.8	25.0	53.3	44.4	51.4	30.7

1. Includes positive culture, negative or no smear.
2. Excludes 11 cases age not given.

3. Excludes 19 cases age not given.
4. Excludes 12 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 much higher rate of positive reactors than do the contacts of patients with only positive culture or those with negative bacteriological findings. Nevertheless, only 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, 1968

Source Bacteriology ¹	Under 20			Over 20			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 .	226	36	15.9	227	4	1.8	453 ³	40	8.8
Tuberculin Pos Contacts . .	97	34	35.1	84	3	3.6	181	37	20.4
<u>Positive Culture Only²</u>									
All Contacts .	204	4	2.0	187	2	1.1	391 ⁴	6	1.5
Tuberculin Pos Contacts . .	33	4	12.1	57	1	1.8	90	5	5.6
<u>Negative Smear & Culture</u>									
All Contacts .	101	-	-	90	-	-	191 ⁵	-	-
Tuberculin Pos Contacts . .	16	-	-	34	-	-	50	-	-

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

2. Positive culture, negative or no smear

3. Excludes 11 cases age not given.

4. Excludes 19 cases age not given.

5. Excludes 12 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 decrease of the percentage of positive reactors in all age groups compared with 1967 findings, particularly in those over the age of 20. This may however, merely reflect the fact that testing in 1968 was done in different geographical areas than in 1967.

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, 1968

Age Group	Total Tested			Number Positive			Percent Positive		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 9	15,233	14,719	29,952	166	172	338	1.1	1.2	1.1
10 - 19	18,964	20,188	39,152	597	630	1,227	3.1	3.1	3.1
20 - 29	6,901	9,487	16,388	780	1,156	1,936	11.3	12.2	11.8
30 - 39	6,568	8,133	14,701	1,700	1,767	3,467	25.9	21.7	23.6
40 - 49	5,284	6,441	11,725	2,206	1,693	3,899	41.7	26.3	33.3
50 & Over	8,319	8,917	17,236	3,731	2,619	6,350	44.8	29.4	36.8
Not Stated	368	457	825	57	47	104	15.5	10.3	12.6
TOTAL	61,637	68,342	129,979	9,237	8,084	17,321	15.0	11.8	13.3

Excludes 246 cases for which sex was not stated.

TABLE 12. - TUBERCULIN TESTING RESULTS BY AGE GROUP AND SIZE OF REACTION,
BRITISH COLUMBIA, 1968

Age Group	Size of Reaction								TOTAL
	0	1-5	6-10	11-15	16-20	21-25	26+	Not Stated	
0 - 9	29,158	553	164	93	46	15	20	4	30,053
10 - 19	37,306	704	486	285	231	111	117	1	39,241
20 - 29	14,284	164	561	620	349	179	230	8	16,395
30 - 39	10,999	226	768	956	704	370	673	17	14,713
40 - 49	7,549	276	874	1,102	736	425	765	2	11,729
50 & Over	10,168	713	2,184	1,930	1,025	526	692	10	17,248
Not Stated	722	15	24	26	28	7	24	-	846
TOTAL	110,186	2,651	5,061	5,012	3,119	1,633	2,521	42	130,225
Percent	84.6	2.0	3.9	3.9	2.4	1.3	1.9	*	100

* Less than 0.05 percent.

TUBERCULOSIS IN THE HEALTH UNIT AREAS

SECTION "B" (Tables 13 - 15)

In this section the mortality rate, the incidence of tuberculosis in 1968 and the prevalence of inactive tuberculosis is shown for individual health units.

Table 13

The number of deaths from tuberculosis in 1967 is too small to serve as a good epidemiological index. The average annual mortality rate in 1964-1968 shows the highest rates in Cariboo, Skeena, Peace River and remote areas not served by Health Units.

Table 14

There are appreciable 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 15

The overall prevalence of inactive tuberculosis in British Columbia in 1968 was 99.2 per 100,000. It was almost 15 times greater among Indians than among the non-Indian population. As reactivations have become so important in the overall tuberculosis picture the differences in the rate seen in different health unit areas are of importance.

