ANNUAL REPORT 1997

CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

In 1997, TB continued to be a disease of worldwide concern. According to WHO's estimates, someone in the world is newly infected with TB every second. Nearly one per cent of the world's population is infected with TB each year. Overall, one-third of the world's population has been infected with the TB bacillus. Seven to 8 million people become sick with TB each year. TB kills 2 to 3 million people each year. It is the leading infectious killer of youth and adults in the world. Thirty million people are likely to die from TB in the next 10 years. Fortunately, increasing number of countries are going to implement effective measures like directly observed treatment, short course (DOTS) and passive case-finding. Widespread implementation of these measures and long-term commitment are the crucial factors in the control of this dreadful human disease.

In Hong Kong, directly observed treatment has been the mainstay of the local TB programme for well over 2 decades. 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 slightly to 103.0 per 100,000 in 1996, and to 108.8 per 100,000 in 1997. However, 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. These drastic increases from previously minor notification sources suggest changes in notification behaviour. In March 1997, a cluster of TB cases occurred in a kindergarten, and attracted very wide coverage by the news media. This incident raised awareness of tuberculosis among both health care workers and members of the public. A marked increase of TB notifications was observed in the second quarter of 1997. Therefore, the recent change in the overall notification trend may to a significant extent be due to the increase in the completeness of notification. Further observation of the trend with the distribution of the notifying sources may be required to clarify this issue.

The population of Hong Kong is getting older as it undergoes demographic transition, which is a result of decreasing birth rate and increasing life expectancy. 10.4% of the population was aged 65 or over in 1997. While there was a declining trend in the overall TB notification rate in the past decade, the actual number of notifications for those aged 65 or above increased from 1,158 (15.3% of total notifications) in 1985, 1,676 (26.5%) in 1994, 1,703 (27.4%) in 1995, 1,925 (29.6%) in 1996 to 2,295 (32.5%) in 1997. With an aging population, TB in the elderly is likely to become an increasing problem in the next few decades.

Only 156 out of the 7,072 notifications in 1997 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 34 cases involved Vietnamese boat people in contrast to 88 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 continued to drop. It declined from a peak of 207.9 per 100,000 in 1951 to a historical low of 3.9 per 100,000 in 1997. The average age at death increased from 25 years in 1951 to 72 years in 1997. 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 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.

In view of the possibility of a genuine resurgence of TB in Hong Kong, a number of improvement measures were introduced in the TB and Chest Service in 1997. Increased emphasis was put on the public health aspects of TB control. Health education activities were intensified through different channels and media. Health talks were delivered in various institutions, especially schools and elderly homes. In collaboration with the Hong Kong Tuberculosis, Chest and Heart Diseases Association, a series of publicity, exhibition, and other education programmes were held to commemorate the World TB Day on 24th March 1997. Regular in-service training seminars were arranged for medical and nursing staff. Collaboration and coordination between different health care providers was actively promoted through the TB Control Coordinating Committee. A set of TB treatment guidelines was developed to assist doctors in the management of TB patients in different clinical settings. As drug resistance is a major threat in the global combat against TB, the TB and Chest Service and the TB Laboratory of the Institute of Pathology in the Department of Health participated in the WHO/IUATLD Global Project on Anti-Tuberculosis Drug Resistance Surveillance.

During the year, 116,715 patients attended the Service compared with 100,417 in 1996, and the total attendance was 914,951 compared with 847,797 in 1996. Among the

116,715 patients, 52,136 patients were new attendants, of whom 35.6% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (8.8%), active tuberculosis of other forms (1.4%), inactive tuberculosis (11.5%), bronchitis not specified as acute or chronic (18.3%), acute repiratory infection (7.6%), pneumonia (4.5%), malignant neoplasm of trachea and bronchus (1.6%), bronchiectasis (0.9%), asthma (0.6%) and emphysema (0.3%). Among all the attendances, 4,597 hospital admissions were arranged.

Part I: Tuberculosis

The number of tuberculosis notification in 1997 was 7,072, making a notification rate of 108.8 per 100,000 population. The corresponding figures in 1996 were 6,501 and 103.0 respectively.

The number of tuberculosis deaths was 252 in 1997 compared with 292 in 1996, with the mortality rate for both years being 3.9 and 4.6 per 100,000 respectively.

Deaths of tuberculosis in 1997 fell 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 72.1 .

In 1997, 99.5% of the newborns were given direct BCG vaccination at birth. 97.2% of primary school children aged 6-10 took up tuberculin test, of which 82.6% 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 II: 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 payment. 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 at $2,570 per month 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 exgratia payment scheme for pre-1981 pneumoconiotics had also been put under review. Improvement measures would be introduced in early 1998.

The attendance at the clinic was 9,185 in 1997 compared with 9,664 in 1996. In 1997, 158 new cases of pneumoconiosis were registered in the Service, and 125 new cases (including 7 cases of asbestos-related lung diseases) were assessed by the Pneumoconiosis Medical Board. Up to the end of 1997, a total of 4,736 patients had been compensated.

Part 1

TUBERCULOSIS

Contents

APPENDIX 1

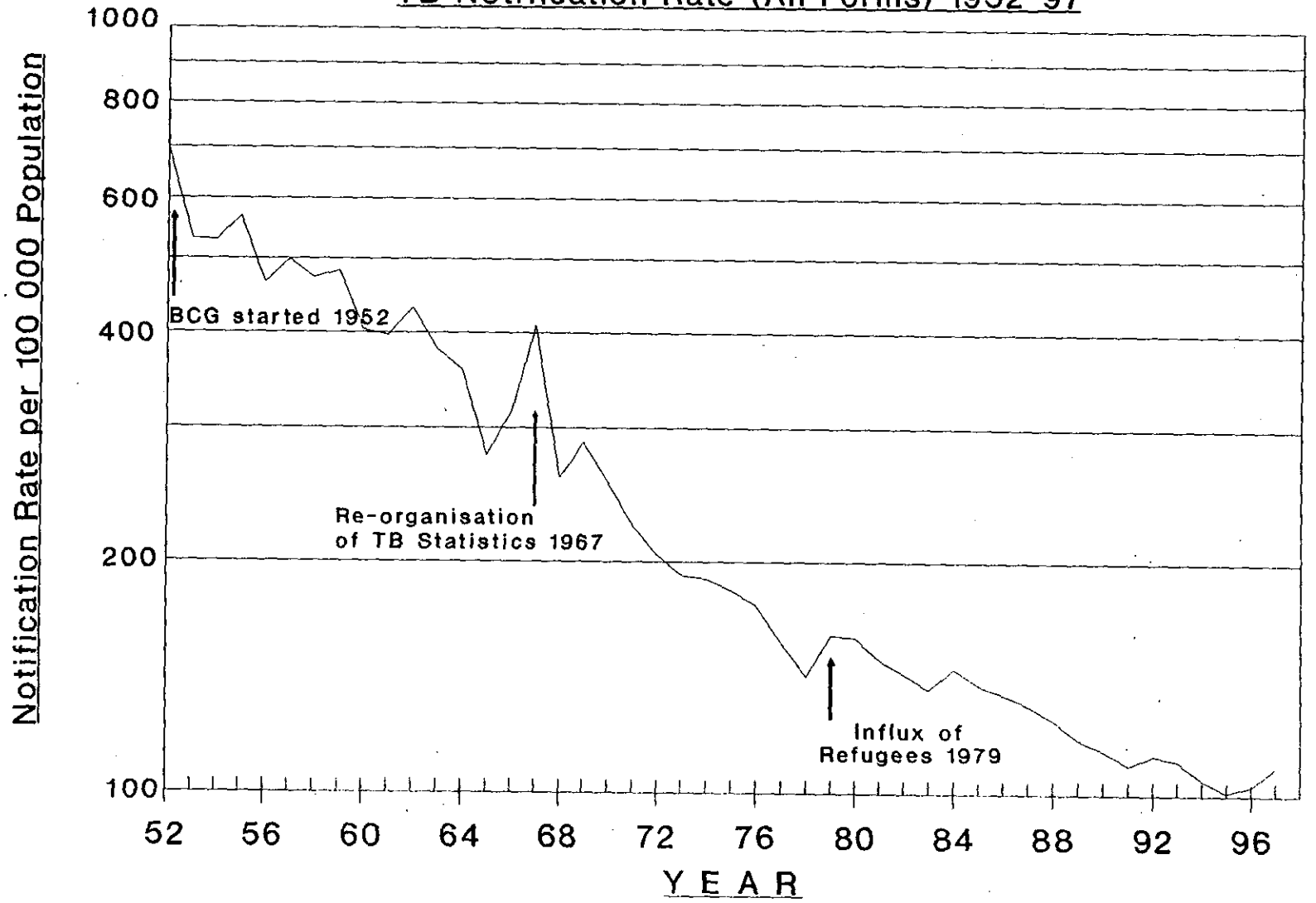
Notification & Death Rate of Tuberculosis (All Forms)
1947 – 1997

Year	TB Notification			Notification Rate per 100,000 Pop	TB Deaths	Death Rate per 100,000 Pop	Ratio (Notifications/ Deaths)	Deaths / Notifications x 100%
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	8,320			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

* 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.

