

ANNUAL REPORT 1998

CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

In Hong Kong, the TB notification rate decreased from a peak of 697.2 per 100,000 in 1952 to around 100.9 per 100,000 in 1995. Thereafter, the notification rate increased to 103.0 per 100,000 in 1996, 108.8 per 100,000 in 1997 and 114.7 per 100,000 in 1998. In terms of actual numbers, there were 7,673 notified TB cases in 1998, in comparison with 6,212 cases in 1995. There was an overall increase of 1,461 cases or 23.5% in these three years. Such a substantial increase in TB notifications, of course, generated concern about TB resurgence locally. However, these figures must be examined against the background demographic changes and the possible changes in notification behaviour.

The population in Hong Kong increased at a relatively rapid rate of 2-3% per year from 1995 to 1998. The estimated mid-year population was 6,687,200 in 1998, in comparison with 6,156,100 in 1995, representing an overall increase of 8.6%. The population of Hong Kong is also getting older as it undergoes demographic transition, which is a result of decreasing birth rate and increasing life expectancy. The number of elderly citizens (aged 65 or above) increased from 601,800 (9.8% of the population) to 701,700 (10.5% of the population) in the same period. There were 2,645 TB cases among the elderly in 1998, in comparison with only 1,703 cases in 1995. Elderly TB patients constituted an increasing proportion of the notified cases, rising from 27.4% in 1995 to 34.5% in 1998.

There were also significant changes in the distribution of notification sources. The number of notifications from private practitioners and private hospitals increased from 276 cases in 1995 to 678 cases in 1996. The number of notifications from public general hospitals also increased from 287 cases in 1996 to 740 cases in 1997 and 1,244 cases in 1998. Such drastic increases from these previously minor notification sources amounted to over 1,000 cases and could account for almost all the increase in notifications from 1995 to 1998. On the other hand, the number of notifications from chest clinics remained more or less the same. As a result, they accounted for decreasing proportions of the overall notifications (56.3% in 1998 as compared to 69.1 % in 1995).

Only 169 out of the 7,673 notifications in 1998 involved recent immigrants from Mainland China. These recent immigrants did not appear to be at an excess risk of TB in comparison with the local population. Only 7 cases involved Vietnamese boat people in contrast to 34 cases in the previous year, probably reflecting the decreasing size of this segment of the population. Overall, these immigrant groups only represented a very small proportion of the total caseload.

TB mortality declined from a peak of 207.9 per 100,000 in 1951 to 4.0 per 100,000 in 1998. The average age at death increased from 25 years in 1951 to 72 years in 1998. While part of the dramatic decline of TB mortality may be attributed to decreasing incidence of the disease, effective management of TB patients must have been another major contributing factor. Effective chemotherapy in the form of directly observed treatment (DOT) cured many ill patients, and averted many deaths. Increased awareness by both patients and health care workers could have led to earlier diagnosis, and allowed treatment at an earlier stage. However, delay in seeking care, atypical presentation, poorer drug tolerance, co-existing diseases, and psychosocial problems were likely factors that had contributed to the less favourable outcome among the elderly.

Increased emphasis was put on the public health aspects of TB control. TB surveillance measures were intensified in 1998. Laboratory information was actively tapped to promote notification, especially among general hospitals. Health education activities were intensified through different channels and media to assist case finding, which focused primarily on infectious TB patients with significant chest or systemic symptoms. In collaboration with the Hong Kong Tuberculosis, Chest and Heart Diseases Association, a series of publicity, and education programmes were held to commemorate the World TB Day on 24 March 1998. Collaboration and coordination between different health care providers was actively promoted through the TB Control Coordinating Committee.

Great emphasis continued to be put on directly observed treatment, which remained the main pillar of the local TB control programme. A set of TB treatment guidelines was developed by the TB Control Coordinating Committee and published in the Hong Kong Medical Journal to assist doctors in the management of TB patients in different clinical settings. The TB and Chest Service and the TB laboratory of the Institute of Pathology continued to participate in the WHO/ IUATLD Global Project on Anti-Tuberculosis Drug Resistance Surveillance. Drug resistance rates were closely monitored in all chest clinics. The drug resistance rates remained relatively low in 1998. A table summarizing the initial, acquired and overall resistance rates has been included in this report for general reference.

During the year, 106,447 patients attended the Service compared with 116,715 in 1997, and the total attendance was 982,818 compared with 914,951 in 1997. Among the 106,447 patients, 41,596 patients were new attendants, of whom 31.5% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (11.3%), active tuberculosis of other forms (1.9%), inactive tuberculosis (11.2%), bronchitis not specified as acute or chronic (17.6%), acute respiratory infection (7.8%),

pneumonia (4.7%), malignant neoplasm of trachea and bronchus (1.7%), bronchiectasis (1.2%), asthma (0.6%) and emphysema (0.3%). Among all the attendances, 4,709 hospital admissions were arranged.

Part 1: Tuberculosis

The number of tuberculosis notification in 1998 was 7,673, making a notification rate of 114.7 per 100,000 population. The corresponding figures in 1997 were 7,072 and 108.8 respectively.

The number of tuberculosis deaths was 270 in 1998 compared with 252 in 1997, with the mortality rate for both years being 4.0 and 3.9 per 100,000 respectively.

Deaths of tuberculosis in 1998 stayed outside the top ten causes of death. Tuberculosis deaths accounted for 0.8% of the total registered deaths in Hong Kong. The average age of tuberculosis deaths was 72.6.

In 1998, 99.4% of the newborns were given direct BCG vaccination at birth. 95.4% of primary school children aged 6-10 took up tuberculin test, of which 84.8% were found to be tuberculin negative and given BCG revaccination.

Tests for HIV infection among tuberculosis patients of the Service were done on a voluntary basis after obtaining their consent. The positive rate was very low.

Part 2: Pneumoconiosis

The Pneumoconiosis Compensation Ordinance was first introduced in 1980 for compensation of workers who acquired pneumoconiosis as a result of occupational exposure to silica and asbestos dusts. Compensation was paid out in the form of a lump sum according to the assessed degree of incapacity and the expected degree of further deterioration. The Ordinance was amended in 1993 to replace the lump sum payment with monthly payment. Reassessment at 2-yearly interval was also introduced at the same time to update the degree of incapacity for adjustment of the monthly compensation. Previously compensated post-1981 pneumoconiotics could apply for reassessment for compensation for additional incapacity. Further amendments were made in 1996. A flat-rate compensation for pain, suffering, and loss of amenities was payable to all post-1981 pneumoconiotics who had applied for reassessment under the revised scheme, irrespective of whether there was additional degree of incapacity over previous lump-sum compensation. The 1996 amendment also allowed the

Pneumoconiosis Medical Board to take other tests into consideration in adjusting the degree of incapacity as determined by FVC test by a maximum of 5% point. The ex-gratia payment scheme for pre-1981 pneumoconiotics were also reviewed. In addition to a flat-rate of monthly payment, additional payments were introduced for those in need of constant care, oxygen and medical appliances.

The attendance at the clinics was 10,821 in 1998 compared with 9,185 in 1997. In 1998, 199 new cases of pneumoconiosis were registered in the Service, and 109 new cases (including 5 cases of asbestos-related lung diseases) were assessed by the Pneumoconiosis Medical Board. Up to the end of 1998, a total of 4,845 patients had been compensated.

Part 1

TUBERCULOSIS

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APPENDIX 1

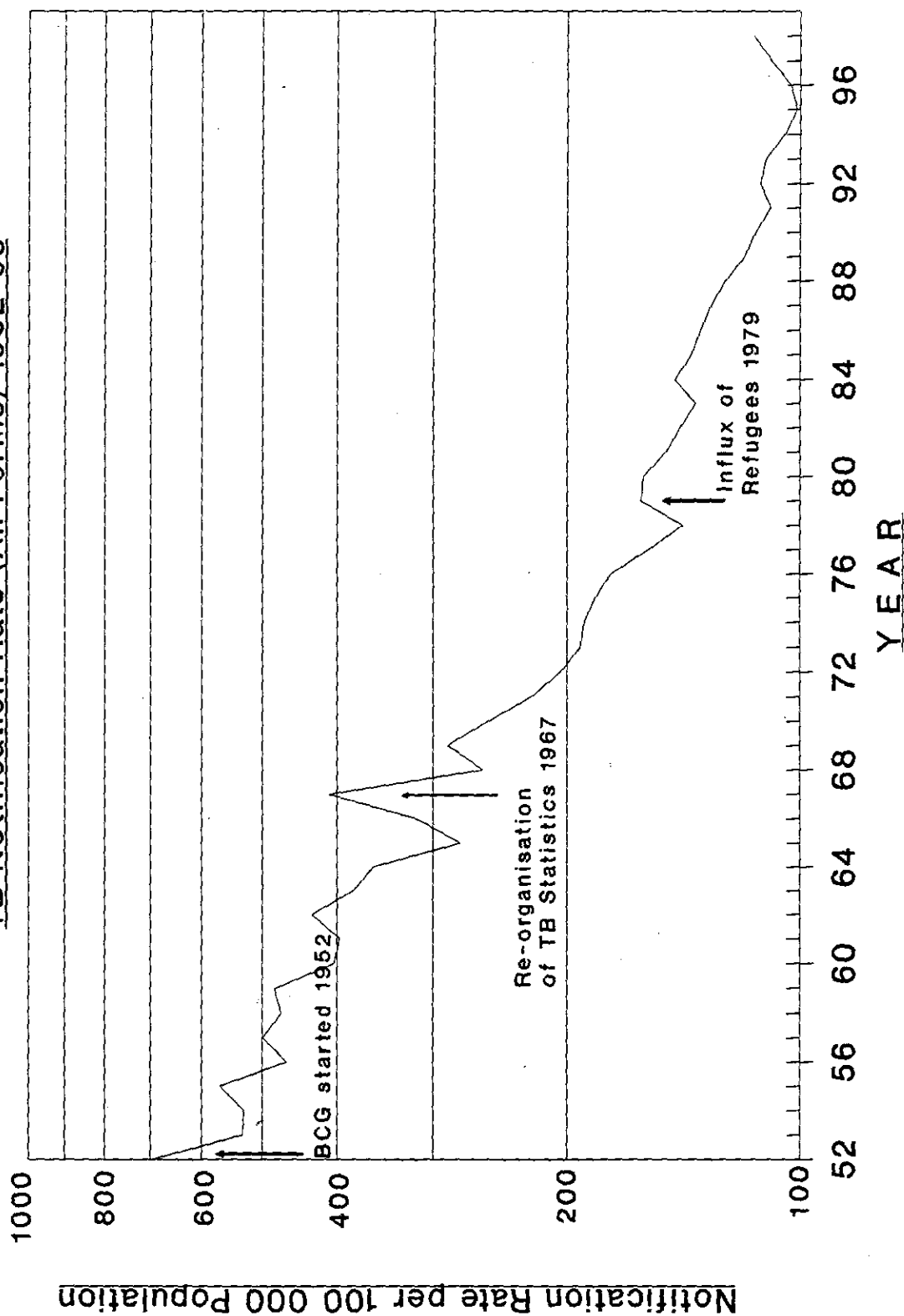
Notification & Death Rate of Tuberculosis (All Forms) 1947 - 1998

