ANNUAL REPORT 2003

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

In recent years, tuberculosis (TB) has become resurgent alongside rampant drug resistance and HIV co-infection in various parts of the world. In April 1993, the World Health Organization (WHO) declared TB as a global emergency. In May 1998, a resolution in the 51st World Health Assembly urged all member states to turn their policies into action and to make strong political commitment on TB control. In September 1999, "TB crisis" was declared in the Western Pacific Region and the project of "Stop TB in the Western Pacific Region" was initiated. A stagnated TB trend has been observed in the past decade in Hong Kong, Singapore, Malaysia, Japan, and Brunei, which are classified together by WHO as "places with intermediate TB burden and a good health infrastructure".

The observation of an apparently stagnant trend was probably multifactorial: more intensive surveillance measures, ageing of the TB epidemic, ageing of the population, and busy population movement. After 2000, the notification rate started to fall again: 108.0 per 100,000 in 2001, 97.3 in 2002, and 88.5 in 2003. Some of the factors accounting for the previously observed stagnation might have started to plateau, thus unmasking the underlying declining trend again. Nevertheless, the international effort in promoting TB control and raising widespread awareness must have taken a major and important role.

In the past decades, Hong Kong has conducted a considerable number of clinical trials in relation to TB. Many of these trials were done in collaboration with the British Medical Research Council. They have contributed significantly to the body of scientific evidence, upon which the global TB control and treatment strategies develop. In recent years, clinical researches continue to be emphasized. The study on BCG revaccination[1] provided the basis for the policy of discontinuation of BCG revaccination in Hong Kong. Such discontinuation has also been or is being considered by other neighbouring countries. The surveillance findings of decreasing drug resistance in Hong Kong from another published report[3] has been quoted as a successful approach towards enhancing TB control and achieving the World Health Organisation targets in an editorial of 2001 IUATLD journal.[2] A paper on the Hong Kong rifapentine trial[5] was published in another issue of the journal in 2002. In an editorial of the same issue,[4] the contribution from Hong Kong to the science of TB control was noted and honored. Besides these few examples, there are many more important papers and contributions from other TB workers and co-workers in the field locally.

In 2003, the world was hit badly and unexpectedly by the SARS (severe acute

respiratory syndrome) epidemic. In just a few months, the novel coronavirus has infected over 8,000 people and caused over 900 deaths globally. Guangdong and Hong Kong was at the centre of the epidemic. The SARS epidemic posed a severe challenge to Hong Kong. It caused a heavy blow to the short term economy. The local health care system was stretched to the limits. A total of 1,755 individuals were affected, with 300 deaths including quite a number of health care staff.

The Tuberculosis & Chest Service, with its dedicated staff, participated in the fight against the SARS epidemic, alongside many other workers within the Department of Health and other sectors. A number of SARS cases were picked up at the chest clinics, facilitating early treatment and implementation of public health measures. Stringent infection control measures were carried out for prevention of nosocomial infection. These included triage, segregation of patients, environmental control (e.g. restricted and careful use of nebulised medications, proper attention to other aerosol-generating procedures and equipment, and ensuring adequate ventilation in healthcare settings), proper use of personal protective equipment (such as face masks, eye shields, protective caps and disposable gowns) and general hygiene measures (e.g. handwashing, use of alcohol swab, change of uniforms and personal hygiene). Many of the SARS infection control measures were modelled from those for TB control, especially in relation to possible aerosol transmission. Additional caution was also put on contact spread (direct or via fomites) and environmental contamination. Four designated medical centres with X-ray support were promptly set up to enforce public health functions, including examination of relevant SARS contacts and other suspects to limit the spread of the infection. With multi-sectoral collaboration, research, accumulation of knowledge and experience, the SARS epidemic was finally kept under control in a few months.

During the SARS epidemic, many regular activities in Hong Kong were seriously affected. To what extent the local TB epidemiology had been affected by the SARS epidemic could not be measured precisely. As observed, the total attendances and consultations in the chest clinics had decreased significantly by 7.7% and 9.8% respectively in 2003 as compared with 2002. Regarding TB notification, there were 6,024 cases in 2003. The notification rate was 88.5 per 100,000, compared with 97.3 per 100,000 in 2002, a drop of 8.9%. There are a number of similarities, relationship and potential interactions between TB and SARS: the lungs being the main organ involved, the two diseases being common differential diagnoses upon patient's presentation, use of steroid in SARS possibly predisposing to TB reactivation in individuals harbouring the latent infection, and stringent infection control measures against SARS being also protective against other respiratory

infections. In fact, the use of coercive control measures like isolation/ home confinement of SARS cases/ contacts aroused discussion again on the use of similar measures for TB control. With the SARS epidemic, the world is once again reminded of the potential threat of emerging and existing infectious diseases. A SARS Expert Committee was set up in Hong Kong to review the event, and a report was produced in October 2003 with a number of recommendations, including the setting up of a Centre for Health Protection for prevention and control of communicable diseases in Hong Kong.

In 2003, colleagues from the TB & Chest Service participated in the following international TB meetings:

(a) 34th IUATLD World Conference on Lung Health in Paris, France (29 Oct to 2 Nov 2003)

(b) 4th Technical Advisory Group (TAG) Meeting to Stop TB in the Western Pacific Region in Manila, Philippines (17-19 Nov 2003). [This meeting was initially scheduled in June 2003 but later postponed to November because of the SARS epidemic.]

During the year, 106,354 patients attended the TB&CS as compared to 110,564 in 2002, and the total attendance was 839,471 in comparison with 908,669 in 2002. Among the 106,354 patients, 29,085 patients were new attendants, of whom 25.2% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (11.7%), active tuberculosis of other forms (2.4%), inactive tuberculosis (11.4%), bronchitis not specified as acute or chronic (11.4%), acute respiratory infection (8.8%), pneumonia (4.6%), malignant neoplasm of trachea and bronchus (1.5%), bronchiectasis (1.0%), asthma (0.7%) and emphysema (0.3%). Among all the attendance, 4,603 hospital admissions were arranged.

Part 1: Tuberculosis

The number of tuberculosis notification in 2003 was 6,024, making a notification rate of 88.5 per 100,000 population. The corresponding figures in 2002 were 6,602 and 97.3 respectively.

The number of tuberculosis deaths was 275 in 2003 as compared with 267 in 2002. The corresponding tuberculosis mortality rates were 4.0 and 3.9 per 100,000 respectively.

Tuberculosis stayed outside the top ten causes of death in 2003. Tuberculosis deaths accounted for 0.8% of the total registered deaths in Hong Kong. The average age of

tuberculosis deaths was 72.3.

In 2003, 99.5% of the newborns were given direct BCG vaccination at birth. The BCG revaccination programme for primary school children was stopped since the school year starting from September 2000.

HIV testing was done among tuberculosis patients of the TB&CS on a voluntary basis after counselling and consent. The positive rate remained low. Besides this, unlinked anonymous screening (UAS) continued to be carried out among a consecutive sample of TB patients annually.

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%. The ex-gratia payment scheme for pre-1981 pneumoconiotics was also reviewed. On top of a flat-rate of monthly payment, additional payments were introduced for those in need of constant care, oxygen and medical appliances.

The Pneumoconiosis Clinic continued to provide a full range of outpatient services to patients with suspected or confirmed pneumoconiosis. These services covered not only the assessment aspect, but also addressed the patients' diversified needs in terms of treatment, prevention and rehabilitation. The attendance at the clinic was 8,008 in 2003 compared with 9,120 in 2002. In 2003, 145 new cases of pneumoconiosis were registered in the TB&CS,

and 80 new cases (including 6 cases of asbestos-related lung diseases) were confirmed by the Pneumoconiosis Medical Board. Up to the end of 2003, a total of 5,442 patients had been compensated.

References

(1) *Leung CC, Tam CM, Chan SL et al. Efficacy of the BCG revaccination programme in a cohort given BCG vaccination at birth in Hong Kong. Int J Tuberc Lung Dis 2001;5:717-23.*

(2) *Espinal MA, Gupta R, Raviglione MC. The future may not be so dark. Int J Tuberc Lung Dis 2001;5:787-8.*

(3) *Kam KM, Yip CW. Surveillance of Mycobacterium tuberculosis drug resistance in Hong Kong, 1986-1999, after the implementation of directly observed treatment. Int J Tuberc Lung Dis 2001;5:815-23.*

(4) *Vernon A, Burman W, Horsburgh CR. Another step on the path to better TB therapies. Int J Tuberc Lung Dis 2002;6:1-2.*

(5) *Tam CM, Chan SL, Kam KM, et al. Rifapentine and isoniazid in the continuation phase of a 6-month regimen. Final report at 5 years: prognostic value of various measures. Int J Tuberc Lung Dis 2002;6:3-10.*

Part 1

TUBERCULOSIS

Appendix No.

Contents

APPENDIX 1

TB Notifications & Death Rate of Tuberculosis (All Forms)
1947 - 2003

Year	TB Notifications			Notification Rate per 100,000 Pop	TB Deaths	Death Rate per 100,000 Pop	Ratio (Notifications/ Deaths)	Deaths ---------- x 100% Notifications
1947	4855			277.4	1861	106.3	2.61	38.33
1948	6279			348.8	1961	108.9	3.20	31.23
1949	7510			404.4	2611	140.6	2.88	34.77
1950	9067			405.3	3263	145.9	2.78	35.99
1951	13886			689.0	4190	207.9	3.31	30.17
1952	14821			697.2	3573	168.1	4.15	24.11
1953	11900			530.7	2939	131.1	4.05	24.70
1954	12508			528.9	2876	121.6	4.35	22.99
1955	14148			568.1	2810	112.8	5.03	19.86
1956	12155			464.9	2629	100.6	4.62	21.63
1957	13665			499.4	2675	97.8	5.11	19.58
1958	13485			472.5	2302	80.7	5.86	17.07
1959	14302			482.0	2178	73.4	6.57	15.23
1960	12425			405.5	2085	68.0	5.96	16.78
1961	12584			397.2	1907	60.2	6.60	15.15
1962	14263			431.5	1881	56.9	7.58	13.19
1963	13031			380.9	1762	51.5	7.40	13.52
1964	12557			358.3	1441	41.1	8.71	11.48
1965	9927			275.9	1278	35.5	7.77	12.87
1966	11427			314.8	1515	41.7	7.54	13.26
1967	15253			409.7	1493	40.1	10.22	9.79
1968	9792			257.5	1483	39.0	6.60	15.15
1969	11072			286.5	1470	38.0	7.53	13.28
1970	10077			254.5	1436	36.3	7.02	14.25
1971	9028			223.2	1250	30.9	7.22	13.85
1972	8420			204.2	1312	31.8	6.42	15.58
1973	8152			192.2	1154	27.2	7.06	14.16
1974	8320			190.0	974	22.2	8.54	11.71
1975	8192			183.6	646	14.5	12.68	7.89
1976	7928			175.5	568	12.6	13.96	7.16
1977	7191			156.9	532	11.6	13.52	7.40
1978	6623			141.9	420	9.0	15.77	6.34
1979	7907	(498) *		160.4	523	10.6	15.12	6.61
1980	8065	(712)		159.3	551	10.9	14.64	6.83
1981	7729	(254)		149.1	489	9.4	15.81	6.33
1982	7527	(112)		143.0	454	8.6	16.58	6.03
1983	7301	(73)		136.6	446	8.3	16.37	6.11
1984	7843	(69)		145.3	420	7.8	18.67	5.36
1985	7545	(59)	580 #	138.3	409	7.5	18.45	5.42
1986	7432	(46)	544	134.5	407	7.4	18.26	5.48
1987	7269	(41)	495	130.3	405	7.3	17.95	5.57
1988	7021	(121)	433	124.8	388	6.9	18.10	5.53
1989	6704	(226)	387	117.9	403	7.1	16.64	6.01
1990	6510	(288)	341	114.1	382	6.7	17.04	5.87
1991	6283	(281)	293	109.2	409	7.1	15.36	6.51
1992	6534	(309)	264	112.6	410	7.1	15.94	6.27
1993	6537	(264)	89	110.8	396	6.7	16.51	6.06
1994	6319	(230)	87	104.7	409	6.8	15.45	6.47
1995	6212	(175)	102	100.9	418	6.8	14.86	6.73
1996	6501	(88)	162	101.0	292	4.5	22.26	4.49
1997	7072	(34)	156	109.0	252	3.9	28.06	3.56
1998	7673	(7)	169	117.3	270	4.1	28.42	3.52
1999	7512	(5)	166	113.7	312	4.7	24.08	4.15
2000	7578	(7)	152	113.7	299	4.5	25.34	3.95
2001	7262	(0)	192	108.0	311	4.6	23.35	4.28
2002	6602	(0)	186	97.3	267	3.9	24.73	4.04
2003	6024	(0)	177	88.5	275	4.0	21.91	4.57