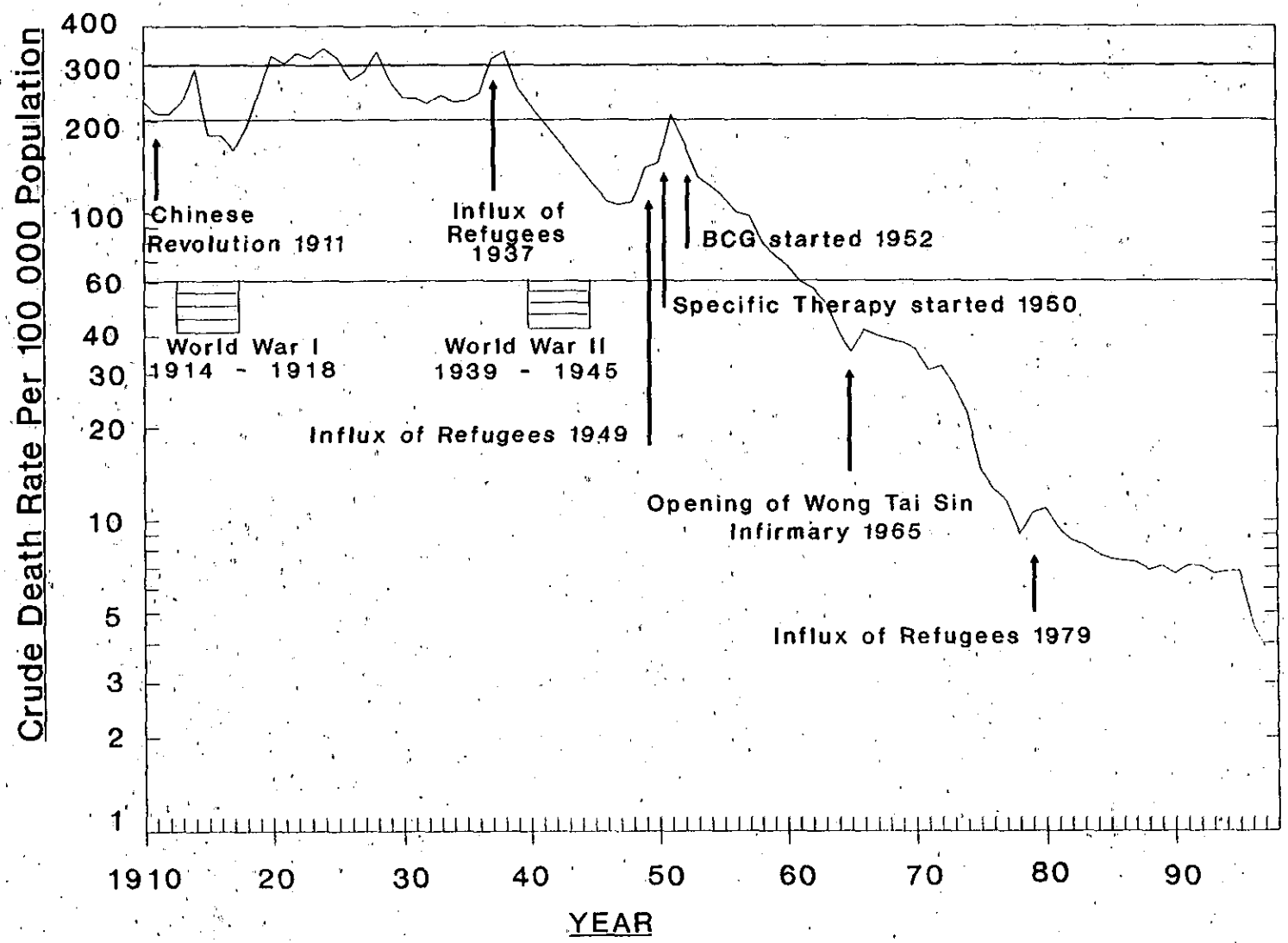
APPENDIX 2

TB Notification Rate (All Forms) 1952-97



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-1997



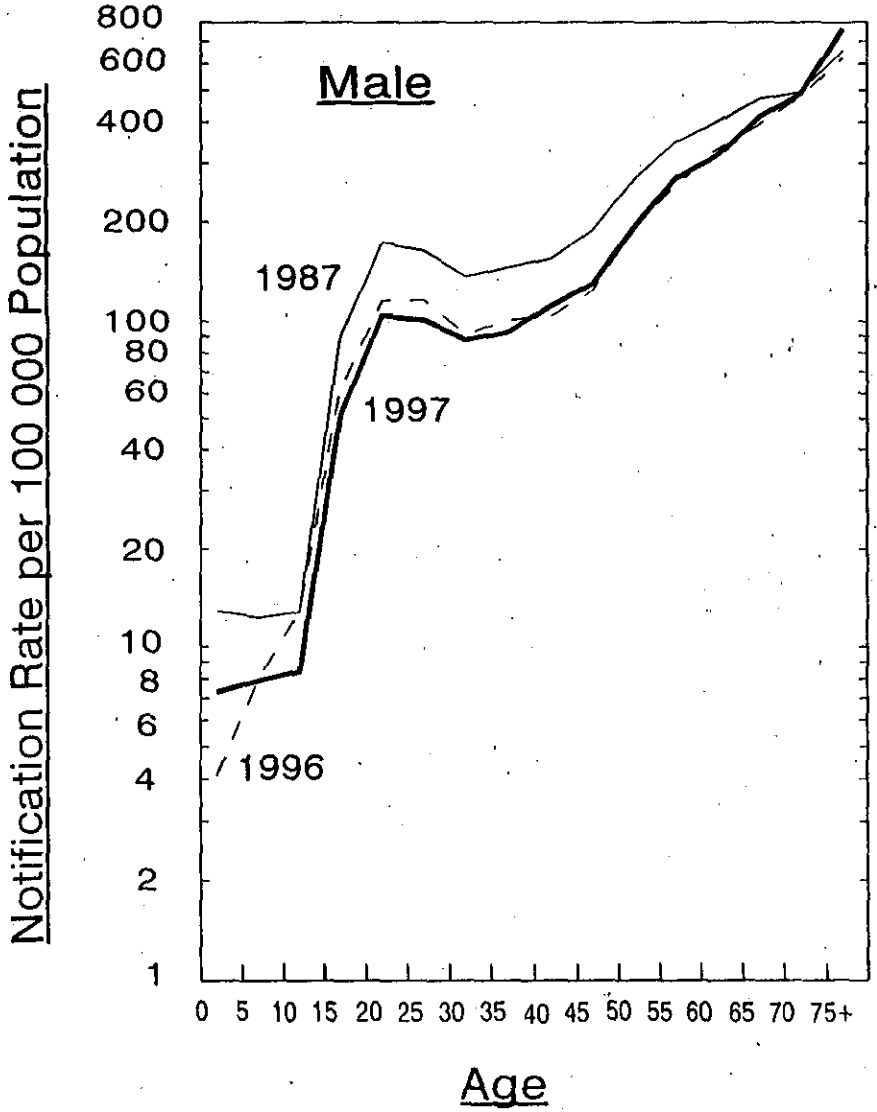
APPENDIX 4

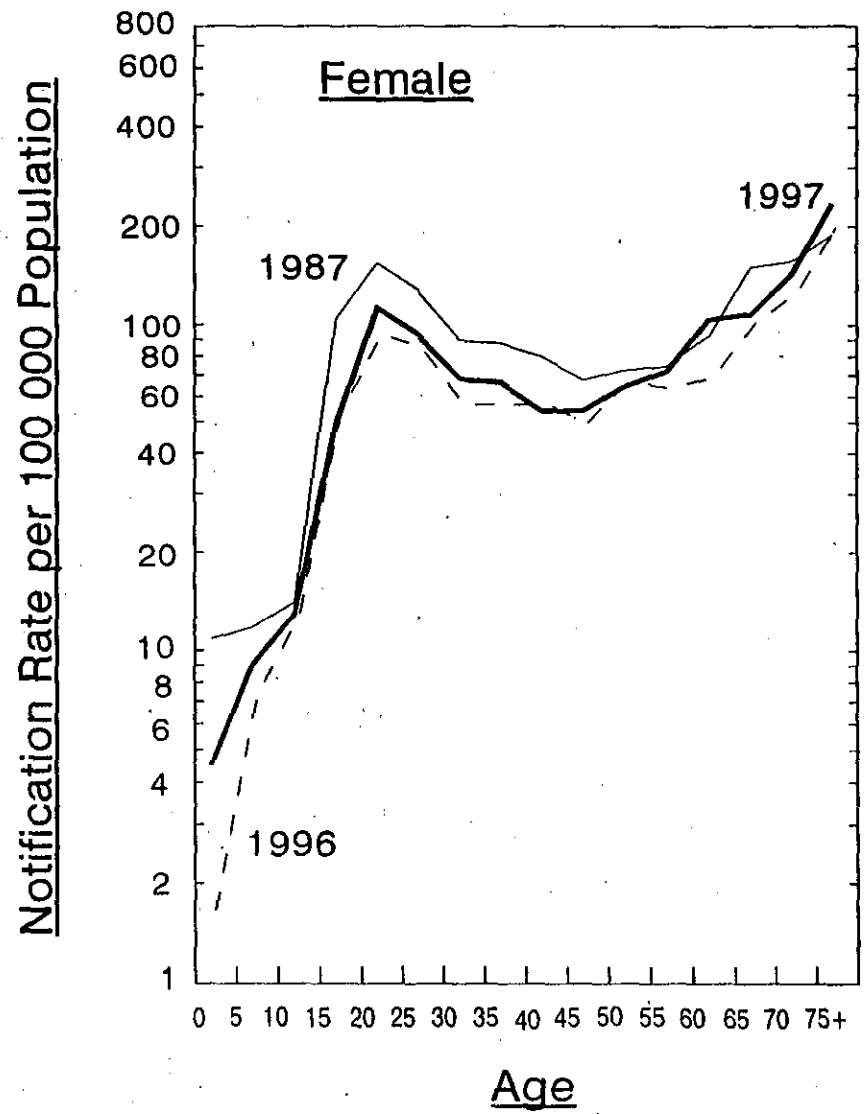
Tuberculosis Notifications (All Forms) & Rate by Age and Sex
1997

Age Group	Tuberculosis Notification (All Forms)			Tuberculosis Notification Rate (per 100,000 population)		
	M	F	T	M	F	T
Under 1	0	–	0			
1	4	3	7			
2	4	2	6	> 7.3	4.5	6.0
3	2	1	3			
4	4	2	6			
5 – 9	16	17	33	7.9	9.1	8.5
10 – 14	18	26	44	8.4	12.8	10.5
15 – 19	117	106	223	51.9	49.9	50.9
20 – 24	243	267	510	104.0	113.0	108.5
25 – 29	251	259	510	100.7	93.5	96.9
30 – 34	272	231	503	87.9	68.2	77.6
35 – 39	320	229	549	92.4	66.6	79.5
40 – 44	330	154	484	111.4	54.3	83.5
45 – 49	330	124	454	131.1	54.5	94.7
50 – 54	319	87	406	194.3	64.7	136.0
55 – 59	379	84	463	271.1	72.2	180.7
60 – 64	442	131	573	316.6	104.2	216.0
65 – 69	502	130	632	415.9	108.0	262.1
70 – 74	426	141	567	489.7	143.0	305.5
75 – 79	378	130	508			
80 – 84	236	110	346	> 762.4	232.5	443.9
85 & over	137	105	242			
Unknown	1	2	3			
Total	4731	2341	7072	144.6	72.5	108.8

APPENDIX 5