Year	TB Notification	Notification Rate per 100,000 Pop	TB Deaths	Death Rate per 100,000 Pop	Ratio (Notifications/ Deaths)	Deaths ----- x 100% Notifications
1947	4,855	277.4	1,861	106.3	2.61	38.33
1948	6,279	348.8	1,961	108.9	3.20	31.23
1949	7,510	404.4	2,611	140.6	2.88	34.77
1950	9,067	405.3	3,263	145.9	2.78	35.99
1951	13,886	689.0	4,190	207.9	3.31	30.17
1952	14,821	697.2	3,573	168.1	4.15	24.11
1953	11,900	530.7	2,939	131.1	4.05	24.70
1954	12,508	528.9	2,876	121.6	4.35	22.99
1955	14,148	568.1	2,810	112.8	5.03	19.86
1956	12,155	464.9	2,629	100.6	4.62	21.63
1957	13,665	499.4	2,675	97.8	5.11	19.58
1958	13,485	472.5	2,302	80.7	5.86	17.07
1959	14,302	482.0	2,178	73.4	6.57	15.23
1960	12,425	404.0	2,085	67.8	5.96	16.78
1961	12,584	397.2	1,907	60.2	6.60	15.15
1962	14,263	431.5	1,881	56.9	7.58	13.19
1963	13,031	380.9	1,762	51.5	7.40	13.52
1964	12,557	358.3	1,441	41.1	8.71	11.48
1965	9,927	275.9	1,278	35.5	7.77	12.87
1966	11,427	314.8	1,515	41.7	7.54	13.26
1967	15,253	409.7	1,493	40.1	10.22	9.79
1968	9,792	257.5	1,483	39.0	6.60	15.15
1969	11,072	286.5	1,470	38.0	7.53	13.28
1970	10,077	254.5	1,436	36.3	7.02	14.25
1971	9,028	223.2	1,250	30.9	7.22	13.85
1972	8,420	204.2	1,312	31.8	6.42	15.58
1973	8,152	192.2	1,154	27.2	7.06	14.16
1974	8,920	190.0	974	22.2	8.54	11.71
1975	8,192	183.6	646	14.5	12.68	7.89
1976	7,928	175.5	568	12.6	13.96	7.16
1977	7,191	156.9	532	11.6	13.52	7.40
1978	6,623	141.9	420	9.0	15.77	6.34
1979	7,907 (498)*	160.4	523	10.6	15.12	6.61
1980	8,065 (712)	159.3	551	10.9	14.64	6.83
1981	7,729 (254)	149.1	489	9.4	15.81	6.33
1982	7,527 (112)	143.0	454	8.6	16.58	6.03
1983	7,301 (73)	136.6	446	8.3	16.37	6.11
1984	7,843 (69)	145.3	420	7.8	18.67	5.36
1985	7,545 (59) 580 #	138.3	409	7.5	18.45	5.42
1986	7,432 (46) 544	134.5	407	7.4	18.26	5.48
1987	7,269 (41) 495	130.3	405	7.3	17.95	5.57
1988	7,021 (121) 433	124.8	388	6.9	18.10	5.53
1989	6,704 (226) 387	117.9	403	7.1	16.64	6.01
1990	6,510 (288) 341	114.1	382	6.7	17.04	5.87
1991	6,283 (281) 293	109.2	409	7.1	15.36	6.51
1992	6,534 (309) 264	112.6	410	7.1	15.94	6.27
1993	6,537 (264) 89	110.8	396	6.7	16.51	6.06
1994	6,319 (230) 87	104.7	409	6.8	15.45	6.47
1995	6,212 (175) 102	100.9	418	6.8	14.86	6.73
1996	6,501 (88) 162	103.0	292	4.6	22.26	4.49
1997	7,072 (34) 156	108.8	252	3.9	28.06	3.56
1998	7,673 (7) 169	114.7	270	4.0	28.42	3.52

- * Figure in brackets denote the number of Vietnamese refugees included.
Figure in this column denote the number of Chinese immigrants staying in Hong Kong for less than 7 years.