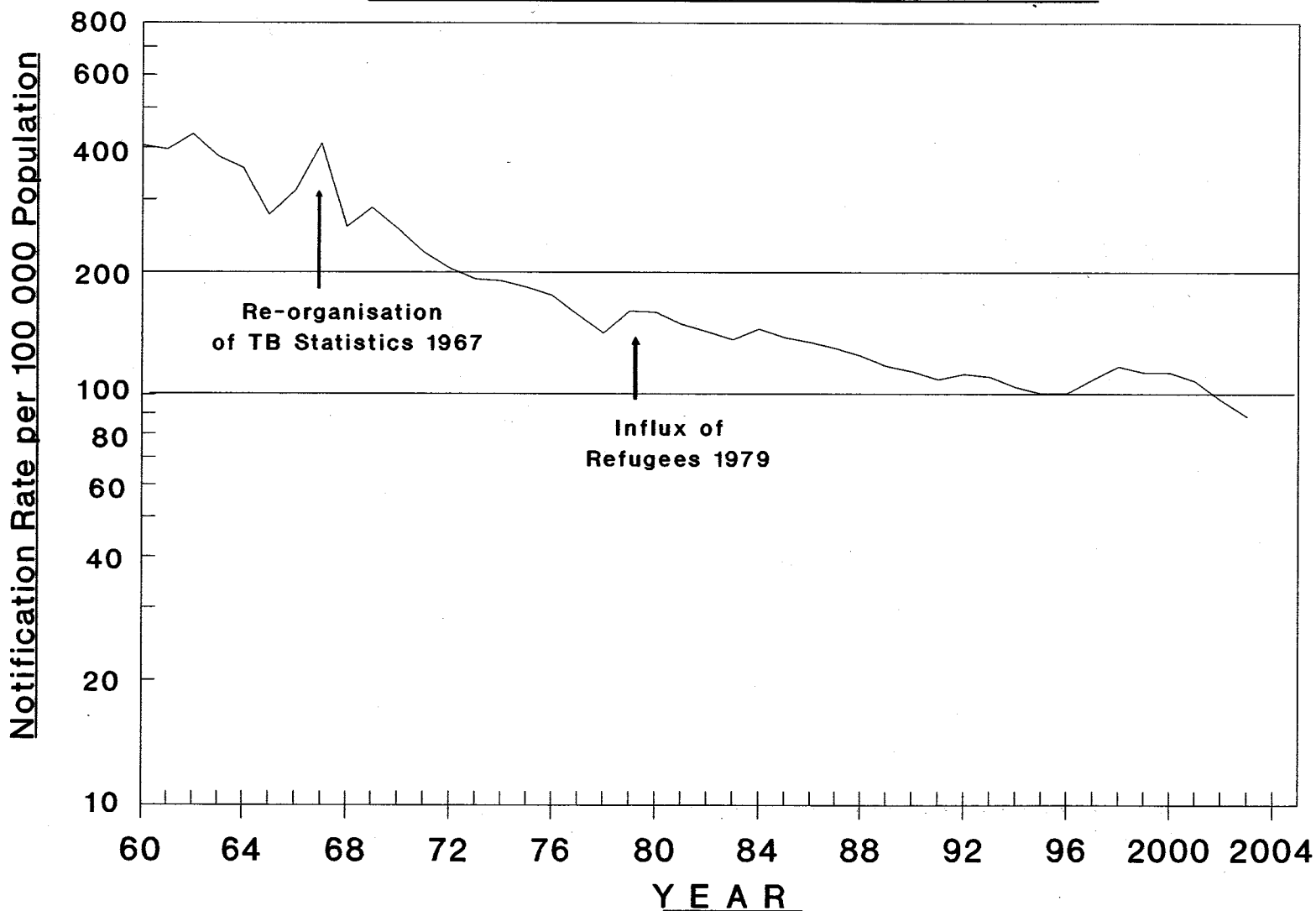
* Figures in brackets denote the number of Vietnamese refugees included.

\# Figures in this column denote the number of Chinese immigrants staying in Hong Kong for less than 7 years.

NB The rates from the year 1996 onwards have been updated to reflect the adoption of the "Resident Population" approach by the Census & Statistics Department in August 2000 and the revision based on the latest results of the 2001 Population Census.

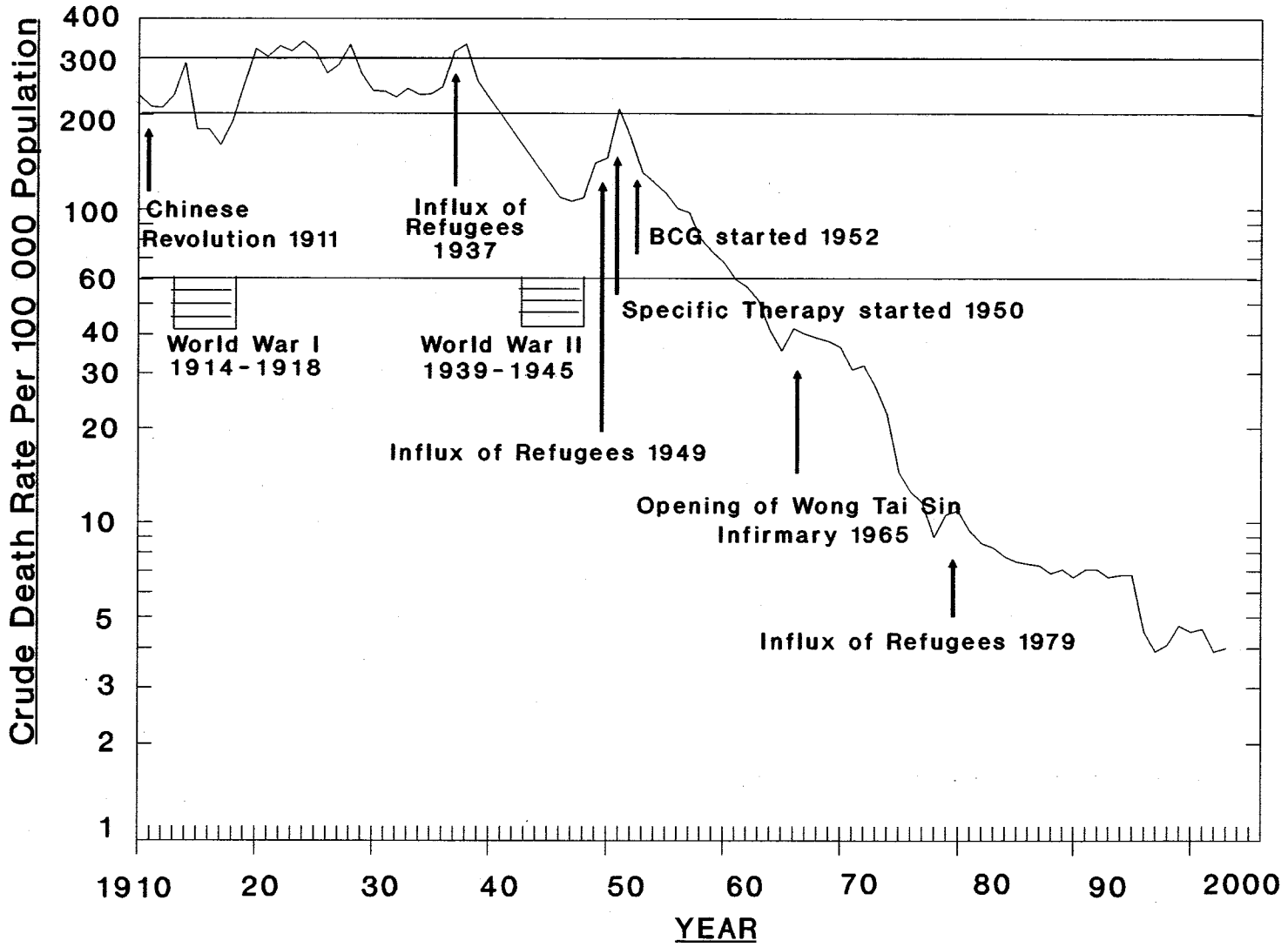
APPENDIX 2

TB Notification Rate (All Forms) 1960-2003



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-2003



APPENDIX 4 (a)

Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2003

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	1	1	5.16	2.36	3.80
1	0	0	0			
2	5	0	5			
3	2	0	2			
4	0	2	2			
5-9	7	4	11	3.63	2.22	2.95
10-14	19	26	45	8.52	12.34	10.38
15-19	106	93	199	47.43	43.89	45.71
20-24	174	196	370	78.27	88.61	83.43
25-29	180	245	425	78.47	93.76	86.61
30-34	186	221	407	74.19	65.87	69.43
35-39	204	170	374	71.45	46.87	57.70
40-44	265	149	414	78.87	40.41	58.75
45-49	316	142	458	106.18	46.37	75.85
50-54	307	107	414	127.44	45.19	86.67
55-59	262	86	348	159.66	56.54	110.06
60-64	309	65	374	248.59	60.35	161.21
65-69	338	106	444	265.31	87.03	178.17
70-74	415	91	506	380.38	80.96	228.44
75-79	380	124	504	535.97	143.19	320.00
80-84	248	114	362	642.49	197.92	376.30
85 & over	205	154	359	915.18	316.22	504.92
Total	**3928**	**2096**	**6024**	**119.25**	**59.73**	**88.55**

Appendix 4 (b)

Pulmonary TB Notifications by Age & Sex 2003**

Age Group	Pulmonary TB			Bacteriologically Positive Pulmonary TB *			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
Under 1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0
2	3	0	3	0	0	0	0	0	0
3	2	0	2	1	0	1	0	0	0
4	0	2	2	0	0	0	0	0	0
5-9	5	3	8	2	3	5	1	0	1
10-14	16	20	36	10	16	26	7	10	17
15-19	93	80	173	66	55	121	37	32	69
20-24	146	169	315	104	117	221	67	62	129
25-29	165	206	371	99	132	231	42	75	117
30-34	159	182	341	107	118	225	59	69	128
35-39	182	134	316	118	91	209	62	51	113
40-44	242	108	350	162	79	241	91	56	147
45-49	299	104	403	209	70	279	107	35	142
50-54	287	80	367	206	54	260	121	34	155
55-59	239	62	301	175	47	222	112	32	144
60-64	284	49	333	216	38	254	112	21	133
65-69	322	83	405	265	67	332	151	44	195
70-74	391	77	468	330	62	392	170	26	196
75-79	364	109	473	301	92	393	136	39	175
80-84	239	98	337	205	73	278	102	33	135
85 & over	197	139	336	158	107	265	61	42	103
Total	**3635**	**1705**	**5340**	**2734**	**1221**	**3955**	**1438**	**661**	**2099**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 4 (c)

Rate of Pulmonary TB Notifications by Age & Sex 2003**

(Rate per 100,000 Population)