TB Notification Rate by Age & Sex 1987, 1996 & 1997





APPENDIX 6

Notifications of Tuberculosis by Type by Age & Sex 1997

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	2	5	–	–	–	–	–	–	1	1	2
2	2	1	3	–	–	–	1	–	1	1	1	2
3	1	1	2	–	–	–	–	–	–	1	–	1
4	3	1	4	–	1	1	–	–	–	1	–	1
5 – 9	14	10	24	–	1	1	–	–	–	2	6	8
10 – 14	16	26	42	–	–	–	–	–	–	2	–	2
15 – 19	105	91	196	–	1	1	–	1	1	12	13	25
20 – 24	224	236	460	1	1	2	1	1	2	17	29	46
25 – 29	225	217	442	2	–	2	–	2	2	24	40	64
30 – 34	241	191	432	2	–	2	5	1	6	24	39	63
35 – 39	297	182	479	–	–	–	1	2	3	22	45	67
40 – 44	318	116	434	3	4	7	–	2	2	9	32	41
45 – 49	314	109	423	–	1	1	2	1	3	14	13	27
50 – 54	309	66	375	–	–	–	–	1	1	10	20	30
55 – 59	371	68	439	–	–	–	1	–	1	7	16	23
60 – 64	424	104	528	1	1	2	6	3	9	11	23	34
65 – 69	487	110	597	3	1	4	2	2	4	10	17	27
70 – 74	411	127	538	2	1	3	1	2	3	12	11	23
75 – 79	367	109	476	1	–	1	3	2	5	7	19	26
80 – 84	230	100	330	–	–	–	2	2	4	4	8	12
85 & over	133	98	231	–	–	–	–	1	1	4	6	10
Unknown	–	2	2	–	–	–	–	–	–	1	–	1
Total	4495	1967	6462	15	12	27	25	23	48	196	339	535 *

* Including :

TB Lymph Node	284
TB Kidney/Urinary System	20
TB Peritonitis	13
TB Pleural Effusion	30
TB Laryngitis	5
Miliary TB	7
TB Skin	7
Others	27
Unspecified	142