TABLE 13. - TUBERCULOSIS MORTALITY BY HEALTH UNIT OF RESIDENCE¹

BRITISH COLUMBIA, 1964-1968

(Rates per 100,000 Population)

Health Unit	Total Number of Deaths 1964-1968	Number of Deaths 1968	Mean Annual Rate 1964-1968	Rate 1968
East Kootenay	4	-	2.2	-
Selkirk	3	2	2.4	8.0
West Kootenay	2	1	1.1	2.2
South Okanagan	13	3	4.7	4.1
North Okanagan	8	2	3.4	4.0
South Central	10	-	4.0	-
Cariboo	8	2	6.1	5.7
Northern Interior	4	-	1.2	-
Upper Fraser Valley	4	-	1.7	-
Boundary	8	1	1.4	0.8
Metropolitan Board of Health of Greater Vancouver	125	25	3.7	3.5
Simon Fraser	5	1	1.3	0.9
Central Fraser	3	1	1.4	1.7
Coast-Garibaldi	4	2	3.1	5.4
Skeena	13	-	5.8	-
Peace River	5	1	2.4	2.3
Greater Victoria Metropolitan Board of Health	20	4	2.5	2.1
Central Vancouver Island	9	2	1.8	1.9
Upper Island	6	1	3.2	2.0
Areas Not Served by Health Units .	5	1 ²	*	*
TOTAL	258	48	2.8	2.4

1. In order to achieve comparability between years, all numbers and rates are shown for the health unit areas as defined in 1968.

2. Nursing Area - Ocean Falls

* Exact population for these areas not available.

TABLE 14. - ACTIVE TUBERCULOSIS¹ BY HEALTH UNIT OF RESIDENCE
FOR BACILLARY CASES AND ALL ACTIVE CASES
BRITISH COLUMBIA, 1968

Health Unit	Bacillary Only		All Active Cases	
	Number	Rate ²	Number	Rate ²
East Kootenay	2	4.3	7	15.0
Selkirk	5	19.9	5	19.9
West Kootenay	3	6.7	4	9.0
South Okanagan	11	15.0	13	17.8
North Okanagan	5	9.9	7	13.8
South Central	8	12.0	10	15.0
Cariboo	11	31.5	18	51.5
Northern Interior	17	22.1	25	32.6
Upper Fraser Valley	7	10.9	11	17.1
Boundary	11	8.7	23	18.2
Metropolitan Board of Health of Greater Vancouver	153	21.1	198	27.3
Simon Fraser	12	11.2	21	19.5
Central Fraser	9	15.4	14	23.9
Coast Garibaldi	6	16.2	8	21.6
Skeena	29	46.1	39	62.0
Peace River	20	45.7	26	59.4
Greater Victoria Metropolitan Board of Health .	25	13.1	44	23.1
Central Vancouver Island	20	18.7	26	24.4
Upper Island	8	15.8	13	25.7
Areas Not Served by Health Units ³	5	32.2	7	45.1
TOTAL	367	18.3	519	25.9

1. Active and Reactivated cases.
2. Rates per 100,000 estimated population.
3. Includes 1 address unknown and 4 ex-province.

TABLE 15. - KNOWN CASES AND RATES OF INACTIVE¹ TUBERCULOSIS BY HEALTH UNIT
BRITISH COLUMBIA, 1968

Health Unit	Pulmonary			Non-pulmonary			TOTAL		
	Excluding Indians	Indians ² Only	Total	Excluding Indians	Indians ³ Only	Total	Excluding Indians	Indians ⁴ Only	Total
<u>East Kootenay, Cranbrook</u>									
Number	256	59	315	16	3	19	272	62	334
Total Rate			67.4			4.1			71.5
<u>Selkirk, Nelson</u>									
Number	172	1	173	13	1	14	185	2	187
Total Rate			68.8			5.6			74.3
<u>West Kootenay, Trail</u>									
Number	220	3	223	19	-	19	239	3	242
Total Rate			50.0			4.3			54.3
<u>South Okanagan, Kelowna</u>									
Number	476	61	537	53	5	58	529	66	595
Total Rate			73.5			7.9			81.4
<u>North Okanagan, Vernon</u>									
Number	281	78	359	17	5	22	298	83	381
Total Rate			70.1			4.3			75.1
<u>South Central, Kamloops</u>									
Number	419	319	738	28	31	59	447	350	797
Total Rate			111.0			8.9			119.9
<u>Cariboo, Williams Lake</u>									
Number	195	262	457	10	23	33	205	285	490
Total Rate			136.9			9.4			140.3
<u>Northern Interior, Prince George</u>									
Number	246	250	496	22	26	48	268	276	544
Total Rate			64.8			6.3			71.0

Table 15. - (Continued)