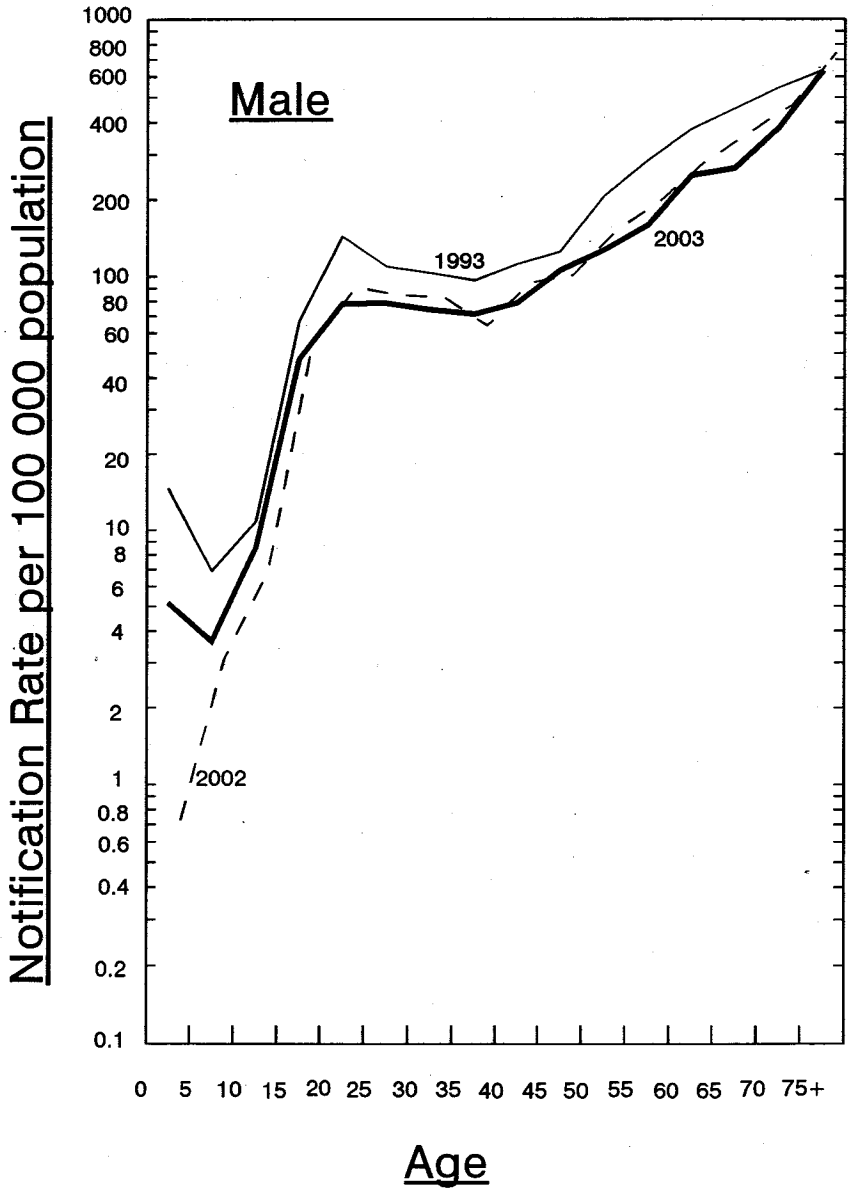
Age Group	Pulmonary TB			Bacteriologically Positive Pulmonary TB *			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0-4	3.7	1.6	2.7	0.7	0.0	0.4	0.0	0.0	0.0
5-9	2.6	1.7	2.1	1.0	1.7	1.3	0.5	0.0	0.3
10-14	7.2	9.5	8.3	4.5	7.6	6.0	3.1	4.7	3.9
15-19	41.6	37.8	39.7	29.5	26.0	27.8	16.6	15.1	15.8
20-24	65.7	76.4	71.0	46.8	52.9	49.8	30.1	28.0	29.1
25-29	71.9	78.8	75.6	43.2	50.5	47.1	18.3	28.7	23.8
30-34	63.4	54.2	58.2	42.7	35.2	38.4	23.5	20.6	21.8
35-39	63.7	36.9	48.8	41.3	25.1	32.2	21.7	14.1	17.4
40-44	72.0	29.3	49.7	48.2	21.4	34.2	27.1	15.2	20.9
45-49	100.5	34.0	66.7	70.2	22.9	46.2	36.0	11.4	23.5
50-54	119.1	33.8	76.8	85.5	22.8	54.4	50.2	14.4	32.4
55-59	145.6	40.8	95.2	106.6	30.9	70.2	68.3	21.0	45.5
60-64	228.5	45.5	143.5	173.8	35.3	109.5	90.1	19.5	57.3
65-69	252.7	68.1	162.5	208.0	55.0	133.2	118.5	36.1	78.3
70-74	358.4	68.5	211.3	302.5	55.2	177.0	155.8	23.1	88.5
75-79	513.4	125.9	300.3	424.5	106.2	249.5	191.8	45.0	111.1
80-84	619.2	170.1	350.3	531.1	126.7	289.0	264.2	57.3	140.3
85 & over	879.5	285.4	472.6	705.4	219.7	372.7	272.3	86.2	144.9
Total	**110.4**	**48.6**	**78.5**	**83.0**	**34.8**	**58.1**	**43.7**	**18.8**	**30.9**

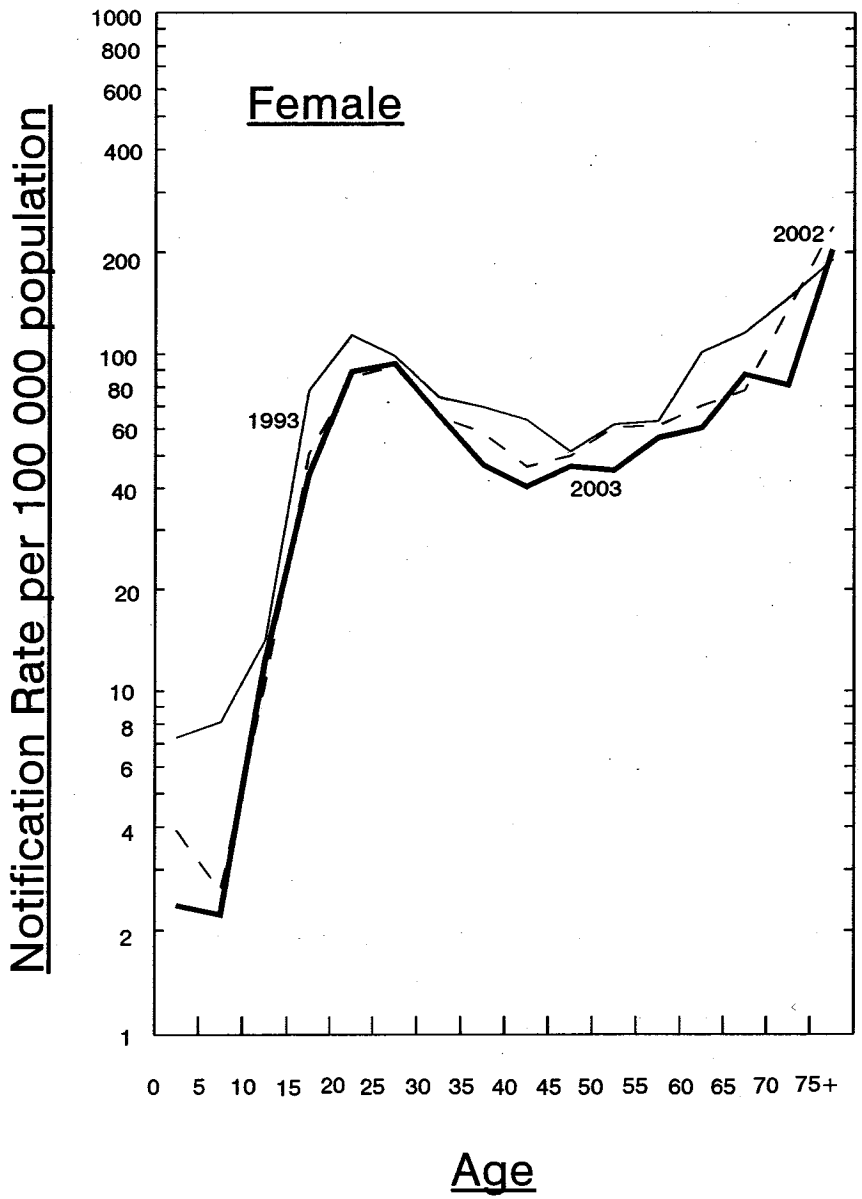
** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

APPENDIX 5

TB Notification Rate by Age & Sex 1993, 2002 & 2003





APPENDIX 6

Notifications of Tuberculosis by Type by Age & Sex 2003

Age Group	Pulmonary only #			Miliary			Meninges			Bones & Joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	3	-	3	-	-	-	-	-	-	-	-	-	2	-	2
3	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
4	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
5 - 9	5	3	8	-	-	-	-	-	-	-	-	-	2	1	3
10 - 14	16	20	36	-	-	-	-	-	-	-	-	-	3	6	9
15 - 19	91	77	168	1	2	3	-	-	-	-	-	-	14	14	28
20 - 24	139	156	295	1	2	3	2	-	2	1	-	1	31	38	69
25 - 29	153	199	352	2	2	4	2	1	3	1	1	2	22	42	64
30 - 34	152	171	323	2	1	3	-	2	2	1	2	3	31	45	76
35 - 39	170	129	299	1	1	2	1	-	1	3	1	4	29	39	68
40 - 44	233	104	337	1	-	1	-	1	1	2	1	3	29	43	72
45 - 49	285	95	380	3	2	5	-	-	-	4	2	6	24	43	67
50 - 54	276	77	353	-	-	0	3	-	3	4	2	6	24	28	52
55 - 59	229	60	289	3	1	4	1	-	1	4	-	4	25	25	50
60 - 64	278	46	324	1	1	2	2	1	3	8	1	9	20	16	36
65 - 69	316	81	397	2	2	4	2	-	2	1	1	2	17	22	39
70 - 74	382	72	454	-	5	5	1	-	1	5	2	7	27	12	39
75 - 79	354	103	457	3	2	5	-	2	2	1	1	2	22	16	38
80 - 84	225	93	318	4	2	6	-	-	-	-	1	1	19	18	37
85 & over	192	135	327	2	2	4	-	-	-	3	1	4	8	16	24
Total	3501	1623	5124	26	25	51 (a)	14	7	21 (b)	38	16	54 (c)	349	425	774 (d) *

* Including:

TB Lymph Node	378
TB Kidney/Urinary System	34
TB Peritonitis	35
TB Pleural Effusion	105
TB Laryngitis	9
TB Skin	40
Others	34
Unspecified	139

(a) All Miliary TB cases has coexisting Pulmonary TB; also include 14 cases with coexisting TB of other extrapulmonary sites (among which 3 are meninges and 4 are bone & joints).

(b) Including 18 cases wih coexisting Pulmonary TB and 1 case with coexisting TB of other extrapulmonary site (bone & joints).

(c) Including 7 cases with coexisting Pulmonary TB and 9 cases with coexisting TB of other extrapulmonary sites.

(d) Including 142 cases with coexisting Pulmonary TB and 8 cases with coexisting TB of other extrapulmonary sites.