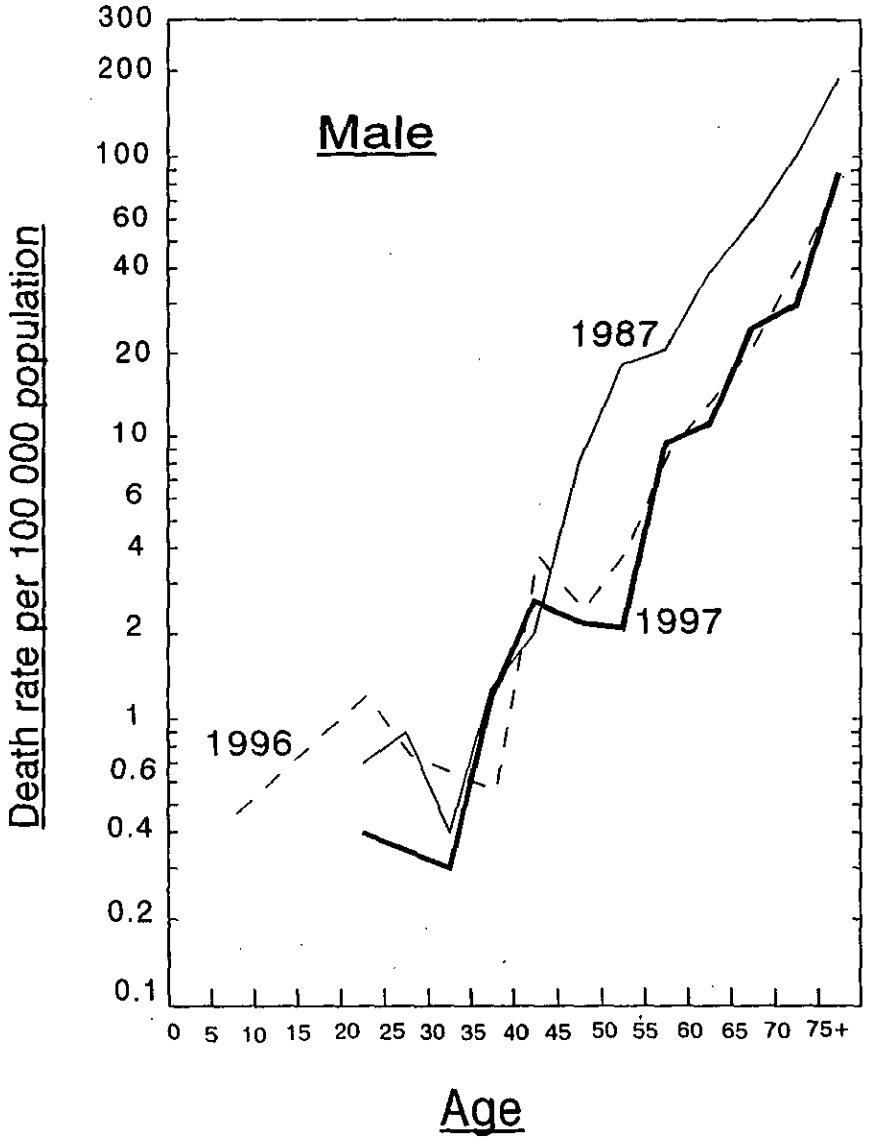
APPENDIX 7

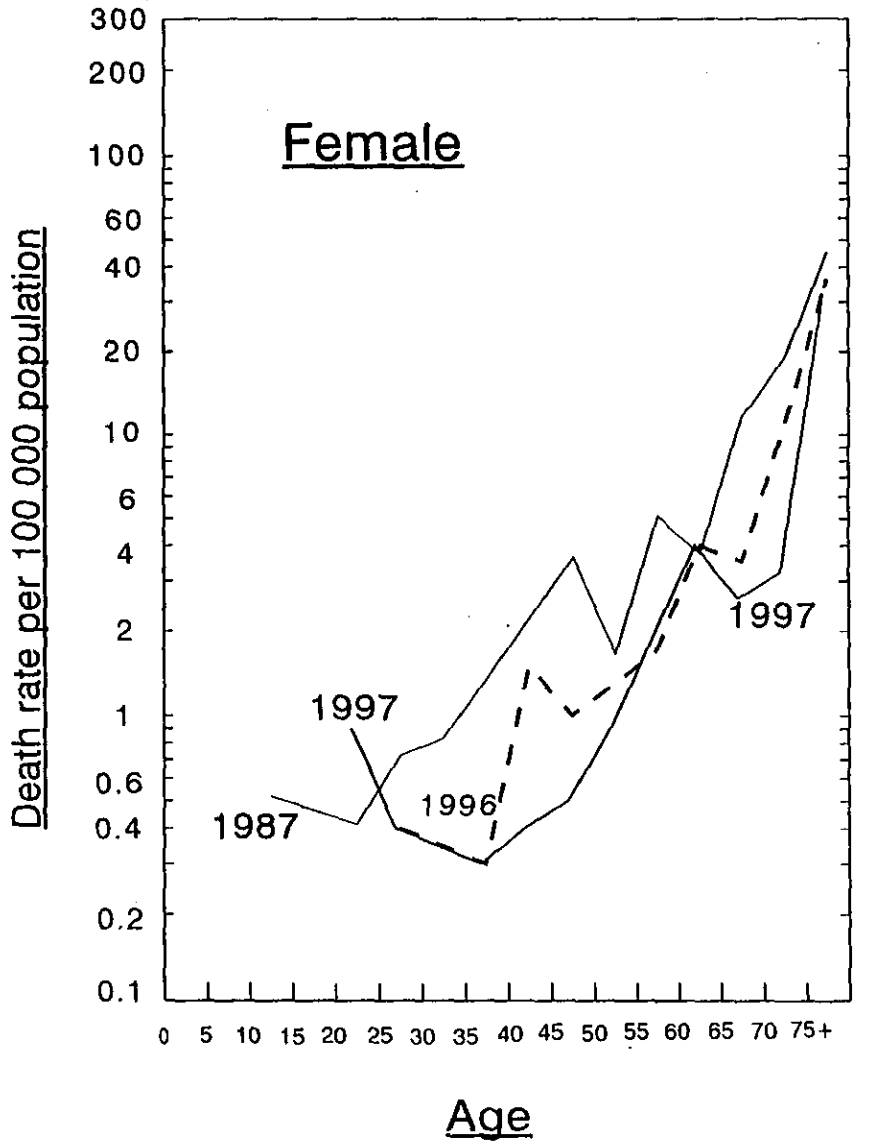
TB Death (All Forms) & Death Rate by Age & Sex 1997

Age Group	TB Death (All Forms)			Death Rate (per 100,000 population)		
	M	F	T	M	F	T
Under 1	–	–	–			
1	–	–	–			
2	–	–	–	> –	–	–
3	–	–	–			
4	–	–	–			
5 – 9	–	–	–	–	–	–
10 – 14	–	–	–	–	–	–
15 – 19	–	–	–	–	–	–
20 – 24	1	2	3	0.4	0.9	0.6
25 – 29	–	1	1	–	0.4	0.2
30 – 34	1	–	1	0.3	–	0.2
35 – 39	4	1	5	1.2	0.3	0.8
40 – 44	7	1	8	2.6	0.4	1.5
45 – 49	5	1	6	2.2	0.5	1.4
50 – 54	3	1	4	2.1	0.9	1.5
55 – 59	13	–	13	9.5	–	5.1
60 – 64	15	5	20	11.1	4.0	7.7
65 – 69	28	3	31	24.7	2.6	13.5
70 – 74	24	3	27	29.7	3.2	15.6
75 –79	29	13	42			
80 – 84	32	13	45	> 88.3	31.0	53.9
85 & over	26	20	46			
Total	188	64	252	5.7	2.0	3.9

APPENDIX 8

TB Mortality Rate by Age & Sex 1987,1996 & 1997





APPENDIX 9

TB Deaths by Type by Age & Sex 1997

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	–	–	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–	–	–
5 – 9	–	–	–	–	–	–	–	–	–	–	–	–
10 – 14	–	–	–	–	–	–	–	–	–	–	–	–
15 – 19	–	–	–	–	–	–	–	–	–	–	–	–
20 – 24	–	–	–	–	1	1	–	–	–	1	1	2
25 – 29	–	–	–	–	–	–	–	–	–	–	1	1
30 – 34	1	–	1	–	–	–	–	–	–	–	–	–
35 – 39	4	–	4	–	–	–	–	–	–	–	1	1
40 – 44	7	1	8	–	–	–	–	–	–	–	–	–
45 – 49	4	–	4	–	1	1	–	–	–	1	–	1
50 – 54	2	–	2	–	–	–	–	–	–	1	1	2
55 – 59	11	–	11	–	–	–	–	–	–	2	–	2
60 – 64	13	3	16	–	1	1	–	–	–	2	1	3
65 – 69	26	3	29	1	–	1	–	–	–	1	–	1
70 – 74	21	1	22	–	–	–	–	–	–	3	2	5
75 – 79	27	10	37	–	–	–	–	–	–	2	3	5
80 – 84	29	12	41	–	–	–	–	1	1	3	–	3
85 & over	24	17	41	–	–	–	–	1	1	2	2	4
Total	169	47	216	1	3	4	–	2	2	18	12	30 *

* Breakdown of Deaths from other forms of TB: –

	Number
Intestines, peritoneum & mesenteric glands (014)	1
Genito–urinary system (016)	4
TB Liver (017)	2
Miliary TB (018)	21
Late effects of TB (137)	2
Total	30

APPENDIX 10

Tuberculosis Mortality
1949 – 1997

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		0.01	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	0.00	0.00	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

NOTE : There were no infant death from TB in 1970, 1976, 1977, 1981, 1982, 1983, 1985, 1986, 1987, 1990, 1991, 1992, 1994, 1995, 1996 & 1997.

APPENDIX 11

Top Ten Causes of Death 1997

Rank	Causes of Death	Detailed List No. 9th Revision	1997		
			Male	Female	Total
	All Causes	001 – 999	18,249	13,827	32,079 (3)
1	Malignant Neoplasms	140 – 208	6,423	3,950	10,373
2	Heart diseases, including hypertensive heart diseases	390 – 429	2,549	2,257	4,806
3	Pneumonia, all forms	480 – 486	2,116	1,984	4,100
4	Cerebrovascular diseases	430 – 438	1,449	1,577	3,026
5	Injury and poisoning	800 – 999	1,275	633	1,908
6	Nephritis, Nephrotic syndrome and Nephrosis	580 – 589	484	501	985
7	Septicaemia	038	280	379	659
8	*Chronic liver disease and cirrhosis*	571	306	130	436
9	Diabetes mellitus	250	150	221	371
10	Aortic aneurysm	441	208	121	329
12	Tuberculosis (including late effects of tuberculosis)	010 – 018 137	188	64	252
	Certain conditions originating in the perinatal period	760 – 779	41	36	77
	All other causes	Residues of 001 – 999	2,780	1,974	4,757 (3)