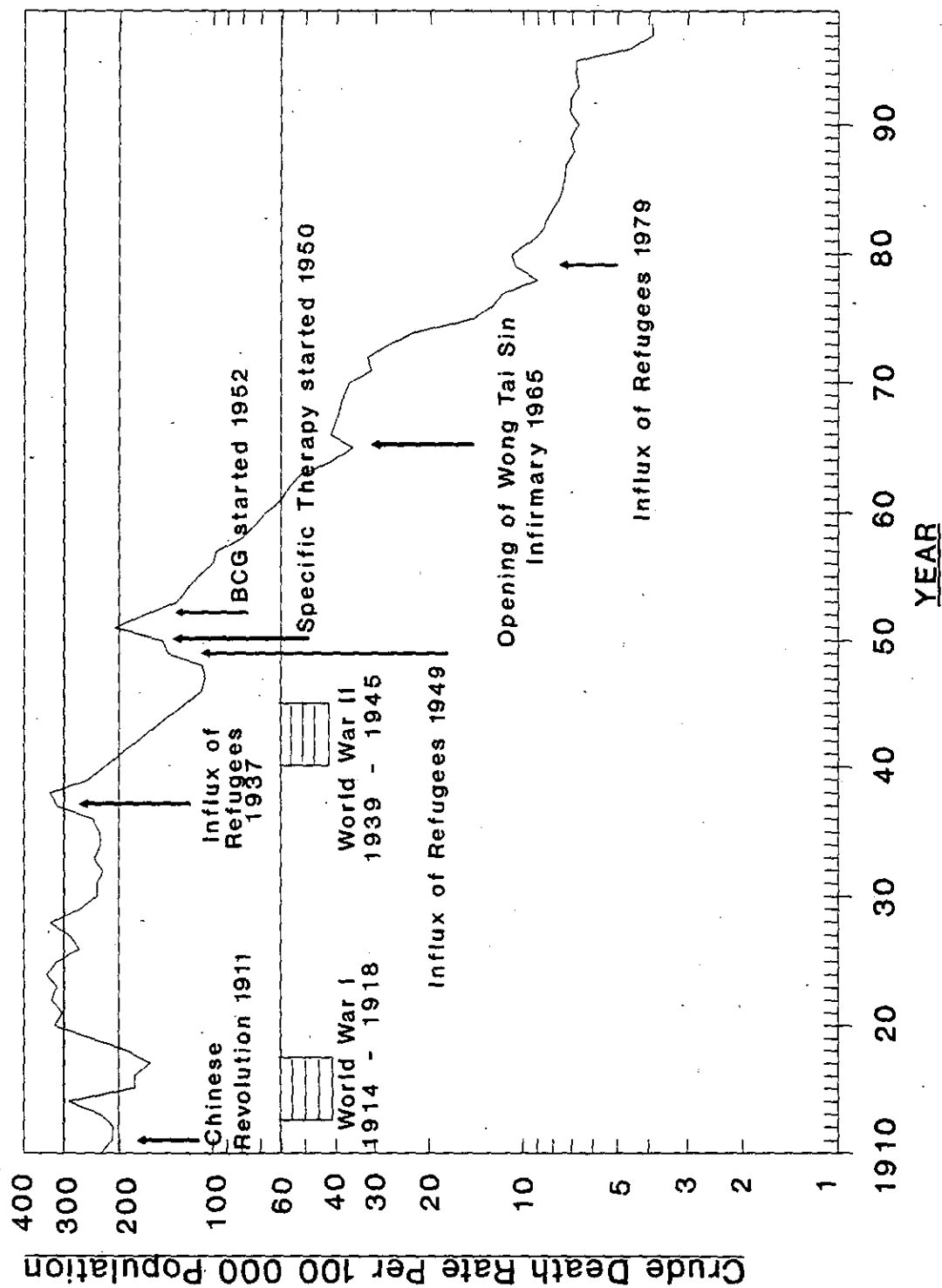
APPENDIX 2

TB Notification Rate (All Forms) 1952-98



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-1998



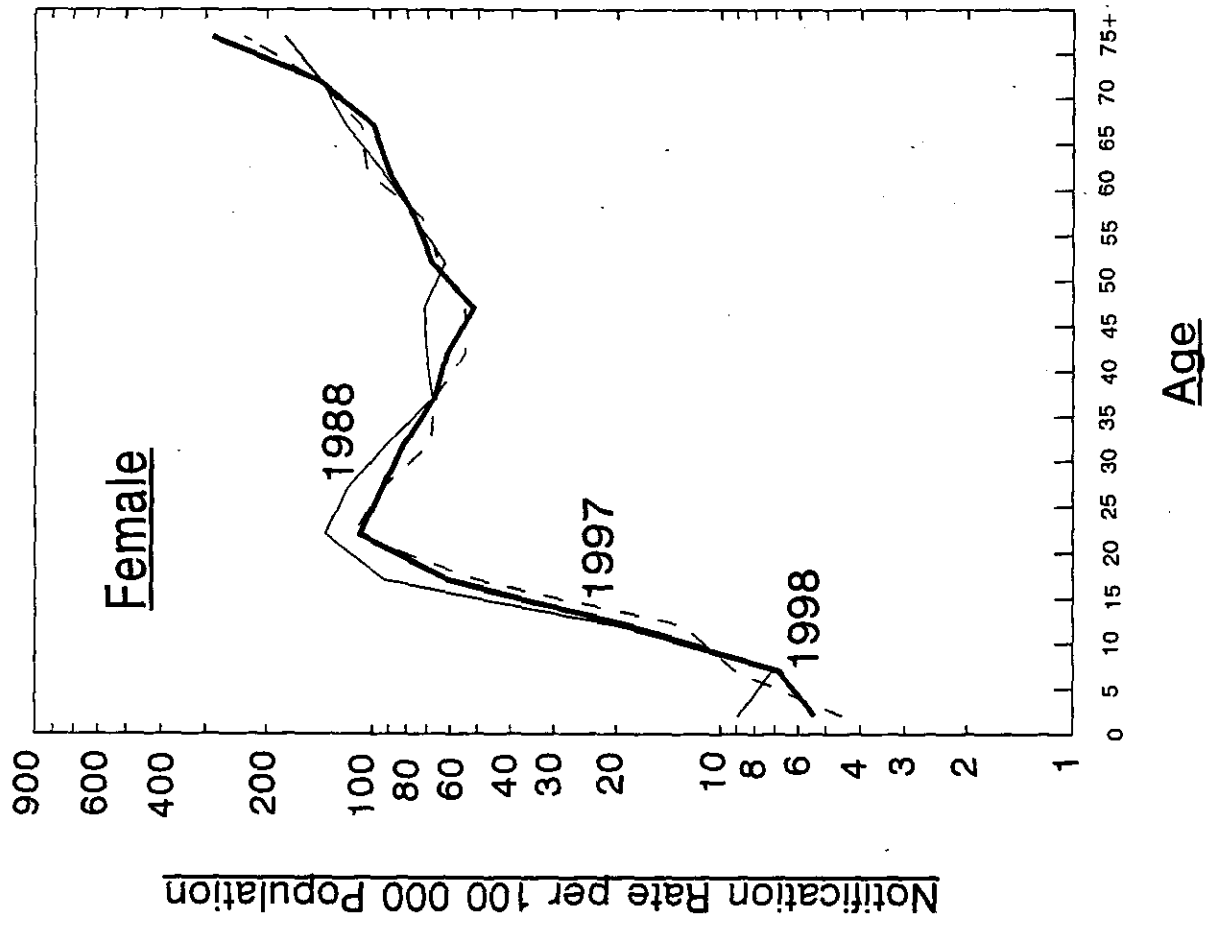
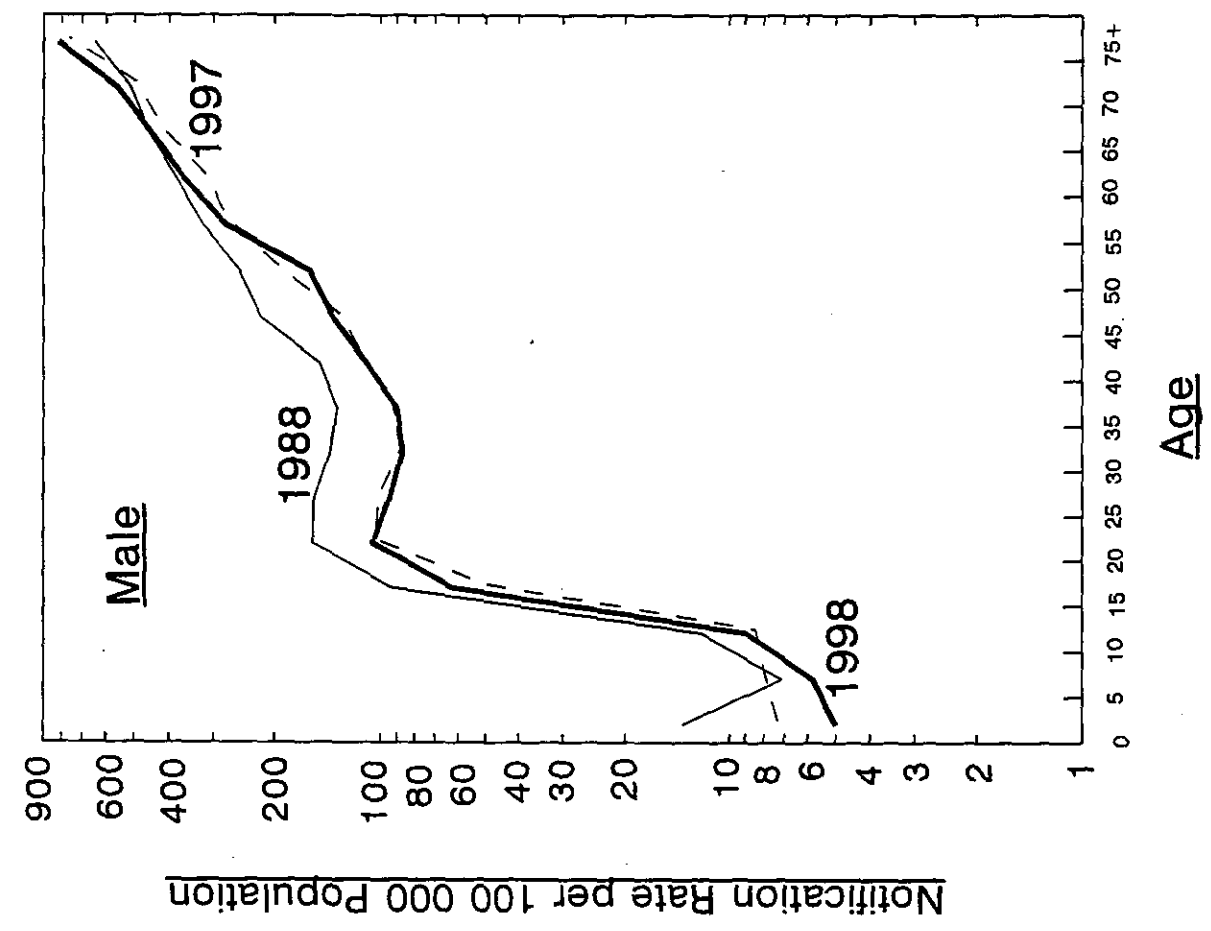
APPENDIX 4

Tuberculosis Notifications (All Forms) & Rate by Age and Sex 1998

Age Group	Tuberculosis Notification (All Forms)			Tuberculosis Notification Rate (per 100,000 population)		
	M	F	T	M	F	T
Under 1	0	—	0	 		

APPENDIX 5

TB Notification Rate by Age & Sex 1988, 1997 & 1998



APPENDIX 6

Notifications of Tuberculosis by Type by Age & Sex 1998

Age Group	Respiratory System (010 - 012)			Meninges (013)			Bones & Joints (015)			Others (014,016-018 & 137)		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	-	-	-	-	-	-	-	-	-	-	-	-
1	3	1	4	-	-	-	-	-	-	-	-	-
2	2	1	3	1	-	1	-	-	-	-	-	-
3	2	2	4	-	-	-	-	-	-	-	-	-
4	1	3	4	-	1	1	-	-	-	-	1	1
5 - 9	10	8	18	1	1	2	-	-	-	1	4	5
10 - 14	17	34	51	-	-	-	-	1	1	2	2	4
15 - 19	131	116	247	-	-	-	1	-	1	10	13	23
20 - 24	220	221	441	1	-	1	3	1	4	23	42	65
25 - 29	222	230	452	-	1	1	1	1	2	19	32	51
30 - 34	246	206	452	3	2	5	1	5	6	18	61	79
35 - 39	291	180	471	2	-	2	5	4	9	26	55	81
40 - 44	329	140	469	-	4	4	2	5	7	23	38	61
45 - 49	340	86	426	1	1	2	3	4	7	20	33	53
50 - 54	282	81	363	1	1	2	-	3	3	18	21	39
55 - 59	371	71	442	1	1	2	-	-	-	15	14	29
60 - 64	493	92	585	-	-	-	1	1	2	20	20	40
65 - 69	533	111	644	-	-	-	3	1	4	19	9	28
70 - 74	495	132	627	-	-	-	3	4	7	14	9	23
75 - 79	421	139	560	-	-	-	3	3	6	8	8	16
80 - 84	276	135	411	1	-	1	-	2	2	2	8	10
85 & over	144	145	289	-	-	-	3	1	4	5	8	13
Unknown	-	-	-	-	-	-	-	-	-	-	-	-
Total	4829	2134	6963	12	12	24 (a)	29	36	65 (b)	243	378	621 *(c)

* Including TB Lymph Node	359
TB Kidney/Urinary System	29
TB Peritonitis	8
TB Pleural Effusion	16
TB Laryngitis	6
Miliary TB	13
TB Skin	7
Others	27
Unspecified	156

- (a) Including 5 cases with coexisting TB of respiratory system, 1 case with coexisting TB of other extrapulmonary site, and 1 case with coexisting TB of respiratory system & TB of other extrapulmonary site
- (b) Including 10 cases with coexisting TB of other extrapulmonary sites
- (c) Including 58 cases with coexisting TB of respiratory system