\# Pulmonary TB only, without extrapulmonary site involvement

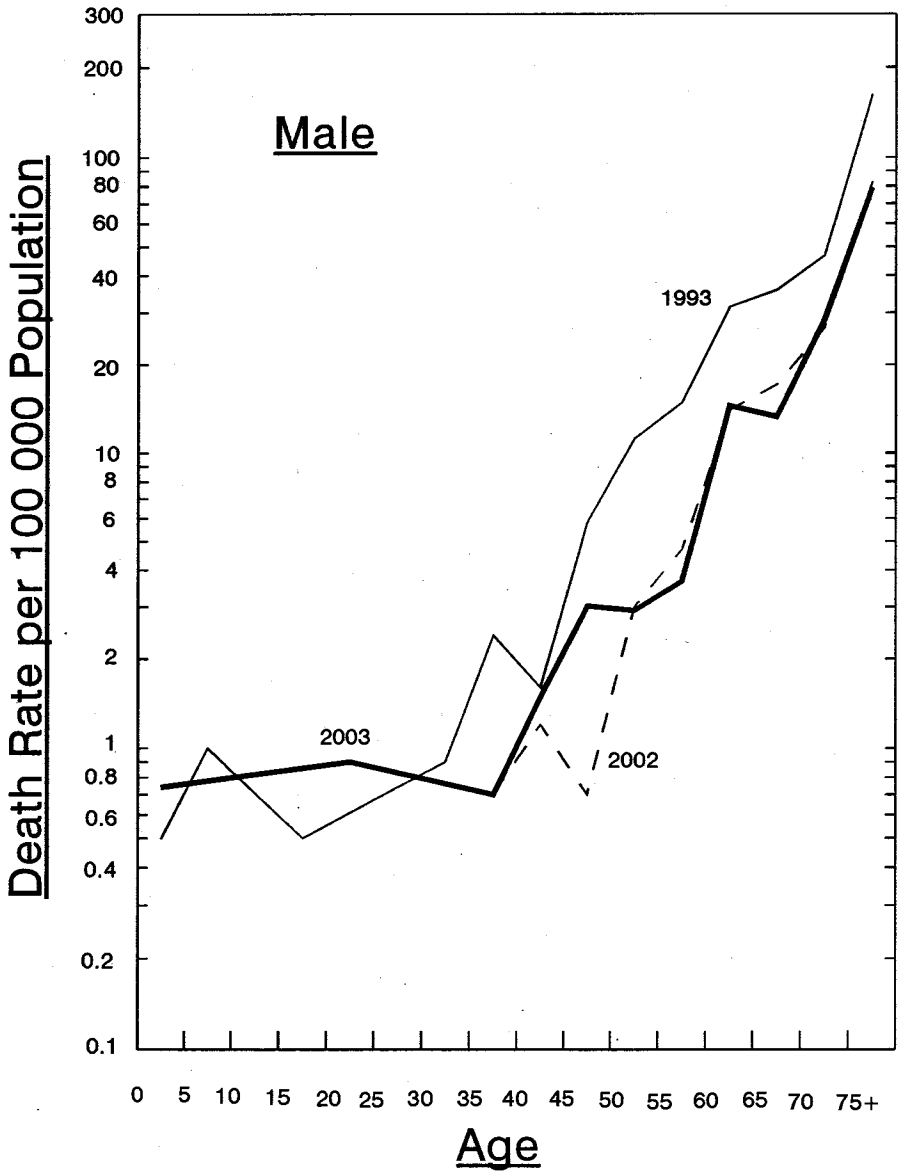
APPENDIX 7

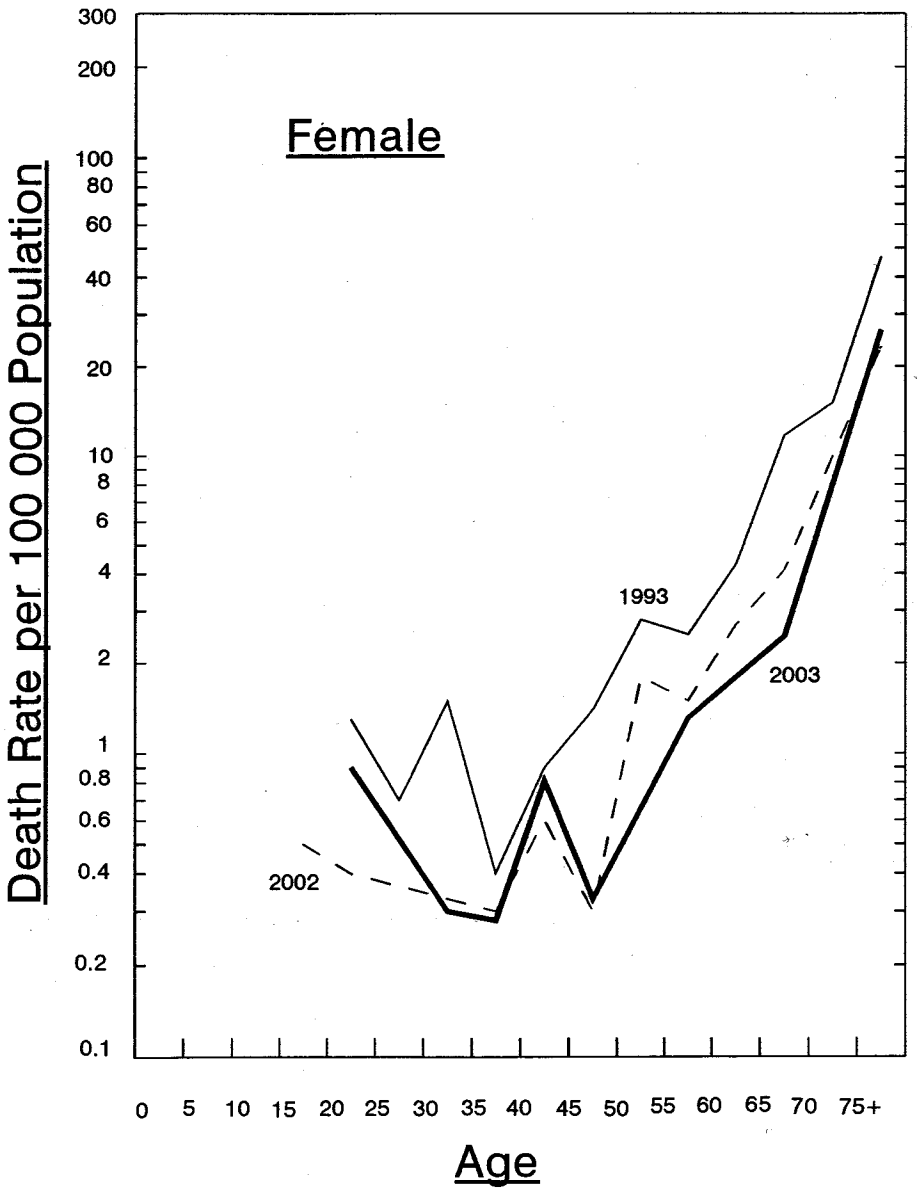
TB Death (All Forms) & Death Rate by Age & Sex 2003

Age Group	Tuberculosis Death (All Forms)			Death Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	0	0	0.74	0.00	0.38
1	0	0	0			
2	0	0	0			
3	1	0	1			
4	0	0	0			
5-9	0	0	0	0.00	0.00	0.00
10-14	0	0	0	0.00	0.00	0.00
15-19	0	0	0	0.00	0.00	0.00
20-24	2	2	4	0.90	0.90	0.90
25-29	0	0	0	0.00	0.00	0.00
30-34	0	1	1	0.00	0.30	0.17
35-39	2	1	3	0.70	0.28	0.46
40-44	5	3	8	1.49	0.81	1.14
45-49	9	1	10	3.02	0.33	1.66
50-54	7	0	7	2.91	0.00	1.47
55-59	6	2	8	3.66	1.31	2.53
60-64	18	0	18	14.48	0.00	7.76
65-69	17	3	20	13.34	2.46	8.03
70-74	31	9	40	28.41	8.01	18.06
75-79	44	11	55	62.06	12.70	34.92
80-84	32	16	48	82.90	27.78	49.90
85 & over	28	24	52	125.00	49.28	73.14
Total	**202**	**73**	**275**	**6.13**	**2.08**	**4.04**

APPENDIX 8

TB Mortality Rate by Age & Sex 1993, 2002 & 2003





Appendix 9

TB Deaths by Type by Age & Sex 2003

Age Group	Pulmonary only #			Miliary			Meninges			Bones & Joints			Others		
	M	F	T	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-24	1	2	3	1	-	1	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
35-39	1	1	2	-	-	-	-	-	-	-	-	-	1	-	1
40-44	4	2	6	1	-	1	-	-	-	-	-	-	-	1	1
45-49	8	-	8	-	-	-	-	-	-	-	-	-	1	1	2
50-54	6	-	6	-	-	-	-	-	-	-	-	-	1	-	1
55-59	5	1	6	1	-	1	-	-	-	-	-	-	-	1	1
60-64	10	-	10	3	-	3	-	-	-	-	-	-	5	-	5
65-69	14	1	15	1	-	1	-	-	-	-	-	-	2	2	4
70-74	27	2	29	-	4	4	-	-	-	-	-	-	4	3	7
75-79	33	7	40	1	1	2	-	-	-	-	-	-	10	3	13
80-84	26	12	38	-	-	-	-	-	-	-	-	-	6	4	10
85 & over	23	20	43	2	-	2	-	-	-	-	-	-	3	4	7
Total	159	49	208	10	5	15	-	-	-	-	-	-	33	19	52 *

* Breakdown of Deaths from other forms of TB:-	Number
Intestines, peritoneum & mesenteric glands	2
Genito-urinary system	2
Tuberculosis of other organ	2
Late effects of Tuberculosis	46
Total	52

Pulmonary TB only, without extrapulmonary site involvement.

APPENDIX 10

Tuberculosis Mortality
1950 - 2003

Year	% of TB Death below 5 years	% of TB Death 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 Death
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
1999	0.00	0.00	0.00	0.9	72.9
2000	0.00	0.00	0.00	0.9	73.4
2001	0.00	0.00	0.00	0.9	74.3
2002	0.00	0.00	0.00	0.8	74.0
2003	0.36	0.00	0.00	0.8	72.3

APPENDIX 11

Top Ten Causes of Death 2003

Rank	Causes of Death	Detailed List No.	2003		
		ICD 10th Revision	Male	Female	Total
	All Causes		20 444	15 977	36 423 (2)
1	Malignant neoplasms	C00-C97	7 156	4 354	11 510
2	Diseases of heart	I00-I09, I11 I13, I20-I51	2 701	2 608	5 309
3	Cerebrovascular diseases	I60-I69	1 685	1 777	3 462
4	Pneumonia	J12-J18	2 092	1 775	3 867
5	Chronic lower respiratory diseases *	J40-J47	1 454	648	2 102
6	External causes of morbidity and mortality #	V01-Y89	1 362	682	2 044
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	518	666	1184
8	Diabetes mellitus	E10-E14	312	471	783
9	Septicaemia	A40-A41	268	304	572
10	Aortic aneurysm and dissection	I71	241	148	389
	Tuberculosis (including late effects of tuberculosis)		202	73	275
	All other causes	Residues of all causes	2453	2471	4926 (2)

Notes : 1. Figures in brackets denote number of deaths of unknown sex included.

2. Classification of diseases and causes of death is based on the International Statistical Classification of Diseases and Related Health Problems (ICD) 10th Revision from 2001 onwards. The disease groups for the purpose of ranking causes of death have also been redefined based on the ICD 10th Revision, and new disease groups have been added. Figures for 2001 may not be comparable with figures for previous years which were compiled based on the ICD 9th Revision.

* Chronic lower respiratory diseases has been included as a disease group for the purpose of ranking the causes of death since 2001.

\# According to the ICD 10th Revision, when the morbid condition is classifiable under Chapter XIX as "injury, poisoning and certain other consequences of external causes", the codes under Chapter XX for "external causes of morbidity and mortality" should be used as the primary cause.

APPENDIX 12 (a)

Origin of Tuberculosis Notifications
1993 - 2003

Origin	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Origin
East Kowloon Chest Clinic	298	280	158	190	175	225	118	192	173	144	123	East Kowloon Chest Clinic
Kowloon Chest Clinic	894	823	788	742	667	529	608	477	413	420	432	Kowloon Chest Clinic
Kwai Chung Chest Clinic	583	552	554	581	547	531	439	342	339	279	300	Kwai Chung Chest Clinic
Sai Ying Pun Chest Clinic (a)	288	271	261	254	180	216	198	196	194	142	133	Sai Ying Pun Chest Clinic (a)
Shaukiwan Chest Clinic	180	176	189	195	181	199	158	169	158	148	122	Shaukiwan Chest Clinic
				31	31	50	29	25	23	27	12	Shaukiwan Pneumoconiosis
Shek Kip Mei Chest Clinic	290	272	256	243	302	282	266	232	208	180	162	Shek Kip Mei Chest Clinic
Wanchai Chest Clinic	717	603	593	590	502	461	365	375	384	279	264	Wanchai Chest Clinic
Yaumati Chest Clinic	296	349	181	325	280	389	344	339	373	271	233	Yaumati Chest Clinic
Yan Oi Chest Clinic	313	303	363	170	428	419	440	425	396	355	320	Yan Oi Chest Clinic
Yung Fung Shee Chest Clinic	276	296	301	300	240	285	331	222	213	218	197	Yung Fung Shee Chest Clinic
NT Chest Clinic	511	706	650	630	561							NT Chest Clinic (e)
						6	13	26	24	35	22	Tung Chung Chest Clinic
						420	395	308	288	223	226	Yuen Chau Kok Chest Clinic
						102	97	103	81	96	59	Sheung Shui Chest Clinic
						98	92	88	84	96	111	Tai Po Chest Clinic
						94	94	111	96	103	75	Yuen Long Chest Clinic
						13	8	4	4	11	7	Sai Kung Chest Clinic
											2	Cheung Chau Chest Clinic
Sub-total	4646	4631	4294	4251	4094	4319	3995	3634	3451	3027	2800	Sub-total
		274	322	335	384	339	426	443	322	237	220	Kowloon Hospital
Tung Wah Group (b)	338	418	372	330	442	458	431	352	330	263	166	Wong Tai Sin Hospital
Ruttonjee Hospital	346	290	229	235	333	275	324	326	305	236	223	Ruttonjee Hospital
Grantham Hospital	269	208	338	285	360	316	296	358	259	249	252	Grantham Hospital
Haven of Hope Hospital	117	80	88	97	72	117	105	141	116	147	119	Haven of Hope Hospital
Other Govt Institutions (c)	612	18	16	3	5	7	42	43	113	107	84	Other Govt. Institutions (f)
		327	277	287	740	1244	1682	2081	2176	2133	1937	Other H.A. Hospitals
Maryknoll Hospital	48											
United Christian Hospital	36											
Caritas Medical Centre	29											
Others (d)	89	53	253	589	413	343	157	121	125	130	159	Private Practitioners
Private Hospitals	7	20	23	89	229	255	54	79	65	73	64	Private Hospitals other
Total	6537	6319	6212	6501	7072	7673	7512	7578	7262	6602	6024	Total
% of cases from Chest Clinics among the total	71.1	73.3	69.1	65.4	57.9	56.3	53.2	48.0	47.5	45.8	46.5	% of cases from Chest Clinics among the total
		20.1	21.7	19.7	22.5	19.6	21.1	21.4	18.3	17.1	16.3	% from Chest Hospitals (g)
		5.5	4.7	4.5	10.5	16.3	22.9	28.0	31.5	33.9	33.5	% from Other Public Hospitals
		1.2	4.4	10.4	9.1	7.8	2.8	2.6	2.6	3.1	3.7	% from Private Sector

Note : (a) Including Notifications from Cheung Chau Chest Clinic until 2002.
(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.
(g) Chest Hospitals include Kowloon Hospital, Wong Tai Sin Hospital, Ruttonjee Hospital, Grantham Hospital and Haven of Hope Hospital.