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

APPENDIX 12

Origin of Tuberculosis Notifications
1987 – 1997

Origin	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Origin
East Kowloon Chest Clinic	371	338	293	311	269	280	298	280	158	190	175	East Kowloon Chest Clinic
Kowloon Chest Clinic	1149	1191	1227	1218	1117	950	894	823	788	742	667	Kowloon Chest Clinic
Kwai Chung Chest Clinic	584	504	478	490	515	556	583	552	554	581	547	Kwai Chung Chest Clinic
Sai Ying Pun Chest Clinic (a)	286	231	262	259	245	262	288	271	261	254	180	Sai Ying Pun Chest Clinic (a)
Shaukiwan Chest Clinic	165	138	131	150	141	188	180	176	189	195	181	Shaukiwan Chest Clinic
										31	31	Shaukiwan Pneumoconiosis
Shek Kip Mei Chest Clinic	346	320	357	331	352	392	290	272	256	243	302	Shek Kip Mei Chest Clinic
Wanchai Chest Clinic	629	771	729	643	560	729	717	603	593	590	502	Wanchai Chest Clinic
Yaumati Chest Clinic	367	330	370	332	264	343	296	349	181	325	280	Yaumati Chest Clinic
NT Chest Clinic	481	449	406	422	402	422	511	706	650	630	561	NT Chest Clinic (e)
Yan Oi Chest Clinic	202	190	226	282	330	291	313	303	363	170	428	Yan Oi Chest Clinic
Yung Fung Shee Chest Clinic	174	163	206	226	238	281	276	296	301	300	240	Yung Fung Shee Chest Clinic
Sub–total	4754	4625	4685	4664	4453	4694	4646	4631	4294	4251	4094	Sub–total
								274	322	335	384	Kowloon Hospital
Tung Wah Group (b)	309	274	240	218	238	238	338	418	372	330	442	Wong Tai Sin Hospital
Ruttonjee Hospital	744	792	651	544	493	305	346	290	229	235	333	Ruttonjee Hospital
Grantham Hospital	379	384	347	323	423	273	269	208	338	285	360	Grantham Hospital
Haven of Hope Hospital	174	165	158	88	51	91	117	80	88	97	72	Haven of Hope Hospital
Other Govt Institutions (c)	493	464	374	466	463	593	612	18	16	3	5	Other Govt. Institutions (f)
								327	277	287	740	Other H.A. Hospitals
Maryknoll Hospital	91	105	63	79	50	55	48					
United Christian Hospital	11	26	13	33	24	32	36					
Caritas Medical Centre	5	7	8	13	8	11	29					
Others (d)	309	179	165	82	80	219	89	53	253	589	413	Private Practitioners
Private Hospitals	N.A.	N.A.	N.A.	N.A.	N.A.	23	7	20	23	89	229	Private Hospitals
Total	7269	7021	6704	6510	6283	6534	6537	6319	6212	6501	7072	Total
% of cases from Chest Clinics among the total	65.4	65.9	69.9	71.6	70.9	71.8	71.1	73.3	69.1	65.4	57.9	% 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	1997	
	Notification	Notification Rate (per 100,000 pop.)
Hong Kong Island	1,526	110.3
Central & Western	315	112.4
Wanchai	311	178.8
Eastern	636	100.3
Southern	264	89.5
Kowloon	2,661	129.5
Yau Tsim Mong	469	158.8
Sham Shui Po	584	158.7
Kowloon City	420	111.4
Wong Tai Sin	580	139.3
Kwun Tong	608	101.7
New Territories (East)	1,085	75.4
North	197	78.1
Tai Po	226	78.8
Shatin	469	76.3
Sai Kung	143	65.9
Islands	50	73.7
New Territories (West)	1,713	106.6
Tsuen Wan	368	128.2
Kwai Chung & Tsing Yi	551	108.7
Tuen Mun	420	87.4
Yuen Long	374	112.3
Others	87	
Imported	0	
Vietnamese Refugees	34	
Unknown	53	
Total	7,072	108.8

APPENDIX 14

Establishment & Strength of Chest Service
As at 31.12.97

Post	Establishment	Strength
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	8 (a)	2
Medical & Health Officer	21	26 (d)
Senior Nursing Officer	–	–
Nursing Officer	15	12
Registered Nurse	53	59
Enrolled Nurse	128	110
Senior Dispenser	1	1
Dispenser	11	11
Senior Inoculator	3	2
Inoculator	23	16
Executive Officer I	1	–
Executive Officer II	–	1
Statistical Officer II	2	2
Senior Personal Secretary	1	–
Personal Secretary I	–	1
Clerical Officer I	16	16
Clerical Officer II	28	19
Clerical Assistant	48	45
Typist	2	3 (b)
Office Assistant	26	16
Workman II	63	61
Watchman	2	2
Medical Social Worker	–	12 (c)
Senior Radiographer	1	1
Radiographer II	18	18
Senior Radiographic Technician	7	5
Radiographic Technician	8	9
Darkroom Technician	16	14

(a) Including 1 SMO (Radiologist) in Chest Service
(b) Supernumerary post (Typist for YMTXSC)
(c) Seconded from Social Welfare Department and some of them are part–time only
(d) Including 2 MOs as Medical staff exchange programme with Ruttonjee Hospital & Wong Tai Sin Hospital

APPENDIX 15

Total Attendances at Chest Clinics
1987 – 1997

Clinic/Hospital	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Shaukiwan Chest Clinic	37,319	37,285	37,004	41,733	47,614	46,348	45,250	43,128	48215	55737	54639
Shaukiwan Pneumoconiosis	–	–	–	–	–	–	–	–	9944	9664	9185
Sai Ying Pun Chest Clinic	50,944	52,048	52,134	54,239	51,161	52,478	51,036	47,995	48537	55967	50875
Wanchai Chest Clinic	84,835	95,998	98,548	94,052	89,769	89,945	88,826	85,106	79964	89391	92697
Kowloon Chest Clinic	82,387	92,142	88,012	87,277	88,930	77,817	80,576	83,223	95667	104572	120663
Yaumati Chest Clinic	85,081	75,855	80,885	80,088	78,008	74,709	78,565	83,555	79224	80341	89759
Shek Kip Mei Chest Clinic	69,220	70,006	67,702	64,588	60,032	67,636	59,342	65,676	56871	63462	72274
East Kowloon Chest Clinic	77,094	72,970	62,829	62,479	58,667	64,659	64,473	64,845	54430	54921	58862
Yung Fung Shee Chest Clinic	51,520	52,880	50,420	57,085	53,925	53,042	53,726	55,740	56908	58139	58841
Kwai Chung Chest Clinic	91,386	83,329	79,775	79,395	80,144	84,721	86,912	91,095	94000	101041	111683
Yan Oi Chest Clinic	36,786	38,611	39,288	46,409	51,660	52,075	51,077	59,698	64091	70741	69581
Yuen Chau Kok Chest Clinic	–	–	–	–	–	–	10,944	51,089	54642	55615	61160
Tung Chung	–	–	–	–	–	–	–	–	–	–	101
Tai Po Chest Clinic	7,056	7,089	7,917	8,174	8,504	9,385	10,852	9,620	8083	8773	15760
Yuen Long Chest Clinic	10,336	10,402	10,474	11,996	10,967	11,149	11,618	8,963	9822	11687	18742
Sheung Shui Chest Clinic	6,741	6,139	6,298	7,043	6,274	6,770	7,217	7,644	7710	10151	15330
Sai Kung Chest Clinic	1,374	1,508	1,381	1,960	1,902	1,529	1,504	1,446	1412	1451	1444
Castle Peak Hospital	1,639	1,224	1,378	1,693	2,695	4,850	3,736	2,442	1932	1773	1169
Cheung Chau Chest Clinic	2,234	1,605	2,075	1,614	3,114	1,903	1,927	1,781	2414	2490	2808
Hei Ling Chau ATC	2,228	2,846	2,398	2,159	877	1,636	1,335	1,232	1550	3187	2600
Shek Pik Prison Hospital	261	158	444	188	179	584	882	594	1239	943	725
Stanley Prison Hospital	2,057	5,287	7,831	9,737	9,430	9,166	7,745	9,991	5925	7751	6053
Pik Uk Prison	47	15	178	386	110	112	46	1	87	–	–
Shatin Chest Clinic	10,959	11,826	13,887	14,567	14,989	16,567	12,974	–	–	–	–
Aberdeen Chest Clinic	4,739	4,506	5,055	1,601	–	–	–	–	–	–	–
Tai Lam Addiction Rx Centre	4,031	1,738	–	–	–	–	–	–	–	–	–
Tai O	8	1	63	47	7	–	–	–	–	–	–
Total	720,282	725,468	715,976	728,510	718,958	727,081	730,563	774,864	782,667	847,797	914,951