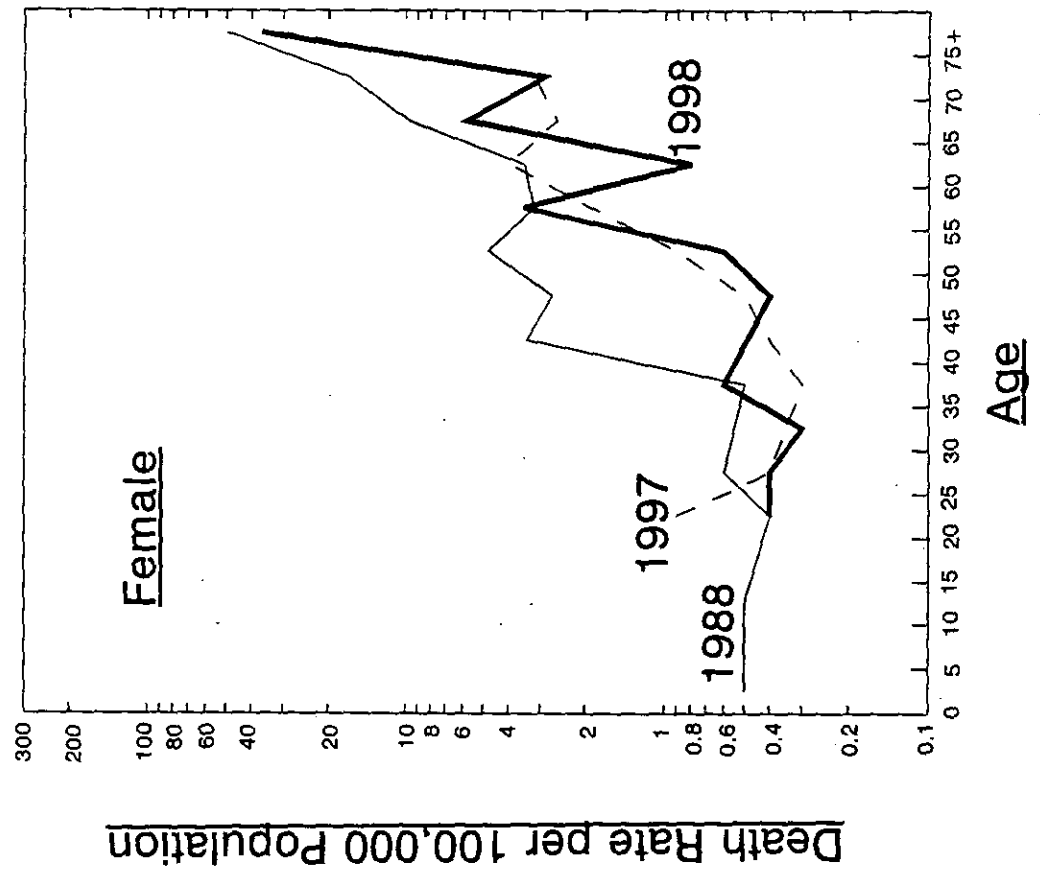
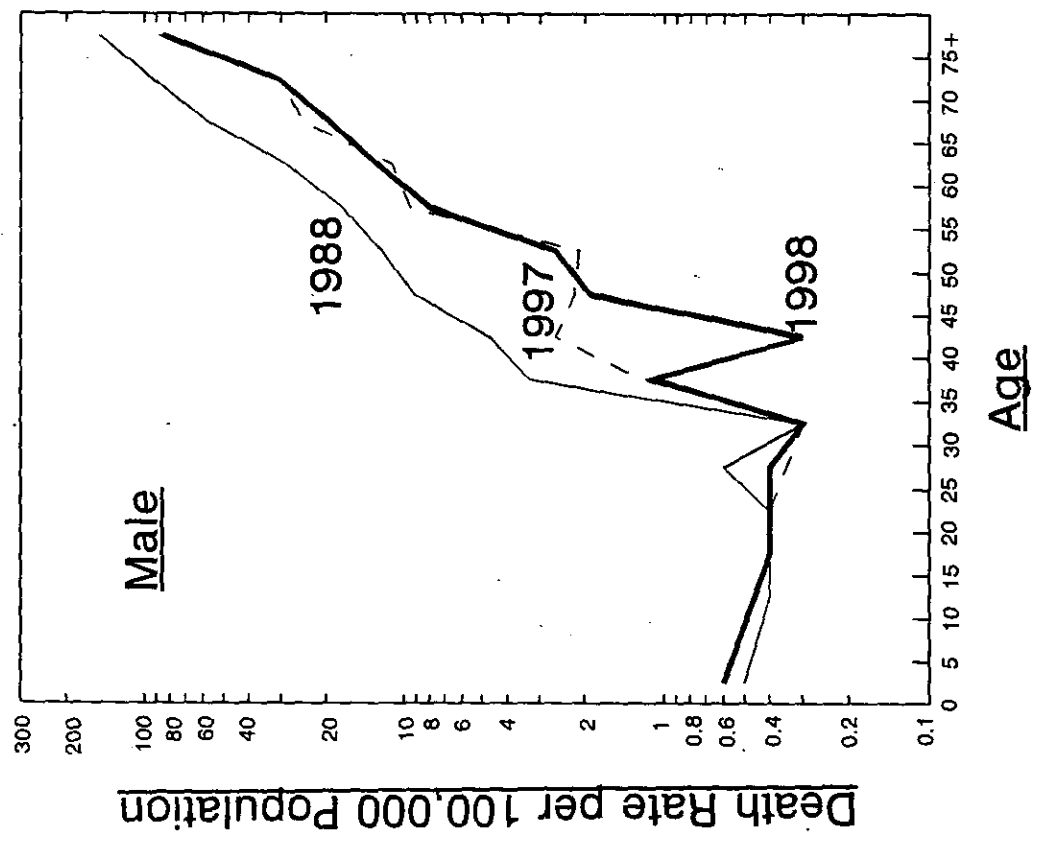
APPENDIX 7

TB Death (All Forms) & Death Rate by Age & Sex 1998

Age Group	TB Death (All Forms)			Death Rate (per 100,000 population)			
	M	F	T	M	F	T	
Under 1	—	—	—	>	0.6	—	0.3
1	—	—	—				
2	—	—	—				
3	1	—	1				
4	—	—	—				
5 — 9	—	—	—	—	—	—	
10 — 14	—	—	—	—	—	—	
15 — 19	1	—	1	0.4	—	0.2	
20 — 24	—	1	1	—	0.4	0.2	
25 — 29	1	1	2	0.4	0.4	0.4	
30 — 34	1	1	2	0.3	0.3	0.3	
35 — 39	4	2	6	1.1	0.6	0.8	
40 — 44	1	—	1	0.3	—	0.2	
45 — 49	5	1	6	1.9	0.4	1.2	
50 — 54	5	1	6	2.6	0.6	1.7	
55 — 59	11	4	15	7.9	3.5	5.9	
60 — 64	18	1	19	12.7	0.8	7.1	
65 — 69	24	7	31	19.4	5.8	12.6	
70 — 74	28	3	31	30.6	2.9	16.0	
75 — 79	34	12	46	>	85.1	36.3	56.0
80 — 84	27	18	45				
85 & over	29	27	56				
Unknown	—	1	1	—	—	—	
Total	190	80	270	5.6	2.4	4.0	

APPENDIX 8

TB Mortality Rate by Age & Sex 1988, 1997 & 1998



APPENDIX 9

TB Deaths by Type by Age & Sex 1998

Age Group	Respiratory System			Meninges			Bones & joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	1	-	1	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5 - 9	-	-	-	-	-	-	-	-	-	-	-	-
10 - 14	-	-	-	-	-	-	-	-	-	-	-	-
15 - 19	-	-	-	-	-	-	-	-	-	1	-	1
20 - 24	-	-	-	-	-	-	-	-	-	-	1	1
25 - 29	1	1	2	-	-	-	-	-	-	-	-	-
30 - 34	1	1	2	-	-	-	-	-	-	-	-	-
35 - 39	2	-	2	-	-	-	-	-	-	2	2	4
40 - 44	1	-	1	-	-	-	-	-	-	-	-	-
45 - 49	5	-	5	-	-	-	-	-	-	-	1	1
50 - 54	4	-	4	-	-	-	-	-	-	1	1	2
55 - 59	10	3	13	-	1	1	-	-	-	1	-	1
60 - 64	14	1	15	-	-	-	-	-	-	4	-	4
65 - 69	22	5	27	-	-	-	-	1	1	2	1	3
70 - 74	27	3	30	-	-	-	-	-	-	1	-	1
75 - 79	31	10	41	-	-	-	-	-	-	3	2	5
80 - 84	26	17	43	1	-	1	-	1	1	-	-	-
85 & over	25	24	49	-	-	-	-	-	-	4	3	7
Unknown	-	1	1	-	-	-	-	-	-	-	-	-
Total	169	66	235	2	1	3	-	2	2	19	11	30 *

* Breakdown of Deaths from other forms of TB: -

Intestines, peritoneum & mesenteric glands (014)
 Genito-urinary system (016)
 TB Liver (017)
 Miliary TB (018)
 Late effects of TB (137)

Number

3

1

2

20

4

Total 30

APPENDIX 10

Tuberculosis Mortality 1949 - 1998

Year	% of TB Deaths below 5 years	% of TB Deaths below 1 year	Infant Mort. Rate from TB per 1,000 Registered Live Births	% of TB Deaths among Total Registered Deaths	Average Age of TB Deaths
1949	34.05	8.31	3.96	16.0	25.5
1950	38.34	9.81	5.28	17.7	24.0
1951	34.22	7.73	4.73	20.0	25.0
1952	34.28	7.05	3.50	18.4	25.0
1953	36.27	9.02	3.51	16.1	26.0
1954	31.26	8.17	2.82	14.9	29.0
1955	28.51	8.61	2.67	14.7	31.0
1956	25.22	7.34	1.99	13.6	32.0
1957	21.20	5.76	1.57	13.8	36.0
1958	19.64	7.04	1.52	11.2	36.5
1959	18.92	5.56	1.16	10.8	37.0
1960	10.55	2.21	0.42	10.9	43.0
1961	11.48	2.62	0.46	10.2	43.0
1962	5.74	1.44	0.24	9.3	46.0
1963	5.51	1.08	0.16	8.9	47.0
1964	4.09	0.90	0.12	8.0	48.0
1965	3.36	0.70	0.09	7.3	49.0
1966	2.71	0.73	0.12	8.1	53.0
1967	2.01	0.33	0.06	7.6	54.5
1968	1.15	0.20	0.04	7.7	56.5
1969	0.95	0.27	0.05	7.8	56.0
1970	0.63	0.00	0.00	6.9	57.5
1971	0.64	0.08	0.01	6.2	57.5
1972	0.30	0.15	0.02	6.2	59.0
1973	0.35	0.09	0.01	5.4	58.0
1974	0.82	0.21	0.02	4.4	58.5
1975	1.39	0.31	0.03	3.0	58.5
1976	0.70	0.00	0.00	2.4	59.5
1977	0.38	0.00	0.00	2.3	61.0
1978	0.48	0.24	0.01	1.8	61.0
1979	0.96	0.19	0.01	2.0	61.0
1980	0.73	0.18	0.01	2.1	62.0
1981	0.41	0.00	0.00	2.0	63.0
1982	0.22	0.00	0.00	1.8	63.0
1983	0.45	0.00	0.00	1.7	63.0
1984	0.24	0.24	0.01	1.6	64.5
1985	0.00	0.00	0.00	1.6	65.5
1986	0.00	0.00	0.00	1.6	68.0
1987	0.00	0.00	0.00	1.5	68.5
1988	0.52	0.26	0.01	1.4	69.0
1989	0.25	0.25	0.01	1.4	69.0
1990	0.52	0.52	0.03	1.3	69.0
1991	0.00	0.00	0.00	1.4	69.0
1992	0.00	0.00	0.00	1.3	68.0
1993	0.25	0.25	0.01	1.3	69.0
1994	0.00	0.00	0.00	1.4	71.0
1995	0.00	0.00	0.00	1.4	71.1
1996	0.00	0.00	0.00	0.9	70.6
1997	0.00	0.00	0.00	0.8	72.1
1998	0.37	0.00	0.00	0.8	72.6

NOTE : There were no infant death from TB in 1970, 1976, 1977, 1981, 1982, 1983, 1985, 1986, 1987, 1991, 1992, 1994, 1995, 1996, 1997 & 1998.

APPENDIX 11

Top Ten Causes of Death 1998

Rank	Causes of Death	Detailed List No.	1998		
			Male	Female	Total
	All Causes	001 – 999	18,573	14,102	32,680 (5)
1	Malignant Neoplasms	140 – 208	6,576	4,115	10,691
2	Heart diseases, including hypertensive heart diseases	390 – 429	2,661	2,399	5,060
3	Pneumonia, all forms	480 – 486	1,894	1,797	3,691
4	Cerebrovascular diseases	430 – 438	1,563	1,734	3,297
5	Injury and poisoning	800 – 999	1,299	611	1,910
6	Nephritis, Nephrotic syndrome and Nephrosis	580 – 589	490	588	1,078
7	Diabetes mellitus	250	228	293	521
8	Septicaemia	038	211	290	501
9	Chronic liver disease and cirrhosis	571	287	131	418
10	Aortic aneurysm	441	214	147	361
12	Tuberculosis (including late effects of tuberculosis)	010 – 018 137	190	80	270
	Certain conditions originating in the perinatal period	760 – 779	41	25	67 (1)
	All other causes	Residues of 001 – 999	2,919	1,892	4,815 (4)

Note : Figures in brackets denote number of deaths of unknown sex included.