Appendix 12(b)

Breakdown of Origin of TB
Notifications for "Other H.A. Hospitals" 2003

Name of Hospital	No. of TB Notification
Alice Ho Miu Ling Nethersole Hospital	105
Caritas Medical Centre	131
Castle Peak Hospital	3
Fung Yiu King Hospital	1
Hong Kong Buddhist Hospital	1
Kwai Chung Hospital	2
Kwong Wah Hospital	153
North District Hospital	140
Our Lady of Maryknoll Hospital	15
Pamela Youde Nethersole Eastern Hospital	145
Pok Oi Hospital	4
Prince of Wales Hospital	151
Princess Margaret Hospital	151
Queen Elizabeth Hospital	189
Queen Mary Hospital	117
Shatin Hospital	8
Tai Po Hospital	11
Tseung Kwan O Hospital	65
Tuen Mun Hospital	166
Tung Wah Hospital	10
Tung Wah Eastern Hospital	1
United Christian Hospital	248
Yan Chai Hospital	120
Total	**1937**

Appendix 13

Tuberculosis Notifications & Notification Rates
by District Council District 2003

District Council District	Notification	Notification Rate (per 100,000 pop.)
Hong Kong Island	1092	86.5
Central & Western	234	99.0
Wanchai	245	163.4
Eastern	385	64.7
Southern	228	81.0
Kowloon	2286	113.2
Kowloon City	442	120.7
Kwun Tong	713	124.5
Sham Shui Po	478	134.4
Wong Tai Sin	243	54.5
Yau Tsim Mong	410	147.0
NT (East)	1311	76.7
Islands	98	88.3
Northern	279	94.1
Sai Kung/Tseung Kwan O	229	61.7
Shatin	476	75.7
Tai Po	229	75.7
NT (West)	1321	73.1
Kwai Tsing	450	89.7
Tsuen Wan	169	62.2
Tuen Mun	380	75.0
Yuen Long	322	61.2
Marine	1	
Unknown	13	
Total	**6024**	**88.5**

APPENDIX 14

Establishment & Strength of TB & Chest Service

As at 31.12.2003

Post	Establishment	Strength
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	10	5
Medical & Health Officer	23	25
Senior Nursing Officer	-	1
Nursing Officer	16	13
Registered Nurse	59	83
Enrolled Nurse	113	102
Senior Dispenser	9	9
Dispenser	1	1
Senior Inoculator	2	1
Inoculator	5	5
Executive Officer I	1	1
Statistical Officer II	2	2
Personal Secretary I	1	1
Clerical Officer	17	17
Assistant Clerical Officer	21	17
Clerical Assistant	56	60
Office Assistant	12	12
Workman II	60	66
Property Attendant	2	0
Senior Radiographer	3	2
Radiographer I	9	6
Radiographer II	16	24
Senior Radiographic Technician	1	1
Radiographic Technician	5	5
Darkroom Technician	13	15

APPENDIX 15

Total Attendances at Chest Clinics
1993 - 2003

Clinic/Hospital	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
East Kowloon Chest Clinic	64473	64845	54430	54921	58862	65220	56317	64102	64820	60729	56132
Kowloon Chest Clinic	80576	83223	95667	104572	120663	117678	112291	119624	106321	98403	97223
Sai Ying Pun Chest Clinic	51036	47995	48537	55967	50875	56233	58380	57916	53854	51808	45437
Shaukiwan Chest Clinic	45250	43128	48215	55737	54639	54732	52446	53011	57215	57968	47541
Shaukiwan Pneumoconiosis	-	-	9944	9664	9185	10821	12182	11023	10889	9120	8008
Shek Kip Mei Chest Clinic	59342	65676	56871	63462	72274	75610	68971	70941	71134	65572	60461
South Kwai Chung Chest Clinic	86912	91095	94000	101041	111683	113185	108654	99012	90448	85221	78998
Tai Po Chest Clinic (Full Time)	-	-	-	-	-	-	-	-	-	7866	33518
Tung Chung	-	-	-	-	101	3730	4687	4601	6241	6129	6807
Wanchai Chest Clinic	88826	85106	79964	89391	92697	91331	85109	84960	79212	70500	62322
Yan Oi Chest Clinic	51077	59698	64091	70741	69581	70979	78840	79188	72982	66905	66084
Yaumati Chest Clinic	78565	83555	79224	80341	89759	103198	108226	111959	114499	95700	71378
Yuen Chau Kok Chest Clinic	10944	51089	54642	55615	61160	76626	71273	66192	65190	64748	60339
Yung Fung Shee Chest Clinic	53726	55740	56908	58139	58841	66567	74735	73255	73663	77078	77516
Castle Peak Hospital	3736	2442	1932	1773	1169	1283	1151	868	1010	416	372
Cheung Chau Chest Clinic	1927	1781	2414	2490	2808	2943	2706	2611	1640	2404	1944
Sai Kung Chest Clinic	1504	1446	1412	1451	1444	1682	1905	2141	1945	2119	2372
Sheung Shui Chest Clinic	7217	7644	7710	10151	15330	18756	21256	22383	24271	24273	22933
Tai Po Chest Clinic (Part Time)	10852	9620	8083	8773	15760	20350	20758	24688	25636	17761	-
Yuen Long Chest Clinic	11618	8963	9822	11687	18742	21677	24075	27603	27208	29393	28702
Shatin Chest Clinic	12974	-	-	-	-	-	-	-	-	-	-
Hei Ling Chau ATC	1335	1232	1550	3187	2600	2664	1855	3726	2474	2302	2352
Pik Uk Prison	46	1	87	-	-	-	-	-	-	-	-
Shek Pik Prison Hospital	882	594	1239	943	725	173	266	241	291	277	203
Stanley Prison Hospital	7745	9991	5925	7751	6053	7380	9062	10468	10532	11977	8829
Total	**730563**	**774864**	**782667**	**847797**	**914951**	**982818**	**975145**	**990513**	**961475**	**908669**	**839471**

Appendix 16

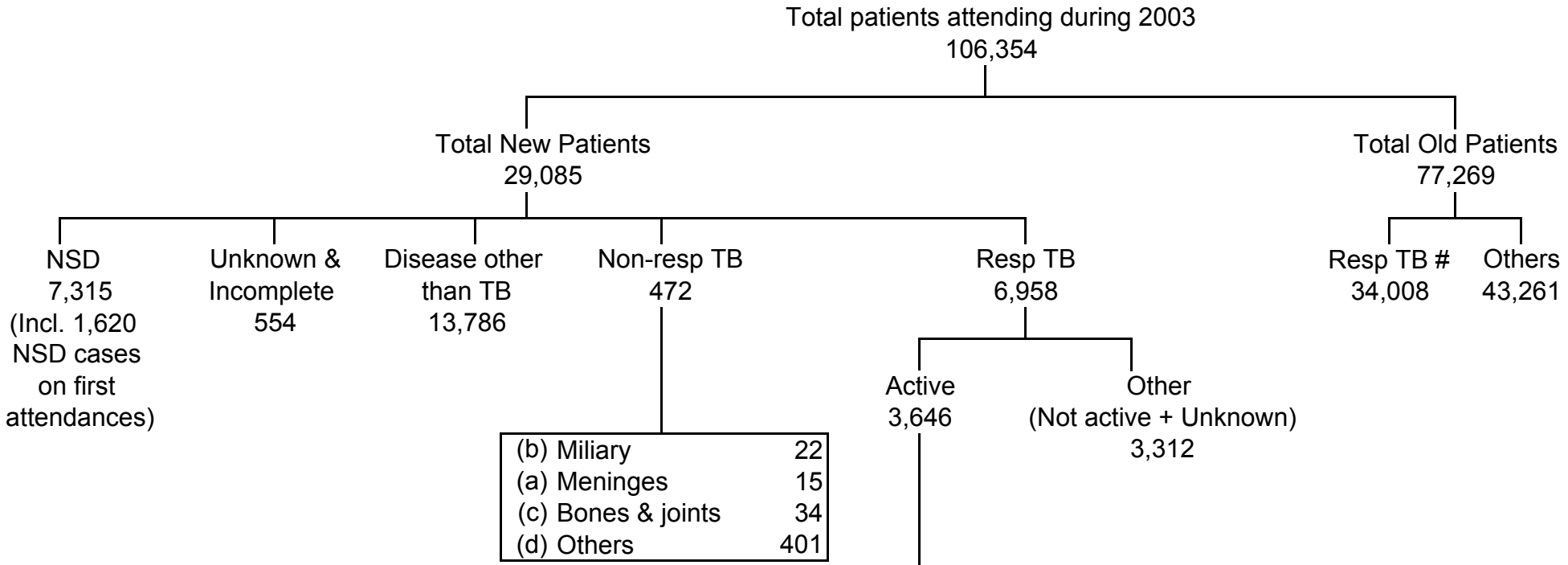
No. of Doctor Sessions, Cases Seen by Doctor and Patient/ Doctor Session 2003

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
Full Time Clinics			
East Kowloon	594	16502	28
Kowloon	1220	38328	31
Sai Ying Pun	644	16720	26
Shaukeiwan	543	14268	26
Pneumoconiosis	543	7808	14
Shek Kip Mei	637	16489	26
South Kwai Chung	1155	31044	27
Wanchai	1236	25163	20
Tai Po	553	12051	22
Tung Chung	544	2842	5
Yan Oi	893	22695	25
Yaumatei	1072	25084	23
Yuen Chau Kok	888	18474	21
Yung Fung Shee	544	18819	35
Sub-total	**11066**	**266287**	**24**
Part Time Clinics			
Castle Peak	28	372	13
Cheung Chau	24	502	21
Sai Kung	51	898	18
Sheung Shui	295	7640	26
Yuen Long	394	8328	21
Sub-total	**792**	**17740**	**22**
Institutions Correctional Ser Dept			
Hei Ling Chau	12	392	33
Shek Pik	12	83	7
Stanley Prison	25	706	28
Sub-total	**49**	**1181**	**24**
Total	**11907**	**285208**	**24**

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

APPENDIX 17

Flow Chart of Patients Attending Chest Clinics 2003



Bacteriology	Extent	Number
Negative	1	987
	2	140
	3	24
Positive	1	1223
	2	779
	3	351
Incomplete	1	108
	2	26
	3	8

Bacteriology	Cavity	Number
Negative	Yes	71
	No	1080
Positive	Yes	553
	No	1800
Incomplete	Yes	11
	No	131

Previous History of TB	Previous Treatment of TB	Number
No	No	3351
Yes	No	121
Yes	Yes	169
Unknown	Unknown	5

Refer to cases with pulmonary TB only, without coexisting TB of extrapulmonary sites.