APPENDIX 16

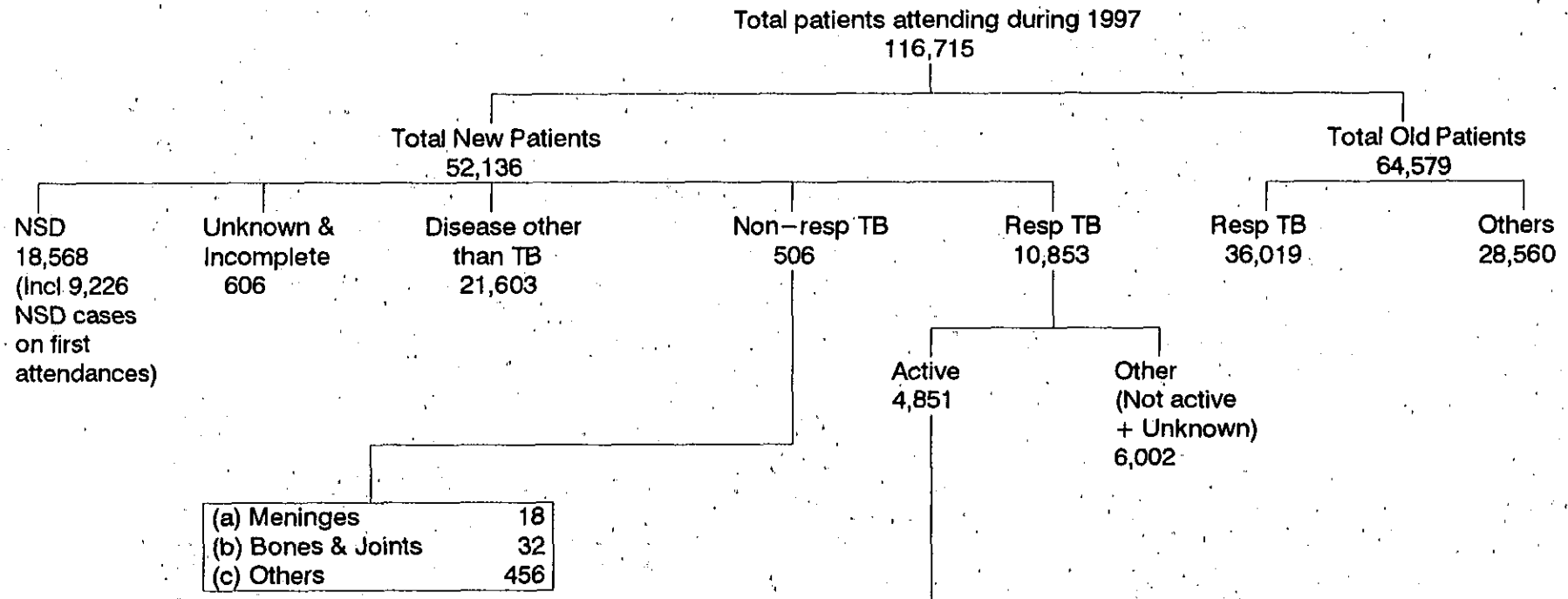
No. of Doctor Sessions, Cases seen by Doctor and Patient/Doctor Session 1997

Clinic/Hospital	Doctor Sessions	Cases seen by Doctor	Patient/ Dr Session
East Kowloon Chest Clinic	797	20,345	26
Kowloon Chest Clinic	1,400	47,153	34
Kwai Chung Chest Clinic	1,405	43,387	31
Sai Ying Pun Chest Clinic	691	21,095	31
Shaukiwan Chest Clinic	539	19,005	35
Shaukiwan Pneumoconiosis	539	8,789	16
Shek Kip Mei Chest Clinic	694	19,137	28
Tung Chung	46	21	0.5
Wanchai Chest Clinic	1,537	38,050	25
Yan Oi Chest Clinic	838	25,877	31
Yaumati Chest Clinic	926	29,852	32
Yuen Chau Kok Chest Clinic	871	24,347	28
Yung Fung Shee Chest Clinic	538	15,767	29
Castle Peak Hospital	49	545	11
Cheung Chau Chest Clinic	27	732	27
Hei Ling Chau ATC	12	282	24
Sai Kung Chest Clinic	51	824	16
Sheung Shui Chest Clinic	241	5,565	23
Stanley Prison Hospital	26	833	32
Wong Siu Ching Chest Clinic	296	5,793	20
Shek Pik Prison Hospital	13	189	15
Yuen Long Chest Clinic	388	7,704	20
Total	11,924	335,292	28

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

APPENDIX 17

Flow Chart of Patients Attending Chest Clinics, 1997



(a) Meninges	18
(b) Bones & Joints	32
(c) Others	456

Bacteriology	Extent	Number
Negative	1	1597
	2	339
	3	88
Positive	1	1314
	2	890
	3	418
Incomplete	1	167
	2	32
	3	6

Bacteriology	Cavity	Number
Negative	Yes	101
	No	1923
Positive	Yes	526
	No	2096
Incomplete	Yes	9
	No	196

Previous History of TB	Previous Treatment for TB	Number
No	No	4572
Yes	No	21
Yes	Yes	249
Unknown	Unknown	9

APPENDIX 18

Classification of Patients of First Attendance with New Case Card Completed
By Clinics According to International Classification of Diseases Code 1997

Code	Classification	Total
010	Primary Tuberculosis Infection	2
011	Pulmonary Tuberculosis	4,610
012	Other Respiratory Tuberculosis	239
013	Tuberculosis of Meninges	18
014	Tuberculosis of Intestines	17
015	Tuberculosis of Bones & Joints	32
016	Tuberculosis of Genito–urinary System	31
017	Tuberculosis of Other Organs	380
018	Miliary Tuberculosis	28
137	Late effects of Tuberculosis	6,002
160–165	Malignant Neoplasm of Respiratory System	880
212	Benign Neoplasm of Respiratory System	8
460–466	Acute Respiratory Infection	3,965
470–478	Other Diseases of Upper Resp Tract	69
480–486	Pneumonia	2,342
487	Influenza	158
490–491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	9,665
492	Emphysema	137
493	Asthma	305
494	Bronchiectasis	472
495–496	Others	500
501	Asbestois	2
502	Silicosis	16
505	Pneumoconiosis, unspecified	4
506–508	Others	0
510	Empyema	7
511	Pleurisy	163
512	Pneumothorax	68
513–519	Other Diseases of Respiratory System	303
786	Unknown	3,230
V71	N.S.D.	6,023
	Diseases Other than TB & Resp System	2,542
Total		42,218

APPENDIX 19

Extent of Active Respiratory TB in First Attenders at Chest Clinics
1995 – 1997

Extent *	1995		1996		1997	
	No.	%	NO.	%	No.	%
1. Minimal	3,423	74.3	3,004	64.6	3,078	63.5
2. Moderate	848	18.4	1,166	25.1	1,261	26.0
3. Extensive	334	7.3	477	10.3	512	10.6
Total	4,605	100.0	4,647	100.0	4,851	100.0
No.of first attenders	40,981		42,170		52,136	
% of active TB	11.2		11.0		9.3	

* 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 1997

	Number	%
Smear+	1656	34.1
Smear−Culture+	1002	20.7
Smear−Culture−	1951	40.2
Incomplete	242	5.0
Total	4851	100.0%

APPENDIX 20 (a)