APPENDIX 12

Origin of Tuberculosis Notifications

1988 - 1998

Origin	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Origin
East Kowloon Chest Clinic	338	293	311	269	280	298	280	158	190	175	225	East Kowloon Chest Clinic
Kowloon Chest Clinic	1191	1227	1218	1117	950	894	823	788	742	667	529	Kowloon Chest Clinic
Kwai Chung Chest Clinic	504	478	490	515	556	583	552	554	581	547	531	Kwai Chung Chest Clinic
Sai Ying Pun Chest Clinic (a)	231	262	259	245	262	288	271	261	254	180	216	Sai Ying Pun Chest Clinic (a)
Shauiwan Chest Clinic	138	131	150	141	188	180	176	189	195	181	199	Shauiwan Chest Clinic
Shek Kip Mei Chest Clinic	320	357	331	352	392	290	272	256	243	31	50	Shauiwan Pneumococcosis
Wanchai Chest Clinic	771	729	643	580	729	717	603	593	590	302	282	Shek Kip Mei Chest Clinic
Yaumati Chest Clinic	330	370	332	264	343	296	349	181	325	280	389	Wanchai Chest Clinic
Yan Oi Chest Clinic	190	226	282	330	291	313	303	363	170	428	419	Yaumati Chest Clinic
Yung Fung Shee Chest Clinic	163	206	226	238	281	276	296	301	300	240	285	Yan Oi Chest Clinic
NT Chest Clinic	449	406	422	402	422	511	706	650	630	561	6	Yung Fung Shee Chest Clinic
											420	NT Chest Clinic (e)
											102	Tung Chung Chest Clinic
											98	Yuen Chau Kok Chest Clinic
											94	Sheung Shui Chest Clinic
											13	Tai Po Chest Clinic
												Yuen Long Chest Clinic
												Sai Kung Chest Clinic
Sub - total	4625	4685	4664	4453	4694	4646	4631	4294	4251	4094	4319	Sub - total
Tung Wah Group (b)	274	240	218	238	238	338	274	322	335	384	339	Kowloon Hospital
Ruttonjee Hospital	792	651	544	493	305	346	418	372	330	442	458	Wong Tai Sin Hospital
Grantham Hospital	384	347	323	423	273	269	290	229	235	333	275	Ruttonjee Hospital
Haven of Hope Hospital	165	158	88	51	91	117	208	338	285	360	316	Grantham Hospital
Other Govt Institutions (c)	464	374	466	463	593	612	80	88	97	72	117	Haven of Hope Hospital
							18	16	3	5	7	Other Govt. Institutions (f)
							327	277	287	740	1244	Other H.A. Hospitals
Maryknoll Hospital	105	63	79	50	55	48						
United Christian Hospital	26	13	33	24	32	36						
Caritas Medical Centre	7	8	13	8	11	29						
Others (d)	179	165	82	80	219	89	53	253	589	413	343	Private Practitioners
Private Hospitals	N.A.	N.A.	N.A.	N.A.	23	7	20	23	89	229	255	Private Hospitals
Total	7021	6704	6510	6283	6534	6537	6319	6212	6501	7072	7673	Total
% of cases from Chest Clinics among the total	65.9	69.9	71.6	70.9	71.8	71.1	73.3	69.1	65.4	57.9	56.3	% of cases from Chest Clinics among the total

Note : (a) Including Notifications from Cheung Chau Chest Clinic.

(b) Most of the notifications are from Wong Tai Sin Hospital.

(c) Sources are from former Government Hospitals, Public Mortuaries, Prison Hospitals, Army Hospitals.

(d) Sources are mainly from Private Practitioners.

(e) Including Yuen Chau Kok Chest Clinic.

(f) Sources are from Public Mortuaries, Prison Hospitals, & Army Hospitals.

APPENDIX 13

Tuberculosis Notifications & Notification Rates by Epidemiological Districts

Epidemiological Districts	1998	
	Notification	Notification Rate (per 100,000 pop.)
<u>Hong Kong Island</u>	1,468	105.3
Central & Western	342	123.0
Wanchai	273	147.9
Eastern	593	92.3
Southern	260	90.0
<u>Kowloon</u>	2,841	135.2
Yau Tsim Mong	556	184.9
Sham Shui Po	573	151.9
Kowloon City	455	115.9
Wong Tai Sin	584	136.7
Kwun Tong	673	111.4
<u>New Territories (East)</u>	1,421	92.3
North	246	91.9
Tai Po	278	89.2
Shatin	590	94.0
Sai Kung	204	81.6
Islands	103	123.2
<u>New Territories (West)</u>	1,897	116.1
Tsuen Wan	322	112.2
Kwai Chung & Tsing Yi	620	129.5
Tuen Mun	519	108.4
Yuen Long	436	112.1
<u>Others</u>	46	
Imported	3	
Vietnamese Refugees	7	
Unknown	36	
Total	7,673	114.7

APPENDIX 14

Establishment & Strength of Chest Service

As at 31.12.98

Post	Establishment	Strength
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	8 (a)	3
Medical & Health Officer	22	27 (d)
Senior Nursing Officer	—	1
Nursing Officer	15	14
Registered Nurse	55	57
Enrolled Nurse	128	113
Senior Dispenser	1	1
Dispenser	11	12
Senior Inoculator	3	2
Inoculator	23	15
Executive Officer I	1	—
Executive Officer II	—	1
Statistical Officer II	2	2
Personal Secretary I	1	1
Clerical Officer I	16	16
Clerical Officer II	28	18
Clerical Assistant	54	50 (b)
Office Assistant	22	12
Workman II	63	62
Watchman	2	2
Medical Social Worker	—	12 (c)
Senior Radiographer	1	1
Radiographer II	18	17
Senior Radiographic Technician	7	5
Radiographic Technician	8	8
Darkroom Technician	16	15

- (a) Including 1 SMO (Radiologist) in Chest Service
- (b) Including 1 Supernumerary CA post at YMTXSC
- (c) Seconded from Social Welfare Department and some of them are part-time only
- (d) Including 1 MOs as Medical staff exchange programme with Ruttonjee Hospital

APPENDIX 15

Total Attendances at Chest Clinics

1988 - 1998

Clinic/Hospital	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Shauiwan Chest Clinic	37,285	37,004	41,733	47,614	46,348	45,250	43,128	48,215	55,737	54,639	54,732
Shauiwan Pneumoconiosis	-	-	-	-	-	-	-	9,944	9,664	9,185	10,821
Sai Ying Pun Chest Clinic	52,048	52,134	54,239	51,161	52,478	51,036	47,995	48,537	55,967	50,875	56,233
Wanchai Chest Clinic	95,998	98,548	94,052	89,769	89,945	88,826	85,106	79,964	89,391	92,697	91,331
Kowloon Chest Clinic	92,142	88,012	87,277	88,930	77,817	80,576	83,223	95,667	104,572	120,663	117,678
Yaumati Chest Clinic	75,855	80,885	80,088	78,008	74,709	78,565	83,555	79,224	80,341	89,759	103,198
Shek Kip Mei Chest Clinic	70,006	67,702	64,588	60,032	67,636	59,342	65,676	56,871	63,462	72,274	75,610
East Kowloon Chest Clinic	72,970	62,829	62,479	58,667	64,659	64,473	64,845	54,430	54,921	58,862	65,220
Yung Fung Shee Chest Clinic	52,880	50,420	57,085	53,925	53,042	53,726	55,740	56,908	58,139	58,841	66,567
Kwai Chung Chest Clinic	83,329	79,775	79,395	80,144	84,721	86,912	91,095	94,000	101,041	111,683	113,185
Yan Oi Chest Clinic	38,611	39,288	46,409	51,660	52,075	51,077	59,698	64,091	70,741	69,581	70,979
Yuen Chau Kok Chest Clinic	-	-	-	-	-	10,944	51,089	54,642	55,615	61,160	76,626
Tung Chung	-	-	-	-	-	-	-	-	-	101	3730
Tai Po Chest Clinic	7,089	7,917	8,174	8,504	9,385	10,852	9,620	8,083	8,773	15,760	20,350
Yuen Long Chest Clinic	10,402	10,474	11,996	10,967	11,149	11,618	8,963	9,822	11,687	18,742	21,677
Sheung Shui Chest Clinic	6,139	6,298	7,043	6,274	6,770	7,217	7,644	7,710	10,151	15,330	18,756
Sai Kung Chest Clinic	1,508	1,381	1,960	1,902	1,529	1,504	1,446	1,412	1,451	1,444	1,682
Castle Peak Hospital	1,224	1,378	1,693	2,695	4,850	3,736	2,442	1,932	1,773	1,169	1,283
Cheung Chau Chest Clinic	1,605	2,075	1,614	3,114	1,903	1,927	1,781	2,414	2,490	2,808	2,943
Hei Ling Chau ATC	2,846	2,398	2,159	877	1,636	1,335	1,232	1,550	3,187	2,600	2,664
Shek Pik Prison Hospital	158	444	188	179	584	882	594	1,239	943	725	173
Stanley Prison Hospital	5,287	7,831	9,737	9,430	9,166	7,745	9,991	5,925	7,751	60,53	7,380
Pik Uk Prison	15	178	386	110	112	46	1	87	-	-	-
Shatin Chest Clinic	11,826	13,887	14,567	14,989	16,567	12,974	-	-	-	-	-
Aberdeen Chest Clinic	4,506	5,055	1,601	-	-	-	-	-	-	-	-
Tai Lam Addiction Rx Centre	1,738	-	-	-	-	-	-	-	-	-	-
Tai O	1	63	47	7	-	-	-	-	-	-	-
Total	725,468	715,976	728,510	718,958	727,081	730,563	774,864	782,667	847,797	914,951	982,818