APPENDIX 18

Classification of Patients of First Attendance with New Case Card Completed By Clinics According to International Classification of Diseases Code 2003

Code	Classification	Total
010	Primary Tuberculosis Infection	2
011	Pulmonary Tuberculosis	3417
012	Other Respiratory Tuberculosis	227
013	Tuberculosis of Meninges	15
014	Tuberculosis of Intestines	25
015	Tuberculosis of Bones & Joints	34
016	Tuberculosis of Genito-urinary System	39
017	Tuberculosis of Other Organs	337
018	Miliary Tuberculosis	22
137	Late effects of Tuberculosis	3312
160-165	Malignant Neoplasm of Respiratory System	442
212	Benign Neoplasm of Respiratory System	2
460-466	Acute Respiratory Infection	2571
470-478	Other Diseases of Upper Resp Tract	204
480-486	Pneumonia	1338
487	Influenza	0
490-491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	3365
492	Emphysema	87
493	Asthma	194
494	Bronchiectasis	292
495-496	Others	264
501	Asbestosis	0
502	Silicosis	3
505	Pneumoconiosis, unspecified	4
506-508	Others	0
510	Empyema	3
511	Pleurisy	114
512	Pneumothorax	41
513-519	Other Diseases of Respiratory System	450
786	Unknown	2066
V71	N.S.D.	3689
	Diseases Other than TB & Resp System	4412
Total		26971

Appendix 19 (a)

Extent of Active Resporary TB in First Attenders at Chest Clinics
2001-2003

Extent *	2001		2002		2003	
	No.	%	No.	%	No.	%
1. Minimal	2859	63.9	2611	63.2	2318	63.6
2. Moderate	1174	26.2	1088	26.3	945	25.9
3. Extensive	442	9.9	435	10.5	383	10.5
Total	4475	100.0	4134	100.0	3646	100.0
No. of first attenders	41109		34788		29085	
% of active TB	10.9		11.9		12.5	

* 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 2003

	Number	%
Smear +	1362	37.4
Smear-Culture +	1000	27.4
Smear-Culture -	1119	30.7
Incomplete	165	4.5
Total	3646	100.0

Refer to cases with pulmonary TB only, without coexisting TB of extrapulmonary sites.

APPENDIX 19 (b1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment during the period January to June 2003:

Age Group	Category	% resistance to				* % resistance to			MDR-TB	# Total % resistance	Total no. of cases analysed
		E	R	H	S	1 drug	2 drugs	≥ 3 drugs			
0 - 19	New cases	0.00	0.00	5.00	11.67	10.00	3.33	0.00	0.00	13.33	60
	Previously treated cases	16.67	16.67	16.67	33.33	16.67	0.00	16.67	16.67	33.33	6
	Overall	1.52	1.52	6.06	13.64	10.61	3.03	1.52	1.52	15.15	66
20 - 39	New cases	0.46	0.46	6.26	6.50	9.28	1.39	0.46	0.46	11.14	431
	Previously treated cases	6.45	9.68	9.68	9.68	3.23	0.00	9.68	9.68	12.90	31
	Overall	0.87	1.08	6.49	6.71	8.87	1.30	1.08	1.08	11.26	462
40 - 59	New cases	0.82	1.36	4.89	8.42	8.70	2.45	0.54	0.82	11.68	368
	Previously treated cases	1.96	3.92	9.80	11.76	13.73	3.92	1.96	1.96	19.61	51
	Overall	0.95	1.67	5.49	8.83	9.31	2.63	0.72	0.95	12.65	419
60 up	New cases	0.00	0.59	3.13	6.26	5.87	1.76	0.20	0.39	7.83	511
	Previously treated cases	0.00	0.68	6.08	8.11	8.78	2.03	0.68	0.68	11.49	148
	Overall	0.00	0.61	3.79	6.68	6.53	1.83	0.30	0.46	8.65	659
All	New cases	0.36	0.73	4.67	7.15	7.88	1.90	0.36	0.51	10.15	1370
	Previously treated cases	1.69	2.97	7.63	9.75	9.32	2.12	2.54	2.54	13.98	236
	Overall	0.56	1.06	5.11	7.53	8.09	1.93	0.68	0.81	10.71	1606

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
New cases: for cases with no past history of anti-tuberculosis treatment
Previously treated cases: for cases with past history of anti-tuberculosis treatment
Overall: for all cases

NB: The TB Reference Labroatory of Department of Health is using the absolute concentration method for drug susceptibility tests.

APPENDIX 19 (b2)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment druing the period January to June 2003:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1370	100	236	100	1606	100
Susceptible to all 4 drugs	1231	89.85	203	86.02	1434	89.29
Any resistance	139	10.15	33	13.98	172	10.71
H	64	4.67	18	7.63	82	5.11
R	10	0.73	7	2.97	17	1.06
E	5	0.36	4	1.69	9	0.56
S	98	7.15	23	9.75	121	7.53
Monoresistance	108	7.88	22	9.32	130	8.09
H	34	2.48	7	2.97	41	2.55
R	2	0.15	1	0.42	3	0.19
E	1	0.07	0	0.00	1	0.06
S	71	5.18	14	5.93	85	5.29
Multidrug resistance	7	0.51	6	2.54	13	0.81
H+R	2	0.15	0	0.00	2	0.12
H+R+E	1	0.07	2	0.85	3	0.19
H+R+S	2	0.15	2	0.85	4	0.25
H+R+E+S	2	0.15	2	0.85	4	0.25
Other patterns	24	1.75	5	2.12	29	1.81
H+E	1	0.07	0	0.00	1	0.06
H+S	22	1.61	5	2.12	27	1.68
H+E+S	0	0.00	0	0.00	0	0.00
R+E	0	0.00	0	0.00	0	0.00
R+S	1	0.07	0	0.00	1	0.06
R+E+S	0	0.00	0	0.00	0	0.00
E+S	0	0.00	0	0.00	0	0.00
Number of drugs resistant to:						
0 drug	1231	89.85	203	86.02	1434	89.29
1 drug	108	7.88	22	9.32	130	8.09
2 drugs	26	1.90	5	2.12	31	1.93
3 drugs	3	0.22	4	1.69	7	0.44
4 drugs	2	0.15	2	0.85	4	0.25

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment during the period January to December 2002:

Age Group	Category	% resistance to				* % resistance to			MDR-TB	# Total % resistance	Total no. of cases analysed
		E	R	H	S	1 drug	2 drugs	≥ 3 drugs			
0 - 19	New cases	0.00	0.86	4.31	11.21	9.48	3.45	0.00	0.86	12.93	116
	Previously treated cases	0.00	33.33	0.00	0.00	33.33	0.00	0.00	0.00	33.33	3
	Overall	0.00	1.68	4.20	10.92	10.08	3.36	0.00	0.84	13.45	119
20 - 39	New cases	0.29	0.43	5.76	7.05	8.49	1.87	0.43	0.29	10.79	695
	Previously treated cases	3.45	15.52	13.79	15.52	13.79	0.00	10.34	10.34	24.14	58
	Overall	0.53	1.59	6.37	7.79	8.90	1.73	1.20	1.06	11.82	753
40 - 59	New cases	0.42	0.14	5.18	8.40	7.98	2.80	0.14	0.14	10.92	714
	Previously treated cases	2.65	5.31	9.73	12.39	12.39	2.65	3.54	5.31	18.58	113
	Overall	0.73	0.73	5.68	8.95	8.59	2.66	0.60	0.73	11.85	827
60 up	New cases	1.08	0.63	3.79	6.58	6.49	1.35	0.81	0.45	8.66	1109
	Previously treated cases	1.38	1.38	9.17	9.17	9.17	2.75	1.83	1.38	13.76	218
	Overall	1.13	0.75	4.67	7.01	6.93	1.58	0.98	0.60	9.50	1327
All	New cases	0.65	0.46	4.71	7.40	7.56	1.97	0.49	0.34	10.22	2634
	Previously treated cases	2.04	4.59	9.69	10.97	10.97	2.04	3.57	3.57	16.58	392
	Overall	0.83	0.99	5.35	7.87	8.00	1.98	0.89	0.76	10.87	3026

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
New cases: for cases with no past history of anti-tuberculosis treatment
Previously treated cases: for cases with past history of anti-tuberculosis treatment
Overall: for all cases

NB: The TB Reference Labroatory of Department of Health is using the absolute concentration method for drug susceptibility tests.

APPENDIX 19 (c2)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment druing the period January to December 2002:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2634	100	392	100	3026	100
Susceptible to all 4 drugs	2370	89.98	327	83.42	2697	89.13
Any resistance	264	10.02	65	16.58	329	10.87
H	124	4.71	38	9.69	162	5.35
R	12	0.46	18	4.59	30	0.99
E	17	0.65	8	2.04	25	0.83
S	195	7.40	43	10.97	238	7.87
Monoresistance	199	7.56	43	10.97	242	8.00
H	60	2.28	17	4.34	77	2.54
R	2	0.08	4	1.02	6	0.20
E	4	0.15	0	0.00	4	0.13
S	133	5.05	22	5.61	155	5.12
Multidrug resistance	9	0.34	14	3.57	23	0.76
H+R	1	0.04	1	0.26	2	0.07
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	2	0.08	7	1.79	9	0.30
H+R+E+S	6	0.23	6	1.53	12	0.40
Other patterns	56	2.13	8	2.04	64	2.12
H+E	2	0.08	0	0.00	2	0.07
H+S	48	1.82	6	1.53	54	1.78
H+E+S	5	0.19	1	0.26	6	0.20
R+E	0	0.00	0	0.00	0	0.00
R+S	1	0.04	0	0.00	1	0.03
R+E+S	0	0.00	0	0.00	0	0.00
E+S	0	0.00	1	0.26	1	0.03
Number of drugs resistant to:						
0 drug	2370	89.98	327	83.42	2697	89.13
1 drug	199	7.56	43	10.97	242	8.00
2 drugs	52	1.97	8	2.04	60	1.98
3 drugs	7	0.27	8	2.04	15	0.50
4 drugs	6	0.23	6	1.53	12	0.40

APPENDIX 19 (d)

Rate of Resistance to Ofloxacin

Drug susceptibility testing to ofloxacin has been performed for Mycobacterium tuberculosis strains isolated in TB Reference Laboratory of Department of Health. The rates of resistance to ofloxacin are tabulated as follows for the years 1999 to 2002. However, the data should be interpreted with caution as susceptibility testing to ofloxacin for Cat [B], [C] and [D] are done only if requested by the attending doctor, and not all such strains are included. Thus, the resistance rates among Cat [B], [C] and [D] are probably somewhat over-estimated. For Cat [E], the test is done for all MDR-TB strains and thus the rates are more representative of the true picture.

Year			All strains [A] (=B+C)	Strains with full susceptibility to SHRE [B]	Strains with resistance to any one drug of SHRE [C] (=D+E)	Non-MDR resistant strains [D]	MDR-TB strains [E]
1999	Total number tested		349	146	203	153	50
	Resistant to Ofloxacin	Number	17	2	15	4	11
		%	(4.9%)	(1.4%)	(7.4%)	(2.61%)	(22%)
2000	Total number tested		343	153	190	135	55
	Resistant to Ofloxacin	Number	14	0	14	3	11
		%	(4.1%)	(0%)	(7.4%)	(2.2%)	(20%)
2001	Total number tested		288	123	165	121	44
	Resistant to Ofloxacin	Number	15	1	14	5	9
		%	(5.2%)	(0.8%)	(8.5%)	(4.1%)	(20.5%)
2002	Total number tested		270	141	129	101	28
	Resistant to Ofloxacin	Number	14	0	14	6	8
		%	(5.2%)	(0%)	(10.7%)	(5.9%)	(28.6%)

Appendix 19 (e)

Trend of anti-TB drug resistance (1998-2003) (Data from Programme Forms)