Health Unit	Pulmonary			Non-pulmonary			TOTAL		
	Excluding Indians	Indians ² Only	Total	Excluding Indians	Indians ³ Only	Total	Excluding Indians	Indians ⁴ Only	Total
<u>Upper Fraser Valley, Chilliwack</u>									
Number	371	94	465	35	13	48	406	107	513
Total Rate			72.3			7.5			79.7
<u>Boundary, Cloverdale</u>									
Number	742	17	759	57	4	61	799	21	820
Total Rate			60.2			4.8			65.0
<u>Metropolitan Board of Health of Greater Vancouver</u>									
Number	6,967	155	7,122	532	22	554	7,499	177	7,676
Total Rate			98.2			7.6			105.9
<u>Simon Fraser, New Westminster</u>									
Number	934	20	954	69	6	75	1,003	26	1,029
Total Rate			88.6			7.0			95.6
<u>Central Fraser, Mission</u>									
Number	390	99	489	30	11	41	420	110	530
Total Rate			83.6			7.0			90.6
<u>Coast-Garibaldi, Powell River</u>									
Number	224	125	349	20	12	32	244	137	381
Total Rate			94.4			8.7			103.0
<u>Skeena, Prince Rupert</u>									
Number	363	825	1,188	30	80	110	393	905	1,298
Total Rate			189.0			17.5			206.5

Peace River,
Dawson Creek

Number	189	115	304	13	12	25	202	127	329
Total Rate			69.4			5.7			75.2

Greater Victoria Metro-
politan Board of Health

Number	1,545	65	1,610	124	5	129	1,669	70	1,739
Total Rate			84.5			6.8			91.2

Central Vancouver Island,
Nanaimo

Number	680	263	943	87	37	124	767	300	1,067
Total Rate			88.3			11.6			100.0

Upper Island, Courtenay

Number	286	162	448	35	11	46	321	173	494
Total Rate			88.5			9.1			97.6

School Districts Not
Served by Health Units

Number	36	154	190	4	15	19	40	169	209
Total Rate			138.0			13.8			151.8

Unorganized⁵

Number	15	219	234	1	22	23	16	241	257
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TOTAL

Number	15,007	3,346	18,353	1,215	344	1,559	16,222	3,690	19,912
Total Rate	75.9	1106.2	91.4	6.1	113.7	7.8	82.1	1220.0	99.2

1. Excludes 23 Indian and 63 Non-Indian quiescent cases.
2. Includes 470 Indians under the supervision of the Provincial Division of Tuberculosis Control.
3. Includes 71 Indians under the supervision of the Provincial Division of Tuberculosis Control.
4. Includes 541 Indians under the supervision of the Provincial Division of Tuberculosis Control.
5. Estimated population not available - rates not calculated.

TUBERCULOSIS IN VARIOUS RACIAL GROUPS

SECTION "C" (Tables 16 - 17)

Tuberculosis rates are at least ten 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 is almost as great as among the Indians.

Table 16

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 about ten times higher among native Indians and the Chinese population than in the white group.

Table 17

The incidence of active tuberculosis in 1968 was eleven times higher among the Indians than among the white population. 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 16. - TUBERCULOSIS MORTALITY FOR THE TOTAL POPULATION,
THE INDIAN, CHINESE AND JAPANESE POPULATION,
AND THE POPULATION EXCLUDING INDIANS AND ORIENTALS
BRITISH COLUMBIA, 1959 - 1968

(Rates per 100,000 Population)*

Year	Total Province		Indians		Excluding Indians	
	Total Number	Average Annual Rate	Total Number	Average Annual Rate	Total Number	Average Annual Rate
1959 - 1963	273	3.4	43	22.2	230	2.9
1964 - 1968	249	2.7	41	18.3	208	2.3
1968	48	2.4	10	21.4	38	1.9

Year	Chinese		Japanese		Excluding Indians and Orientals	
	Total Number	Average Annual Rate	Total Number	Average Annual Rate	Total Number	Average Annual Rate
1959 - 1963	30	24.8	6	11.5	194	2.5
1964 - 1968	28	19.8	6	10.0	174	2.0
1968	2	6.7	2	15.9	34	1.8

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

TABLE 17. - INCIDENCE OF ACTIVE¹ TUBERCULOSIS
 IN CANADIAN AND NON-CANADIAN BORN PERSONS
 BRITISH COLUMBIA, 1968

Ethnic Group and Racial Origin	Bacteriologically Confirmed Cases		Total Active Tuberculosis	
	Number of Cases	Rate ²	Number of Cases	Rate ²
Canadian Born	227	15.1	317	21.1
Non-Canadian Born	140	28.0	202	40.4
<u>Total</u>				
White and Others	256	13.3	372	19.4
Indian	78	167.0	98	209.9
Chinese	26	86.7	41	136.7
Japanese	7	55.6	8	63.5

1. Activated and reactivated cases.
2. Rates per 100,000 population based on estimated population only.