APPENDIX 16

No. of Doctor Sessions, Cases seen by Doctor and Patient/Doctor Session 1998

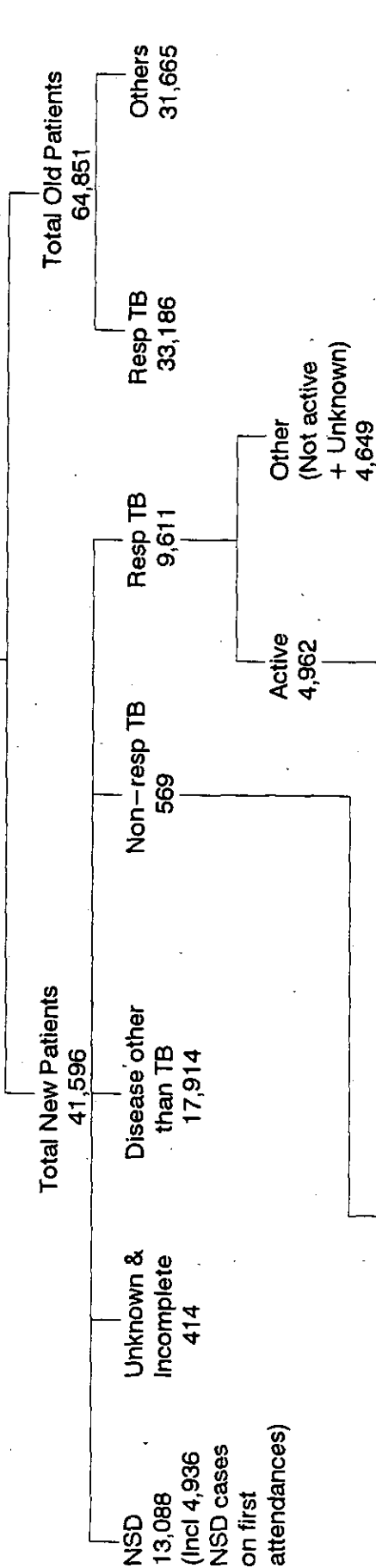
Clinic/Hospital	Doctor Sessions	Cases seen by Doctor	Patient/ Dr Session
East Kowloon Chest Clinic	749	20,382	27
Kowloon Chest Clinic	1,265	42,289	33
Kwai Chung Chest Clinic	1,356	40,669	30
Sai Ying Pun Chest Clinic	649	20,313	31
Shauiwan Chest Clinic	544	18,822	35
Shauiwan Pneumoconiosis	551	10,433	19
Shek Kip Mei Chest Clinic	664	17,808	27
Tung Chung Chest Clinic	543	1,453	3
Wanchai Chest Clinic	1,275	35,062	27
Yan Oi Chest Clinic	871	26,613	31
Yaumati Chest Clinic	935	31,747	34
Yuen Chau Kok Chest Clinic	835	24,630	29
Yung Fung Shee Chest Clinic	543	16,076	30
Castle Peak Hospital	31	472	15
Cheung Chau Chest Clinic	25	784	31
Hei Ling Chau ATC	12	279	23
Sai Kung Chest Clinic	51	853	17
Sheung Shui Chest Clinic	264	5,834	22
Stanley Prison Hospital	26	792	30
Wong Siu Ching Chest Clinic	298	6,159	21
Shek Pik Prison Hospital	12	174	15
Yuen Long Chest Clinic	388	8,076	21
Total	11,887	329,720	28

Note : Doctor Session — one doctor of a half-day session.

APPENDIX 17

Flow Chart of Patients Attending Chest Clinics, 1998

Total patients attending during 1998
106,447



Bacteriology	Extent	Number
Negative	1	1509
	2	321
	3	81
Positive	1	1431
	2	975
	3	457
Incomplete	1	161
	2	20
	3	7

Bacteriology	Cavity	Number
Negative	Yes	103
	No	1808
Positive	Yes	620
	No	2243
Incomplete	Yes	7
	No	181

Previous History of TB	Previous Treatment for TB	Number
No	No	4714
Yes	No	17
Yes	Yes	228
Unknown	Unknown	3

APPENDIX 18

Classification of Patients of First Attendance with New Case Card Completed
By Clinics According to International Classification of Diseases Code 1998

Code	Classification	Total
010	Primary Tuberculosis Infection	3
011	Pulmonary Tuberculosis	4,718
012	Other Respiratory Tuberculosis	241
013	Tuberculosis of Meninges	15
014	Tuberculosis of Intestines	21
015	Tuberculosis of Bones & Joints	50
016	Tuberculosis of Genito-urinary System	41
017	Tuberculosis of Other Organs	417
018	Miliary Tuberculosis	25
137	Late effects of Tuberculosis	4,649
160-165	Malignant Neoplasm of Respiratory System	728
212	Benign Neoplasm of Respiratory System	6
460-466	Acute Respiratory Infection	3,262
470-478	Other Diseases of Upper Resp Tract	57
480-486	Pneumonia	1,951
487	Influenza	43
490-491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	7,438
492	Emphysema	138
493	Asthma	263
494	Bronchiectasis	499
495-496	Others	467
501	Asbestois	0
502	Silicosis	27
505	Pneumoconiosis, unspecified	9
506-508	Others	0
510	Empyema	5
511	Pleurisy	161
512	Pneumothorax	40
513-519	Other Diseases of Respiratory System	295
786	Unknown	3,103
V71	N.S.D.	4,953
	Diseases Other than TB & Resp System	2,525
Total		36,150

APPENDIX 19 (a)

Extent of Active Respiratory TB in First Attenders at Chest Clinics 1996 – 1998

Extent *	1996		1997		1998	
	No.	%	NO.	%	No.	%
1. Minimal	3,004	64.6	3,078	63.5	3,101	62.5
2. Moderate	1,166	25.1	1,261	26.0	1,316	26.5
3. Extensive	477	10.3	512	10.6	545	11.0
Total	4,647	100.0	4,851	100.0	4,962	100.0
No. of first attenders	42,170		52,136		41,596	
% of active TB	11.0		9.3		11.9	

- * 1. Minimal : Less than right upper lobe
 2. Moderate : More than right upper lobe
 3. Extensive : More than a lung

Percentage on Sputum Results of Active TB in First Attenders at Chest Clinics 1998

	Number	%
Smear+	1633	32.9
Smear-Culture+	1184	23.9
Smear-Culture-	1780	35.9
Incomplete	365	7.4
Total	4962	100.0%

APPENDIX 19(b)

Rate of Drug – resistant Tuberculosis

(among patients of chest clinics with date of starting treatment Jan – Jun 1998)

Category	% resistant to				% resistant to *			MDR – TB	Total % resistance #	Total no. of cases analysed
	E	R	H	S	1 drug	2 drugs	>2 drugs			
Initial	1.4	1.1	6.2	7.9	5.8	3.5	1.1	1.1	10.3	1146
Acquired	1.5	3.5	8.5	13.1	12.1	3	2.5	2.5	17.6	199
Overall	1.4	1.5	6.5	8.6	6.7	3.4	1.3	1.3	11.4	1345

Notes : E = ethambutol

R = rifampicin

H = isoniazid

S = streptomycin

* % resistant to one, two or more than two of the four drugs E, R, H and S

total % resistance : resistant to at least one of the four drugs E, R, H and S

Initial resistance : for cases with no past history of anti – tuberculosis treatment

Acquired resistance : for cases with past history of anti – tuberculosis treatment

Overall resistance : for all cases

NB Yung Fung Shue TB Laboratory is using the absolute concentration method for sensitivity tests.

Name of clinic/hospital	Service regimen																																	
	No. ut m i e l	Drop out													Interrup, Rx temp.	Transfer out to		Treatment completed					Brought in			Unsup Incomp Rx super. Rx <3m	No.def. >2m, <3m							
		Complete defaulter					Rx by GP Leave HK Def. >1x AMA <2M >2M, <3M >3M %									hosp	other co	L	M	N	O	P	Q	R	S			T	U	V	W	X	Y	Z
		Complete defaulter																																
		Complete defaulter																																
1	2	3	4	5	6M	at6m	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z										
198	169	7	8	133	169	5	116	162	84.2	58	85	0	8	1	5	0	6	21	7	4	9.7	206	9	70	5									
433	526	29	21	304	270	18	217	454	92.0	274	248	1	13	4	14	49	17	4	2	1.4	264	3	128	1										
429	448	40	48	255	140	6	271	376	89.6	128	71	0	24	5	7	10	17	15	5	2	3.0	423	0	152	6									
200	174	7	19	147	90	9	136	156	93.9	88	27	1	6	1	4	4	2	2	2	1.9	197	2	49	0										
245	186	3	25	175	166	8	139	193	89.0	136	47	2	5	1	15	1	8	4	2	6	3.2	233	0	94	4									
283	224	11	16	161	123	3	198	212	89.9	72	47	0	13	3	5	2	10	3	0	12	3.3	238	0	130	0									
392	381	5	13	233	159	13	208	260	84.6	189	76	0	10	4	52	4	9	5	1	4	1.8	348	3	127	19									
339	343	13	25	226	445	8	181	267	83.4	176	46	244	34	5	16	3	13	4	7	10	3.9	377	2	56	25									
298	324	8	19	141	184	2	170	203	83.6	58	80	0	23	4	17	2	20	2	1	6	2.0	386	0	64	11									
320	338	19	10	218	99	16	184	247	89.6	96	47	2	11	8	13	4	3	7	3	5	3.1	358	8	124	2									
236	211	4	11	206	193	2	143	179	89.2	146	90	0	1	5	16	1	9	1	7	0	2.2	261	0	90	0									
4	10	1	0	7	19	1	8	5	81.3	5	1	1	0	0	0	0	3	0	0	0	0.0	17	0	2	0									
3377	3334	147	215	2206	2057	91	1971	2714	88.1	1426	865	251	148	41	164	80	117	68	39	53	3.0	3308	27	1086	73									
HOSPITAL																																		
DISCHARGE																																		
CLINICS																																		
East Kowloon	20	1	0	2	12	15	0	14	19	80.5	6	2	0	0	0	0	1	7	0	0	17.1	1	4	4	0									
Kowloon	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0										
sub-total	20	1	0	2	12	15	0	14	19	80.5	6	2	0	0	0	0	1	7	0	0	17.1	1	4	4	0									
PART TIME																																		
CLINICS																																		
Castle Peak	18	21	0	0	0	1	2	5	11	100.0	0	2	6	0	0	0	0	0	0	0	0.0	14	0	0	0									
Cheung Chau	7	4	0	0	15	7	0	2	13	88.2	1	4	0	1	1	0	0	0	0	0	0.0	11	0	0	0									
Sai Kung	6	10	0	0	0	5	14	1	6	1	2	6	0	1	0	0	1	0	0	0	0.0	17	0	0	0									
Sheung Shui	90	75	2	3	59	37	3	34	65	80.5	15	17	0	5	2	6	2	7	0	2	7.3	106	1	81	0									
Tai Po	70	87	4	4	58	42	1	45	55	91.7	20	12	0	1	1	2	4	4	0	1	0.9	119	0	91	15									
Yuen long	77	80	0	4	37	29	1	44	54	91.6	15	13	0	2	0	1	2	4	0	2	1.9	89	0	64	24									
sub-total	268	277	6	11	174	130	8	136	199	87.9	53	54	6	10	4	9	8	11	7	0	5	3.1	356	1	236	39								
INSTITUTIONS																																		
CORRECTIONAL																																		
SERVICE DEPT.																																		
Hei Ling Chau	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0									
Stanley Prison	35	58	0	0	0	0	0	62	6	100.0	0	0	0	0	0	0	0	0	0	0	0.0	25	0	0	0									
Shek Pik Prison	6	22	0	0	0	0	25	0	ERR	0	0	0	0	0	0	0	0	0	0	ERR	3	0	0	0	0									
sub-total	41	80	0	0	0	0	25	62	6	100.0	0	0	0	0	0	0	0	0	0	0	0.0	28	0	0	0									
TOTAL	3706	3692	153	228	2392	2202	124	2183	2938	88.2	1485	921	257	158	45	173	88	129	82	39	58	3.1	3693	32	1326	112								