New cases

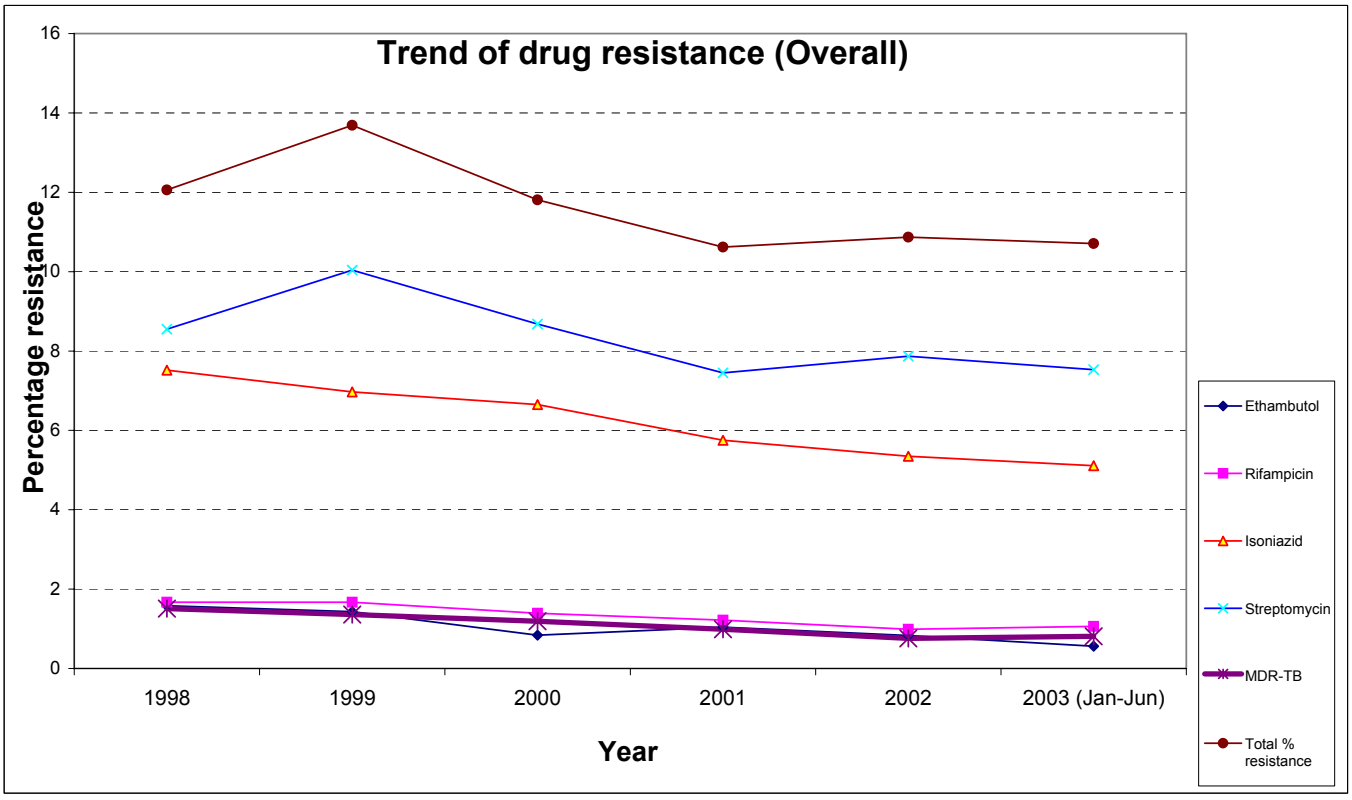
(Percentages)	1998	1999	2000	2001	2002	2003 (Jan-Jun)
Ethambutol	1.24	1.11	0.54	0.96	0.65	0.36
Rifampicin	1.17	0.97	0.61	0.83	0.46	0.73
Isoniazid	6.78	6.22	5.21	5.02	4.71	4.67
Streptomycin	7.65	9.34	7.78	7.39	7.40	7.15
MDR-TB	1.06	0.75	0.47	0.55	0.34	0.51
Total % resistance	10.89	12.61	10.35	10.39	10.22	10.15

Previously treated cases

(Percentages)	1998	1999	2000	2001	2002	2003 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	1.69
Rifampicin	4.61	6.09	5.98	3.71	4.59	2.97
Isoniazid	11.84	11.51	15.26	11.80	9.69	7.63
Streptomycin	13.82	14.45	13.81	10.96	10.97	9.75
MDR-TB	4.17	5.19	5.36	3.54	3.57	2.54
Total % resistance	18.86	20.32	20.41	16.36	16.58	13.98

Overall

(Percentages)	1998	1999	2000	2001	2002	2003 (Jan-Jun)
Ethambutol	1.58	1.43	0.84	1.04	0.83	0.56
Rifampicin	1.67	1.67	1.39	1.22	0.99	1.06
Isoniazid	7.52	6.97	6.65	5.75	5.35	5.11
Streptomycin	8.55	10.04	8.68	7.45	7.87	7.53
MDR-TB	1.51	1.36	1.19	0.99	0.76	0.81
Total % resistance	12.06	13.69	11.81	10.62	10.87	10.71



Appendix 20 (a)
Treatment Return 2003

Name of Clinic/Hospital	Service Regimen																								
	No. put on Rx b/f	Bought in					Treatment completed				Transfer out to		Interrup Rx temp	Died	Drop out				Complete defaulter				No. still onRx c/f	Unsup Rx	Incomp super. Rx	No. def. >2M <3M
		1	2	3	4	5	<6M	at 6M	>6M	%	hosp.	other cc			Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M <3M	>3M	%				
	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	256	102	7	15	149	128	8	119	201	90.7	59	52	0	13	0	11	1	3	0	3	3	1.7	184	13	74	5
Kowloon	97	387	54	22	165	138	28	151	282	88.4	102	103	0	22	2	16	0	8	2	4	3	1.8	140	0	158	13
South Kwai Chung	313	283	40	20	195	102	9	164	320	89.3	82	29	0	22	1	9	0	14	2	3	7	2.2	291	16	107	1
Sai Ying Pun	167	120	7	13	136	78	5	56	164	92.1	81	21	0	8	1	2	0	4	2	0	2	1.7	175	3	80	2
Shaukeiwan	195	115	1	13	137	122	5	85	186	93.1	80	33	0	8	0	3	1	4	1	1	3	1.7	173	0	53	2
Shek Kip Mei	172	133	7	12	137	85	5	105	162	86.4	68	20	0	8	1	9	6	7	3	3	11	5.5	138	6	55	1
Wanchai	227	214	15	16	135	152	21	141	158	84.9	161	25	0	6	1	32	0	6	1	2	5	2.3	200	2	110	13
Yan Oi	275	303	6	14	156	147	21	170	249	87.7	115	29	0	24	2	21	3	6	1	0	5	1.3	255	0	96	29
Yaumatei	291	225	8	21	121	100	27	178	180	84.2	56	45	0	16	1	10	1	14	1	12	13	6.1	212	0	55	14
Yuen Chau Kok	295	226	16	8	130	95	10	155	230	90.8	67	39	6	16	4	3	1	8	1	1	6	1.9	223	15	95	1
Yung Fung Shee	329	188	20	15	198	116	12	171	237	89.1	66	85	0	19	1	2	0	6	0	1	21	4.8	245	7	106	0
Tung Chung	24	18	5	2	15	16	1	28	19	92.2	5	1	0	2	0	0	0	1	0	1	0	2.0	22	0	5	0
Tai Po	151	126	3	1	81	61	3	94	130	88.2	26	9	1	12	0	9	2	7	1	0	1	0.8	128	0	45	1
Sub-total	2792	2452	189	177	1760	1360	156	1617	2520	88.6	968	530	7	176	14	127	15	88	15	31	80	2.7	2386	64	1039	82
Hosp Discharge Clinic																										
East Kowloon	3	0	1	1	0	2	0	0	2	100.0	1	2	0	0	0	0	0	0	0	0	0	0.0	2	0	1	0
Part Time Clinics																										
Castle Peak	7	9	0	0	1	0	2	2	4	85.7	0	1	0	1	0	0	0	0	0	0	0	0.0	7	0	0	0
Cheung Chau	5	4	0	0	3	6	1	1	3	66.7	2	6	0	2	0	0	0	0	0	0	0	0.0	3	0	0	0
Sai Kung	23	6	0	0	4	4	2	8	12	90.9	1	0	0	2	0	0	0	0	0	0	0	0.0	12	0	1	0
Sheung Shui	140	63	1	6	79	28	1	37	86	89.1	32	25	0	5	0	2	0	3	1	0	4	3.6	121	0	86	0
Yuen Long	131	69	2	16	52	49	5	49	108	94.6	25	16	1	5	0	2	1	2	0	0	0	0.0	105	0	76	6
Sub-total	306	151	3	22	139	87	11	97	213	91.4	60	48	1	15	0	4	1	5	1	0	4	1.5	248	0	163	6
Institutions Correctional Services Dept																										
Hei Ling Chau	10	19	2	3	1	2	5	4	8	70.6	1	6	4	0	0	5	3	0	0	0	0	0.0	1	0	0	0
Stanley Prison	30	32	0	0	6	0	20	10	7	89.5	0	2	0	0	0	0	0	2	0	0	0	0.0	27	0	0	0
Shek Pik Prison	16	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	3	0	0	0	0.0	14	0	6	0
Sub-total	56	49	2	3	7	2	25	14	15	74.4	1	8	4	0	0	5	3	5	0	0	0	0.0	39	0	6	0
Total	3157	2652	195	203	1906	1451	192	1728	2750	88.7	1030	588	12	191	14	136	19	98	16	31	84	2.6	2675	64	1209	88

Appendix 20 (b)
Treatment Return 2003

Name of Clinic/Hospital	Other Regimen																								
	No. put	Bought in					Treatment completed				Transfer out to		Interrup		Drop out				Complete defaulter				No. still	Unsup	Incomp	No. def.
	on Rx b/f	1	2	3	4	5	<6M	at6M	>6M	%	hosp.	other cc	Rx temp	Died	Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M <3M	>3M	%	onRx c/f	Rx	super. Rx	>2M <3M
	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	37	2	1	1	46	36	2	3	28	81.6	26	15	0	3	0	0	0	1	0	3	0	7.9	42	6	13	0
Kowloon	177	12	8	5	39	30	5	6	45	91.1	15	11	0	2	0	0	0	0	2	0	1	5.4	184	0	33	4
South Kwai Chung	49	5	3	4	27	12	3	4	25	82.9	10	3	0	6	0	0	1	0	0	0	0	0.0	48	2	14	0
Sai Ying Pun	24	2	2	2	19	6	0	0	13	92.9	6	1	0	1	0	0	0	0	0	0	0	0.0	34	1	9	0
Shaukeiwan	17	1	1	0	23	13	0	2	13	83.3	10	2	0	2	0	0	0	1	0	0	0	0.0	25	0	9	0
Shek Kip Mei	60	4	1	9	40	10	2	3	25	77.8	11	5	0	4	0	1	0	1	1	0	1	5.6	70	0	18	0
Wanchai	17	3	2	4	17	17	2	1	15	76.2	19	0	0	2	0	2	0	0	1	0	0	4.8	18	0	7	1
Yan Oi	33	5	0	4	12	3	0	0	9	100.0	3	0	0	0	0	0	0	0	0	0	0	0.0	45	0	5	1
Yaumatei	19	0	3	0	22	7	0	6	17	82.1	5	3	0	5	0	0	0	0	0	0	0	0.0	15	0	6	0
Yuen Chau Kok	34	7	4	6	18	5	2	3	27	90.9	4	4	0	3	0	0	0	0	0	0	0	0.0	31	1	16	0
Yung Fung Shee	24	5	1	2	11	8	0	1	17	90.0	6	2	0	2	0	0	0	0	0	0	0	0.0	23	0	7	0
Tung Chung	2	0	0	1	0	0	0	0	1	100.0	1	0	0	0	0	0	0	0	0	0	0	0.0	1	0	0	0
Tai Po	13	3	1	2	11	8	1	3	10	68.4	2	2	0	3	0	1	0	1	0	1	0	5.3	14	0	4	0
Sub-total	506	51	28	40	285	156	17	32	245	84.5	118	53	0	33	0	4	1	4	4	4	2	3.0	549	10	141	6
Hosp Discharge Clinic																										
East Kowloon	1	0	0	0	0	3	0	0	0	0.0	1	3	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Part Time Clinics																										
Castle Peak	0	0	0	0	0	0	0	0	0	0.0	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	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Sai Kung	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Sheung Shui	4	0	1	1	4	1	0	2	0	66.7	0	0	0	1	0	0	0	0	0	0	0	0.0	8	0	7	0
Yuen Long	6	0	0	0	1	1	0	0	7	100.0	1	0	0	0	0	0	0	0	0	0	0	0.0	0	0	1	0
Sub-total	10	0	1	1	5	2	0	2	7	90.0	1	0	0	1	0	0	0	0	0	0	0	0.0	8	0	8	0
Correctional Ser Dept Institutions																										
Hei Ling Chau	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Stanley Prison	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Shek Pik Prison	0	4	0	3	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	7	0	0	0
Sub-total	0	4	0	3	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	7	0	0	0
Total	517	55	29	44	290	161	17	34	252	84.6	120	56	0	34	0	4	1	4	4	4	2	3.0	564	10	149	6

APPENDIX 20 (c)

Explanatory Notes for Appendices 20(a) & 20(b)

Name of clinic/hospital	Service regimen / Other regimens *																								
	b/f	Brought in					Treatment completed				Transfer out to		Interrup. Rx temp.	Died	Drop out				Complete defaulter				Number still on Rx c/f	Unsup. Rx	Incomp. Super. Rx	No. Def. >2m, <3m
											hospi-tal	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 = (H + I) / (A + B + C + D + E + F - G - K - L - M - Q - W) ⇨

V = (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 20 (d)

Explanatory Notes For Appendices 20(a) and 20(b)

Appendix 20 (a) : Service regimen: For treatment cases who, upon starting anti-TB drugs, were given any combination of drugs including H (isoniazid), R (rifampicin), Z (pyrazinamide), E (ethambutol), and S (streptomycin).