Treatment Return 1997

Name of clinic/hospital	Service regimen																								
	Number on Rx b/f	Brought in					Treatment completed				Transfer out to		Interrup. Rx temp.	Died	Drop out				Complete defaulter				Number on Rx c/f	Unsup Rx	Incomp super. Rx	No.def. >2m, <3m
											hospital	other cc			Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M, <3M	>3M	%				
							<6M	at6m	>6m	%																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
FULL TIME CLINICS																										
East Kowloon	185	151	9	16	124	141	7	109	110	83.9	77	82	0	9	2	0	1	10	13	6	2	8.0	198	8	62	1
Kowloon	425	560	21	25	372	169	22	273	409	90.7	157	167	0	10	3	11	41	21	15	4	6	3.3	433	7	162	16
South Kwai Chung	428	473	41	50	235	107	4	237	389	87.4	114	56	3	18	7	13	12	13	30	6	3	5.4	429	0	118	4
Sai Ying Pun	196	157	8	14	152	97	4	119	137	90.1	98	36	2	13	1	5	0	3	5	1	0	2.1	200	0	38	0
Shaukiwan	182	162	5	22	192	131	4	117	160	92.0	116	26	1	9	0	5	1	1	7	0	2	3.0	245	0	92	10
Shek Kip mei	207	222	9	21	165	100	3	141	153	91.3	63	38	0	11	1	7	15	7	1	1	0	0.6	283	0	83	2
Wanchai	340	430	9	36	236	142	25	222	221	84.2	187	59	1	5	3	41	3	7	9	3	15	5.1	392	5	152	10
Yan Oi	197	321	21	19	192	344	8	194	255	86.3	147	48	158	25	3	13	3	5	4	10	11	4.8	210	1	49	12
Yaumatei	277	274	20	35	126	156	0	218	192	89.3	49	79	0	12	3	10	3	13	0	8	3	2.4	298	2	50	12
Yuen Chau Kok	249	304	17	15	187	91	15	209	171	89.4	50	50	0	11	2	9	3	6	15	1	1	4.0	320	3	141	1
Yung Fung Shee	208	199	8	20	169	161	1	144	140	84.0	112	77	0	7	4	20	1	11	1	10	1	3.6	236	0	90	0
Tung Chung	0	0	0	0	0	4	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	4	0	0	0
sub-total	2894	3253	168	273	2150	1643	93	1983	2337	88.1	1170	718	165	130	29	134	83	97	100	50	44	4.0	3248	26	1037	68
HOSPITAL DISCHARGE CLINICS																										
East Kowloon	16	2	1	0	46	47	5	17	26	79.6	29	2	0	0	0	0	2	3	8	0	0	14.8	20	3	6	0
Kowloon	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
sub-total	16	2	1	0	46	47	5	17	26	79.6	29	2	0	0	0	0	2	3	8	0	0	14.8	20	3	6	0
PART TIME CLINICS																										
Castle Peak	11	19	0	0	1	1	0	0	9	100.0	0	1	4	0	0	0	0	0	0	0	0	0.0	18	1	0	0
Cheung Chau	12	4	0	2	8	4	0	3	12	83.3	2	3	0	2	0	0	0	1	0	0	0	0.0	7	0	0	0
Sai Kung	9	8	0	0	1	5	0	7	6	100.0	2	2	0	0	0	0	0	0	0	0	0	0.0	6	0	8	0
Sheung Shui	69	62	4	3	36	58	0	40	53	94.9	29	13	0	3	2	0	2	0	0	0	0	0.0	90	0	47	30
Tai Po	59	57	4	9	52	42	1	38	53	88.3	26	22	0	1	0	7	1	3	0	0	1	1.0	70	0	73	2
Yuen long	67	72	0	4	34	38	2	46	47	91.2	26	7	0	2	2	1	1	4	0	0	0	0.0	77	0	47	7
sub-total	227	222	8	18	132	148	3	134	180	91.5	85	48	4	8	4	8	4	8	0	0	1	0.3	268	1	175	39
INSTITUTIONS CORRECTIONAL SERVICE DEPT.																										
Hei Ling Chau	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
Stanley Prison	37	15	0	0	0	0	17	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	35	0	0	0
Shek Pik Prison	9	12	0	1	0	0	6	0	0	0.0	0	0	0	0	2	6	0	0	0	0	0	0.0	8	0	0	0
sub-total	46	27	0	1	0	0	23	0	0	0.0	0	0	0	0	2	6	0	0	0	0	0	0.0	43	0	0	0
TOTAL	3183	3504	177	292	2328	1838	124	2134	2543	88.1	1284	768	169	138	35	148	89	108	108	50	45	3.8	3579	30	1218	107

APPENDIX 20 (b)

Treatment Return 1997 (Cont'd)

Name of clinic/hospital	Other regimens																								
	Number on Rx b/f	Brought in					Treatment completed				Transfer out to		Interrup. Rx temp.	Died	Drop out				Complete defaulter				Number on Rx c/f	Unsup. Rx	Incomp. super. Rx	No.def. >2m, <3m
											hospital	other cc			Rx by GP	Leave HK	Def. >1x	AHA	<2M	>2M, <3M	>3M	%				
							<6M	at6m	>6m	%																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
FULL TIME CLINICS																										
East Kowloon	10	1	0	2	21	6	0	1	6	46.7	6	8	0	1	0	0	1	0	4	2	1	46.7	10	3	5	0
Kowloon	49	1	2	0	17	22	1	2	10	80.0	8	4	0	1	0	0	2	2	0	0	0	0.0	61	0	1	1
South Kwai Chung	23	0	1	2	35	5	2	3	13	72.7	5	3	0	5	1	0	0	0	0	0	0	0.0	34	0	13	0
Sai Ying Pun	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
Shaukiwan	20	0	0	4	17	34	0	0	19	86.4	24	3	0	3	0	0	0	0	0	0	0	0.0	26	0	6	1
Shek Kip mei	29	2	0	0	13	9	0	8	10	85.7	8	2	0	0	0	1	0	2	0	0	0	0.0	22	0	13	0
Wanchai	16	2	0	5	12	15	0	1	11	92.3	11	0	0	1	0	0	1	0	0	0	0	0.0	25	0	1	0
Yan Oi	128	0	2	1	15	12	0	0	12	92.3	6	1	5	1	0	0	1	0	0	0	0	0.0	132	1	2	1
Yaumatei	6	1	6	1	10	5	0	2	8	90.9	4	1	0	1	0	0	1	0	0	0	0	0.0	12	0	2	1
Yuen Chau Kok	35	2	5	9	24	7	1	2	33	85.4	12	2	0	0	0	2	4	1	2	0	1	7.3	22	6	16	0
Yung Fung Shee	8	1	0	1	9	4	0	0	5	71.4	3	8	0	0	0	0	0	1	0	1	0	14.3	5	0	2	0
Tung Chung	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
sub-total	324	10	16	25	173	119	4	19	127	81.1	87	32	5	13	1	3	10	6	6	3	2	6.1	349	10	61	4
HOSPITAL DISCHARGE CLINICS																										
East Kowloon	8	0	0	1	14	8	1	3	8	91.7	3	2	0	0	0	0	0	0	1	0	0	8.3	13	2	1	0
Kowloon	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
sub-total	8	0	0	1	14	8	1	3	8	91.7	3	2	0	0	0	0	0	0	1	0	0	8.3	13	2	1	0
PART TIME CLINICS																										
Castle Peak	1	0	0	0	0	0	0	0	1	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Cheung Chau	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
Sai Kung	0	0	0	0	0	1	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	1	0	1	0
Sheung Shui	12	0	0	0	3	0	0	1	7	100.0	2	0	0	0	0	0	0	0	0	0	0	0.0	5	0	3	0
Tai Po	5	0	0	2	4	7	0	1	2	100.0	7	2	0	0	0	0	0	0	0	0	0	0.0	6	0	8	0
Yuen long	7	0	0	1	0	3	0	1	6	100.0	1	1	0	0	0	0	0	0	0	0	0	0.0	2	0	1	0
sub-total	25	0	0	3	7	11	0	3	16	100.0	10	3	0	0	0	0	0	0	0	0	0	0.0	14	0	13	0
INSTITUTIONS CORRECTIONAL SERVICE DEPT.																										
Hei Ling Chau	8	16	2	2	0	0	1	0	0	ERR	0	1	16	0	0	0	0	0	0	0	0	ERR	10	0	0	0
Stanley Prison	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
Shek Pik Prison	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0	0	0	0	0	0	0	0	ERR	0	0	0	0
sub-total	8	16	2	2	0	0	1	0	0	ERR	0	1	16	0	0	0	0	0	0	0	0	ERR	10	0	0	0
TOTAL	365	26	18	31	194	138	6	25	151	83.4	100	38	21	13	1	3	10	6	7	3	2	5.7	386	12	75	4

APPENDIX 20 (c)

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.	Died	Drop out				Complete defaulter				Number still on Rx c/f	Unsupervised Rx	Incomplete supervised Rx	No. of defaulters >2M, <3M
											hospital	other cc			Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M, <3M	>3M	%				
							<6M	at 6M	>6M	%																
	A	B *	C *	D *	E *	F *	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

$$J = \frac{H + I}{A + B + C + D + E + F - G - K - L - M - Q - W}$$

$$V = \frac{S + T + U}{A + B + C + D + E + F - G - K - L - M - Q - W}$$

$$W = (A+B+C+D+E+F) - (G+H+I+K+L+M+N+O+P+Q+R+S+T+U)$$

* Explanatory Notes :

Service regimen	Upon starting treatment, the regimen contains any combination of drugs including H (isoniazid), R (rifampicin), Z (pyrazinamide), E (ethambutol), and S (streptomycin).
Other regimens	Upon starting treatment, the regimen contains second line drugs apart from H, R, Z, E or S.
Item B	New cases with treatment started in chest clinics.
Item C	Retreatment cases, with treatment newly started. Previous treatment either not completed, or even if claimed to be completed, without documentation in the available clinic record.
Item D	Relapse cases, with treatment newly started. Previous treatment is completed with documentation in the available clinic record.
Item E	Treatment cases transferred in from hospitals, private doctors, etc. without treatment started previously at any chest clinics for this episode of tuberculosis.
Item F	Other transferred in treatment cases, with treatment given previously in any chest clinics for this episode of tuberculosis.