Appendix 20 (b)

Treatment Return 1998 (Cont'd)

Name of clinic/hospital	R p u u m t e o r n R x b/f	Other regimens																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		Brought in						Treatment completed				Transfer out to		Interrup. Rx temp.	Died	Drop out				Complete defaulter				Unsup. Rx	Incomp. Rx	No. def.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Explanatory Notes for Appendices 20(a) & 20(b)

Name of clinic/hospital	Service regimen / Other regimens *																										
	Number put on Rx b/f	Brought in				Treatment completed				Transfer out to		Interrup. Rx temp.	Drop out			Complete defaulter	Number still on Rx c/f	Unsupervised Rx	Incomplete supervised Rx	No. of defaulters >2M, <3M							
		A	B *	C *	D *	E *	F *	G	H	I	J	K	L	M	N	O					P	Q	R	S	T	U	V
J = A + B + C + D + E + F - G - K - L - M - Q - W															V = A + B + C + D + E + F - G - K - L - M - Q - W					W = (A + B + C + D + E + F) - (G + H + I + K + L + M + N + O + P + Q + R + S + T + U)							
H + I															S + T + U												

APPENDIX 21

Examination of Contacts in the Chest Clinics 1998

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	2200	4890	7090
No. of contacts listed	6712	13645	20357
Number of children with negative tuberculin test	168	550	718
Number of children given BCG	166	503	669
Number of contacts x-rayed	5598 (100.00%)	10671 (100.00%)	16269 (100.00%)
Results			
(a) NSD & Unknown	4990 (89.14%)	9581 (89.79%)	14571 (89.56%)
(b) Disease other than TB	312 (5.57%)	509 (4.77%)	821 (5.05%)
(c) Inactive respiratory TB	134 (2.39%)	311 (2.91%)	445 (2.74%)
(d) Active respiratory TB			
A (radiologically)	46 (0.82%)	62 (0.58%)	108 (0.66%)
B (bacteriologically)	11 (0.20%)	15 (0.14%)	26 (0.16%)
C (incomplete)	9 (0.16%)	18 (0.17%)	27 (0.17%)
(e) Non-respiratory TB	6 (0.11%)	24 (0.22%)	30 (0.18%)
(f) Result not yet known	90 (1.61%)	151 (1.42%)	241 (1.48%)

APPENDIX 22

Scheme for Tuberculin Testing and BCG Administration in Hong Kong, 1998

Population Group		Procedure
New borns and within 6 weeks after birth		Direct BCG - Government inoculators with intradermal method Other inoculators with percutaneous method
Infants (excluding contacts)	negative BCG history and/or negative BCG scar	over 6 weeks TT with 1 TU RT 23, negative - BCG positive - observe or no action
	BCG history and BCG scar	no action
Primary School Children (aged 6 - 10)		TT with 1 TU RT 23, negative - BCG positive - no action or chest x-ray
Contact	under 5 (Source DS +ve) *	X-ray, if normal, in 3 months repeat x-ray and do TT, negative - BCG
	under 5 (Source DS -ve)	TT with 1 TU RT 23, negative - BCG positive - x-ray chest
	5 years and over over 14 years	x-ray chest
Vietnamese Refugees	14 years and under	x-ray chest
		Direct BCG

Positive ---> Give full course of chemoprophylaxis

* For those aged under 1 Do TT (Exclude active TB)

Repeat TT ---> Stop chemoprophylaxis and give BCG
Negative
Repeat TT ---> Exclude active TB and complete full course of chemoprophylaxis
positive

Negative ---> Give chemoprophylaxis for 3 months
TT

- Notes :
- (1) Tuberculin Test by intradermal method
 - (2) Reaction to tuberculin
Criterion for + tuberculin reaction : diameter of induration = 10 mm and above
Criterion for - tuberculin reaction : diameter of induration = 9 mm and below
 - (3) Evans freeze dried BCG used
Intradermal strength - viability count of $8 - 26 \times 10^5$ per 0.1 ml dose
Percutaneous strength - viability count of $50 - 250 \times 10^5$ per 0.03ml dose
 - (4) Any child with symptoms and BCG complication should be seen by a doctor

APPENDIX 23

BCG Vaccinations at Birth, 1998

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole	3,605	3,595	99.7
	Queen Mary	632	681	107.8 *
	Tsan Yuk	3,859	3,807	98.7
Private Hosp.	Canossa	823	800	97.2
	H.K. Adventist	689	655	95.1
	HK Sanatorium	1,079	1,076	99.7
	Matilda	844	781	92.5
	St. Paul's	1,790	1,781	99.5
Total (HK Island)		13,321	13,176	98.9
Hospital under HA management	Caritas	1,627	1,648	101.3 *
	Kwong Wah	4,165	4,135	99.3
	Maryknoll	1,053	1,043	99.1
	Queen Elizabeth	3,817	3,831	100.4 *
	United Christian	3,397	3,393	99.9
Private Hosp.	Baptist	5,319	5,257	98.8
	St. Teresa's	3,757	3,692	98.3
Total (Kowloon)		23,135	22,999	99.4
Hospital under HA management	Prince of Wales	5,791	5,791	100.0
	Princess Margaret	2,946	2,964	100.6 *
	Tuen Mun	5,745	5,727	99.7
Private Hosp.	Adventist	920	915	99.5
	Union	1171	1153	98.5
Government Maternity Home		35	32	91.4
Total (NT Areas)		16,608	16,582	99.8
GRAND TOTAL		53,064	52,757	99.4

Note : * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 1998.

Vaccination Method 1998	Percentage
Intradermal	64.7
Percutaneous	35.3

APPENDIX 24 (a)

Tuberculin Tests and BCG Vaccination of School Children 1962 - 1998

Year	Number (a) Eligible	% Agree for TT	Number TT Tested	Number TT Negative	Number Given BCG	% of TT Tested Given BCG
1962			49,567		22,903	46.2
1963			34,793		10,706	30.8
1964			38,871		9,764	25.1
1965			76,407		10,845	14.2
1966			77,447		10,911	14.1
1967	224,666	56.1	125,975	25,794	25,766	20.5
1968	208,029	68.2	141,922	30,328	30,314	21.4
1969	126,906	70.4	89,306	16,831	16,821	18.8
1970	194,298	65.7	127,680	49,655	49,547	38.8
1971	213,457	68.0	145,205	50,115	50,020	34.4
1972	201,537	61.7	124,385	54,340	54,100	43.5
1973	120,797	69.4	83,882	29,713	29,554	35.2
1974	295,287	60.7	179,169	47,591	47,378	26.4
1975	136,175	65.3	88,987	38,334	(b) 39,120	44.0
1976	230,861	63.7	147,057	77,085	76,790	52.2
1977	137,465	55.4	76,143	43,752	43,502	57.1
1978	134,218	66.9	89,732	52,504	54,137	60.3
1979	133,697	66.1	88,375	49,555	49,355	55.8
1980	101,215	66.8	67,633	42,419	43,830	64.8
1981	111,121	68.7	76,342	47,093	47,089	61.7
1982	115,042	71.9	82,675	52,654	52,455	63.4
1983	121,392	77.9	94,578	65,487	65,627	69.4
1984	71,950	85.3	61,359	47,086	47,705	77.7
1985	90,771	82.4	74,802	56,646	56,625	75.7
1986	100,116	82.0	82,057	65,251	64,985	79.2
1987	84,610	79.2	67,038	53,695	53,419	79.7
1988	78,806	89.2	70,318	58,796	59,237	84.2
1989	68,367	91.3	62,390	50,747	50,794	81.4
1990	121,280	86.0	104,263	78,244	78,540	75.3
1991	120,705	91.3	110,193	75,343	75,107	68.2
1992	102,580	91.2	93,533	63,550	(c) 63,234	67.6
1993	100,895	96.3	97,189	69,723	68,598	70.6
1994	91,593	94.8	86,817	65,075	66,372	76.5
1995	94,614	93.4	88,378	65,044	64,005	72.4
1996	73,265	92.3	67,625	49,619	49,113	72.6
1997	61,445	97.2	59,746	49,824	49,336	82.6
1998	91,523	95.4	87,271	74,199	74,008	84.8

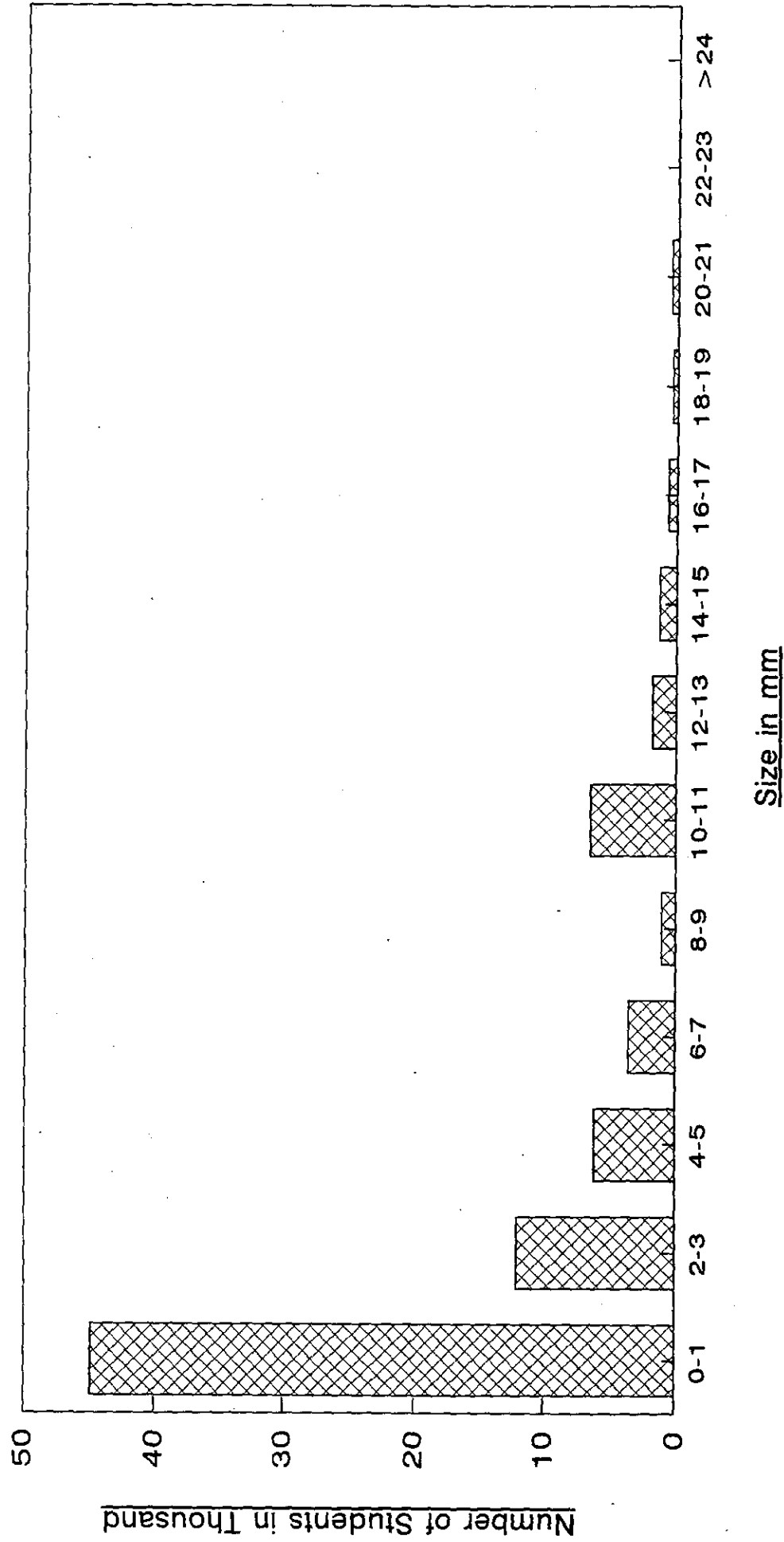
Note : (a) By "number eligible" is meant the total population in the specified age group which it was intended to test and or vaccinate, i.e. the number of persons in each area who could have been tested and/or vaccinated during the period of reporting according to the prevailing policy, by the staff assigned to that area.

(b) Direct BCG was introduced in remote areas w.e.f. 27.10.1975 and number of BCG given includes direct BCG without TT.

(c) No direct BCG was given in 1992 and number of direct BCG given in previous years were not recorded separately.

APPENDIX 24 (b)

Frequency Distribution of Tuberculin Test - Reaction Size
Among Primary School Students 1998 (After 1 TU PPD-RT23)



APPENDIX 25

Beds for Treatment of Tuberculosis, 1998

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	196
	Kowloon Hospital	122 *
	Ruttonjee Hospital	157
	Haven of Hope Hospital	133
	Wong Tai Sin Hospital	175
Total (Hospital Authority)		783
Private	St. Paul's Hospital	—
	Hong Kong Sanatorium	—
Total (Private)		0
Custody	Victoria Prison Hospital	—
	Stanley Prison Hospital	20
	Tai Lam Correctional Institution	—
Total (Custody)		20
Grand Total (1998)		803
Grand Total (1997)		800
Grand Total (1996)		820

* Including two beds in the Intensive Care Unit

APPENDIX 26

Annual Admissions to Hospitals from Government Chest Clinics 1988 - 1998

Year	Total Admissions
1988	4,764
1989	4,809
1990	5,046
1991	5,056
1992	5,229
1993	5,159
1994	5,176
1995	5,392
1996	4,607
1997	4,597
1998	4,709

Admissions by Clinic	Year 1998
East Kowloon	359
Kowloon	899
Kwai Chung	457
Sai Ying Pun	382
Shau Kei Wan	287
Shau Kei Wan Pneumoconiosis	84
Shek Kip Mei	225
Wanchai	530
Yaumati	297
NT Unit	133
Yan Oi	354
Yuen Chau Kok	348
Yung Fung Shee	320
Tung Chung	28
Cheung Chau	6
Total	4,709

Part 2

PNEUMOCONIOSIS

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No.

- 1 Notifications of Silicosis attending the Pneumoconiosis Clinic
in Hong Kong, 1956–1998
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- 3 Occupation Distribution of Confirmed Silicosis, 1998
- 4 Pneumoconiosis Patients by Duration of Exposure to Dust, 1998
- 5 Pneumoconiosis Patients by Degree of Incapacity, 1998
- 6 Confirmed Pneumoconiosis Patients Classified by Radiological Appearance, 1998
- 7 Pneumoconiosis Patients with Tuberculosis, 1998
- 8 Confirmed Pneumoconiosis Patients by Other Particulars, 1998

APPENDIX 1

Notifications of Silicosis attending the Pneumoconiosis Clinic in Hong Kong 1956 - 1998

Year	Number Notified				Cumulative Total Compensated	
	Government Workers	Non-government Workers	Total	Cumulative Total	R1	R2
1956	1	—	1	1		
1957	4	4	8	9		
1958	9	13	22	31		
1959	5	7	12	43		
1960	9	6	15	58		
1961	8	—	8	66		
1962	3	1	4	70		
1963	9	5	14	84		
1964	21	17	38	122		
1965	9	4	13	135		
1966	7	9	16	151		
1967	3	6	9	160		
1968	4	2	6	166		
1969	4	10	14	180		
1970	22	36	58	238		
1971	9	18	27	265		
1972	9	29	38	303		
1973	3	39	42	345		
1974	—	97	97	442		
1975	5	84	89	531		
1976	15	252	267	798		
1977	3	216	219	1,017		
1978	12	207	219	1,236		
1979	2	210	212	1,448		
1980	12	532 (a)	544	1,992	386 (a)	—
1981	8	608	616	2,608	1,332	162
1982	4	511	515	3,123	1,434	634
1983	2	292	294	3,417	1,469	945
1984	1	231	232	3,649	1,477	1,140
1985	1	179	180 (b)	3,829	1,479	1,322
1986	3	176	179 (3)	4,008	1,485	1,513
1987	4	166	170 (2)	4,178	1,485	1,679
1988	6	172	178 (4)	4,356	1,488	1,877
1989	—	156	156 (1)	4,512	1,488	2,023
1990	2	147	149 (1)	4,661	1,489	2,142
1991	—	171	171 (1)	4,832	1,489	2,151
1992	2	171	173 (3)	5,005	1,490	2,340
1993	2	247	249 (4)	5,254	1,492	2,492
1994	—	327	327 (7)	5,581	1,493	2,770
1995	9	245	254 (9)	5,835	1,494	3,000
1996	4	193	197 (9)	6,032	1,494	3,119
1997	4	154	158 (7)	6,190	1,494	3,242
1998	2	197	199 (c) (5)	6,389	1,494 (d)	3,351

Note: (a) The Pneumoconiosis Compensation Scheme was initiated in 1980, before that notifications were voluntary.

(b) The figures in this column denote the number of patient with asbestos-related lung disease.

(c) Up to the moment that this report is being compiled, only 109 of the 199 cases notified in 1998 had been assessed and confirmed Pneumoconiosis by the Pneumoconiosis Medical Board. And the following tables (Appendix 2 to Appendix 8) are compiled basing on the data of these 109 cases.

(d) Under Revised Ordinance 1993: 580 out of 1,494 pneumoconiotics were each receiving a monthly ex-gratia payment of \$4,710 in 1998.

APPENDIX 2

Age Distribution of Pneumoconiosis Cases 1998

Age	Number of Cases	%
25 - 29	—	—
30 - 34	—	—
35 - 39	3	3
40 - 44	12	11
45 - 49	11	10
50 - 54	17	16
55 - 59	18	17
60 - 64	11	10
65 - 69	14	12
70 - 74	19	17
75+	4	4
Total	109	100

APPENDIX 3

Occupation Distribution of Confirmed Silicosis 1998

Type of Occupation	Number of Cases	%
Construction	73	67
Construction/Quarry	16	15
Others	20	18
Total	109	100

APPENDIX 4

Pneumoconiosis Patients by Duration of Exposure to Dust 1998

Duration	Number of Cases	%
< 5 years	2	2
5 - 9	2	2
10 - 14	7	6
15 - 19	26	24
20 - 24	18	17
25 - 29	18	17
30+	31	28
Unknown	5 *	4
Total	109	100

* Fatal cases, no reliable information available.

APPENDIX 5

Pneumoconiosis Patients by Degree of Incapacity, 1998

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	40
10	30
15	9
20	10
25	5
30	1
35	4
40	—
45	—
50	1
55	—
60	1
65	—
70	—
80	3
100	—
N.A. *	5
Total	109

* Fatal cases.

APPENDIX 6

Confirmed Pneumoconiosis Patients Classified by Radiological Appearance, 1998

Type of Opacity	Profusion			Sub - Total
	1	2	3	
<u>Small opacities</u>				
<u>Rounded</u>				
p (up to 1.5 mm diameter)	40	1	—	41
q (1.5 to 3.0 mm diameter)	20	11	1	32
r (3.0 to 10.0 mm diameter)	1	2	1	4
<u>Irregular</u>				
s (fine irregular or linear)	8	—	—	8
t (medium irregular)	4	4	—	8
u (coarse irregular)	—	—	—	—
Sub-total	73	18	2	93
<u>Combined opacities</u>	9	1	—	10
<u>N.A.</u>	—	—	—	6
Total				109

22 out of the 109 patients have large opacities as follows :

<u>Large opacities</u>	
A (Single opacity 1 – 5 cm or multiple opacities > 1 cm each but sum of diameter < 5 cm)	16
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	5
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	1
Total	22

APPENDIX 7

Pneumoconiosis Patients with Tuberculosis, 1998

Type of T.B.	Number of Cases	%
Bacteriological Positive	16	15
Bacteriological Negative	29	27
No T.B.	59	54
N.A.	5	4
Total	109	100

APPENDIX 8

Confirmed Pneumoconiosis Patients by Other Particulars 1998

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	91	84
	Non-smoker	13	12
	Unknown	5	4
	Total	109	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	36	33
	No	68	63
	Unknown	5	4
	Total	109	100
General Condition	Good	98	90
	Fair	6	6
	Poor	—	—
	Died	5	4
	Total	109	100