APPENDIX 21

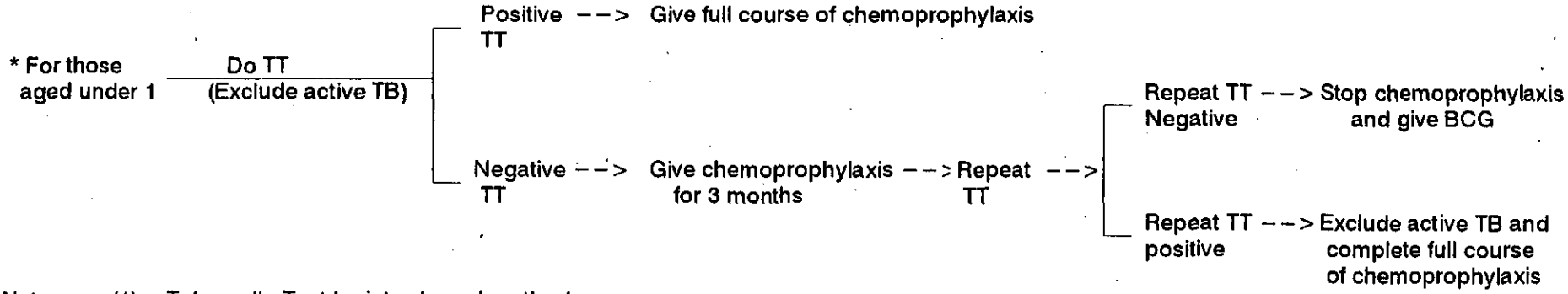
Examination of Contacts in the Chest Clinics 1997

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	1503	4030	5533
No. of contacts listed	5000	11592	16592
Number of children with negative tuberculin test	141	439	580
Number of children given BCG	131	416	547
Number of contacts x-rayed	4114 (100.00%)	9014 (100.00%)	13128 (100.00%)
Results			
(a) NSD & Unknown	3671 (89.23%)	8197 (90.94%)	11868 (90.40%)
(b) Disease other than TB	195 (4.74%)	368 (4.08%)	563 (4.29%)
(c) Inactive respiratory TB	129 (3.14%)	217 (2.41%)	346 (2.64%)
(d) Active respiratory TB			
A (radiologically)	33 (0.80%)	36 (0.40%)	69 (0.52%)
B (bacteriologically)	5 (0.12%) > 50 (1.21%)	18 (0.20%) > 76 (0.84%)	23 (0.18%) > 126 (0.96%)
C (incomplete)	12 (0.29%)	22 (0.24%)	34 (0.26%)
(e) Non-respiratory TB	7 (0.17%)	18 (0.20%)	25 (0.19%)
(f) Result not yet known	62 (1.51%)	138 (1.53%)	200 (1.52%)

APPENDIX 22

Scheme for Tuberculin Testing and BCG Administration in Hong Kong, 1997

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	x–ray chest
Vietnamese Refugees	over 14 years	x–ray chest
	14 years and under	Direct BCG



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, 1997

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole	3,875	3,874	100.0
	Queen Mary	730	788	107.9 *
	Tsan Yuk	4,182	4,154	99.3
Private Hosp.	Canossa	881	863	98.0
	H.K. Adventist	737	706	95.8
	HK Sanatorium	1,321	1,315	99.5
	Matilda	775	727	93.8
	St. Paul's	1,932	1,922	99.5
Total (HK Island)		14,433	14,349	99.4
Hospital under HA management	Caritas	1,860	1,847	99.3
	Kwong Wah	4,365	4,346	99.6
	Maryknoll	884	870	98.4
	Queen Elizabeth	4,835	4,832	99.9
	United Christian	3,513	3,510	99.9
Private Hosp.	Baptist	6,483	6,406	98.8
	Evangel	144	154	106.9 *
	St. Teresa's	4,471	4,401	98.4
Total (Kowloon)		26,555	26,366	99.3
Hospital under HA management	Prince of Wales	6,288	6,297	100.1 *
	Princess Margaret	3,322	3,326	100.1 *
	Tuen Mun	6,377	6,371	99.9
Private Hosp.	Adventist	1,092	1,082	99.1
	Union	1263	1256	99.4
Government Maternity Home		70	67	95.7
Total (NT Areas)		18,412	18,399	99.9
GRAND TOTAL		59,400	59,114	99.5

Note : * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 1997.

Vaccination Method 1997	Percentage
Intradermal	65.1
Percutaneous	34.9

APPENDIX 24

Tuberculin Tests and BCG Vaccination
of School Children
1962 – 1997

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

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 25

Beds for Treatment of Tuberculosis, 1997

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	196
	Kowloon Hospital	128 *
	Ruttonjee Hospital	157
	Haven of Hope Hospital	114
	Wong Tai Sin Hospital	185
	Total (Hospital Authority)	780
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 (1997)	800
	Grand Total (1996)	820
	Grand Total (1995)	794

* Including two beds in the Intensive Care Unit

APPENDIX 26

Annual Admissions to Hospitals
from Government Chest Clinics
1987 – 1997

Year	Total Admissions
1987	4,561
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

Admissions by Clinic	Year 1997
East Kowloon	354
Kowloon	967
Kwai Chung	460
Sai Ying Pun	296
Shau Kei Wan	295
Shau Kei Wan Pneumoconiosis	76
Shek Kip Mei	219
Wanchai	583
Yaumati	266
NT Unit	182
Yan Oi	364
Yuen Chau Kok	286
Yung Fung Shee	249
Total	4,597

Part 2

PNEUMOCONIOSIS

Contents

APPENDIX 1

Notifications of Silicosis attending the Pneumoconiosis Clinic in Hong Kong 1956 – 1997

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 (c) (7)	6,190	1,494 (d)	3,242

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 125 of the 158 cases notified in 1997 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 125 cases.

(d) Under Revised Ordinance 1993: 577 out of 1,494 pneumoconiotics were each receiving a monthly ex-gratia payment of $3,950 in 1997.

APPENDIX 2

Age Distribution of Pneumoconiosis Cases 1997

Age	Number of Cases	%
25 – 29	–	–
30 – 34	–	–
35 – 39	3	2
40 – 44	11	8
45 – 49	15	12
50 – 54	12	10
55 – 59	30	24
60 – 64	16	13
65 – 69	16	13
70 – 74	12	10
75+	10	8
Total	125	100

APPENDIX 3

Occupation Distribution of Confirmed Silicosis 1997

Type of Occupation	Number of Cases	%
Construction	82	66
Construction/Quarry	24	19
Others	19	15
Total	125	100

APPENDIX 4

Pneumoconiosis Patients by Duration of Exposure to Dust 1997

Duration	Number of Cases	%
< 5 years	1	1
5 – 9	–	–
10 – 14	13	10
15 – 19	29	23
20 – 24	23	18
25 – 29	25	20
30+	32	26
Unknown	2 *	2
Total	125	100

* Fatal cases, no reliable information available.

APPENDIX 5

Pneumoconiosis Patients by Degree of Incapacity, 1997

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	50
10	30
15	9
20	13
25	5
30	3
35	–
40	6
45	1
50	1
55	–
60	1
65	1
70	2
80	1
100	–
N.A. *	2
Total	125

* Fatal cases. (Including one fatal case under Old Scheme)

APPENDIX 6

Confirmed Pneumoconiosis Patients Classified by Radiological Appearance, 1997

Type of Opacity	Profusion 1	2	3	Sub-Total
Small opacities				
Rounded				
p (up to 1.5 mm diameter)	27	–	–	27
q (1.5 to 3.0 mm diameter)	18	16	–	34
r (3.0 to 10.0 mm diameter)	2	8	1	11
Irregular				
s (fine irregular or linear)	24	2	–	26
t (medium irregular)	2	2	–	4
u (coarse irregular)	1	–	–	1
Sub-total	74	28	1	103
Combined opacities	13	4	–	17
N.A.	–	–	–	5
Total				125

18 out of the 125 patients have large opacities as follows :

Large opacities	
A (Single opacity 1 – 5 cm or multiple opacities > 1 cm each but sum of diameter < 5 cm)	13
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	3
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	2
Total	18

APPENDIX 7

Pneumoconiosis Patients with Tuberculosis, 1997

Type of T.B.	Number of Cases	%
Bacteriological Positive	30	24
Bacteriological Negative	22	17
No T.B.	71	57
N.A.	2	2
Total	125	100

APPENDIX 8

Confirmed Pneumoconiosis Patients by Other Particulars 1997

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	114	91
	Non-smoker	9	7
	Unknown	2	2
	Total	125	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	46	37
	No	77	61
	Unknown	2	2
	Total	125	100
General Condition	Good	121	96
	Fair	2	2
	Poor	-	-
	Died	2	2
	Total	125	100

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