Appendix 20 (b) : Other regimens: For treatment cases who, upon starting anti-TB drugs, were given also second line drugs apart from H, R, Z, E or S.

Number put on treatment b/f:

(A) - No. put on Rx b/f: Total number of treatment cases c/f from last month's balance.

Brought in:

- Items (B), (C), (D) & (E) will be using a new treatment number, while item (F) will be using the same previous treatment number, as follows:

(B) (1) Newly started treatment in your chest clinic.

(C) (2) Retreatment cases, with treatment newly started, including:
- Cases previously classified under items(O), (P), (Q), (R), (S), (T) or (U) in the most recent episode of treatment, with treatment restarted now after treatment has been interrupted for over 2 months;
- Cases claiming to have anti-TB treatment completed previously in chest clinic or chest hospital, but the clinic record is not available, e.g., because it has been destroyed;
- Cases claiming to have anti-TB treatment completed previously from sources other than chest clinic or chest hospital.

(D) (3) Relapse case:
- Cases having treatment completed previously (even if this is completed less than 2 months ago) in either chest clinic or chest hospital as indicated in the clinic record which is still available, e.g., cases classified under items (H) or (I) in the most recent episode.

(E) (4) Transfer in from hospitals, general practitioners (GPs), or prison:
- Cases previously unknown to any one chest clinic for this episode of treatment.

(F) (5) Cases using the same previous treatment number:
- Cases previously known to chest clinic for this episode of treatment, and now being transferred in from other chest clinics, hospitals, GPs, or prison, e.g., cases previously classified under items (K) or (L);
- Cases previously classified under items (O), (P), (Q), (R), or (S) in the most recent episode of treatment, with treatment restarted now after treatment has been interrupted for less than 2 months;
- Cases previously classified under item (M), and resuming treatment now.

Treatment completed:

(G) < 6m: Treatment stopped permanently by doctor prematurely, e.g., revised diagnosis.

(H) at 6m: Treatment stopped permanently by doctor at or within 2 weeks of 6 month from DOS.

(I) > 6m: Treatment stopped permanently by doctor at 7 month or more.

(J) % = (H + I)/(A + B + C + D + E + F – G – K – L – M – Q – W)

Transfer out to:

(K) hosp: Admission to hospital.

(L) other cc: Transfer out to other chest clinics.

Interrup. Rx temp.:

(M) Treatment interrupted by doctor temporarily, e.g., due to side effects of drug such as impaired LFT.

Died:

(N) Treatment cases who died.

Drop out:

(O) Rx by GP: Changed to be treated by GP.

(P) Leave HK: Treatment cases known to be going back to Philippines, China, or other countries for good as stated in the clinic record (whether AMA has been signed or not).

(Q) Def. > 1x: Defaulted treatment and NFA in conference with MO for more than one time.

(R) AMA: Treatment cases who have signed AMA, excluding those who are to be classified under items (O) or (P).

Complete defaulter:

(S) < 2m: Defaulted treatment for less than 2 months, and NFA in conference with MO for the first time.

(T) > 2m, < 3m: Defaulted treatment for more than 2 months but less than 3 months, and NFA in conference with MO for the first time..

(U) > 3m: Defaulted treatment for more than 3 months, and NFA in conference with MO for the first time.

(V) % = (S + T + U)/(A + B + C + D + E + F – G – K – L – M – Q – W)

No. still on Rx c/f:

(W) - Number of treatment cases in hand at the end of the month = (A + B + C + D + E + F) – (G + H + I + K + L + M + N + O + P + Q + R + S + T + U)

Unsup. Rx:

(X) - Treatment cases with all anti-TB drugs supplied (not even taken one dose at chest clinic) and unsupervised. Count under this item if this happens within the first 2 month of treatment.

Incomp. super. Rx:

(Y) - Treatment incompletely supervised, including:
  - Treatment supervised by non-clinic staff, e.g., CNS, old aged home staff, Vietnamese camp, prison.
  - Drug supplied to patient or relatives.

  Count under this item if this happens within the first 2 months of treatment.

No. def. > 2m, < 3m:

(Z) - Number of defaulters who have defaulted treatment for more than 2 months but less than 3 months, but not yet NFA in conference with MO. (NB: No cases who have been counted under this item in the last month will be counted again under this item for the subsequent months.)

  This item needs to be counted only on the last working day of the month when completing the monthly treatment return.

APPENDIX 21

Examination of Contacts in the Chest Clinics 2003

Particulars	Smear Positive Index Cases		Smear Negative Index Cases		Total	
No. of patients (new & old) listed	1832		4003		5835	
No. of contacts listed	5089		10964		16053	
Number of contacts x-rayed	4679	(100%)	9564	(100.00%)	14243	(100.00%)
Results						
(a) NSD & Unknown	4053	(86.62%)	8170	(85.42%)	12223	(85.82%)
(b) Disease other than TB	361	(7.72%)	770	(8.05%)	1131	(7.94%)
(c) Inactive respiratory TB	189	(4.04%)	483	(5.05%)	672	(4.72%)
(d) Active respiratory TB						
A (radiologically)	21 (0.45%)		32 (0.33%)		53 (0.37%)	
B (bacteriogically)	11 (0.24%) >	34 (0.73%)	23 (0.24%) >	57 (0.60%)	34 (0.24%) >	91 (0.64%)
C (incomplete)	2 (0.04%)		2 (0.02%)		4 (0.03%)	
(e) Non-respiratory TB	3	(0.06%)	4	(0.04%)	7	(0.05%)
(f) Result not yet known	39	(0.83%)	80	(0.84%)	119	(0.84%)

APPENDIX 22 (a)

Scheme for Tuberculin Testing and BCG Administration in Hong Kong, 2003

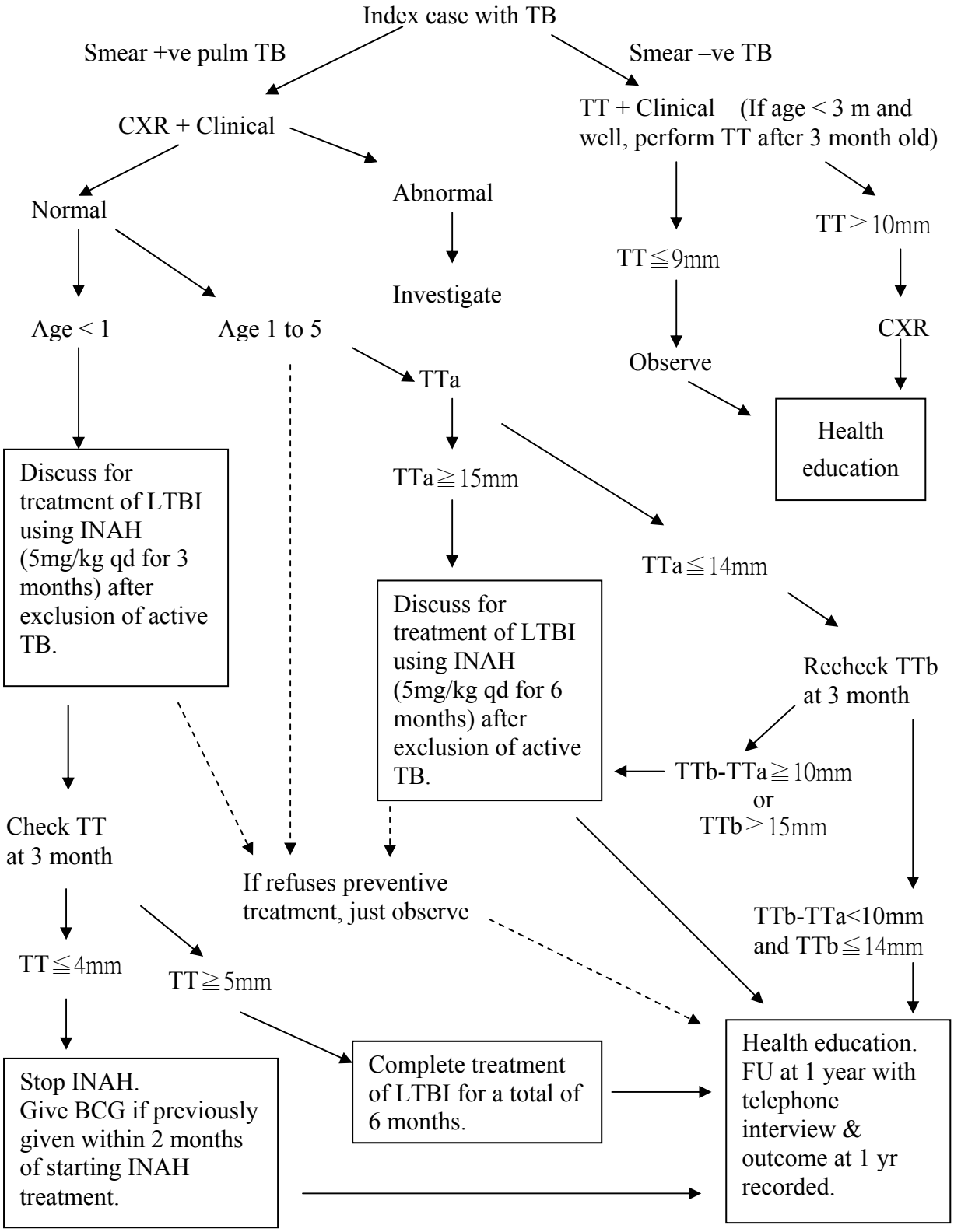
Population Group		Procedure
Newborns		Direct BCG • Government and most other inoculators using intradermal method • A small proportion of other inoculators using percutaneous method
Children under the age of 15 (excluding close contacts)	Negative BCG history and/or negative BCG scar	Direct BCG with intradermal method (since September 2000)
	BCG history and BCG scar	No action
Primary School Children (aged 6-10)		BCG revaccination programme stopped since September 2000
Close contacts	Under 5	See Appendix 22 (b)
	5 years and over	Chest X-ray

Notes: (1) Freeze dried BCG from Statens Serum Institut of Denmark being used

(2) Any child with symptoms and/or BCG complications should be seen by a doctor

APPENDIX 22 (b)

Household Contacts below 5 (with history of previous BCG vaccination)



Note: Tuberculin test (TT) is done by intradermal method using 2 TU (in 0.1 ml) of PPD-RT23. In general, the criteria for a positive TT is a reaction at 48-72 hour with diameter of induration at 10 mm or above. However, special criteria for TT is being used in the above flow chart for the special groups under consideration. [5 TU of PPD-S, which is widely used in the United States, is equivalent to 2 TU of PPD-RT23.]

APPENDIX 23

BCG Vaccinations at Birth 2003

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	3773	3763	99.7
	Queen Mary	3534	3564	100.8 *
Private Hospital	Canossa	672	667	99.3
	H.K. Adventist	655	646	98.6
	H.K. Sanatorium	663	659	99.4
	Matilda International	741	671	90.6
	St. Paul's	1141	1128	98.9
Total (HK Island)		11179	11098	99.3
Hospital under HA management	Kwong Wah	5797	5776	99.6
	Queen Elizabeth	5427	5439	100.2 *
	United Christian	3813	3795	99.5
Private Hospital	H.K. Baptist	2210	2158	97.6
	St. Teresa's	3373	3314	98.3
Total (Kowloon)		20620	20482	99.3
Hospital under HA management	Alice H.M.L. Nethersole	508	500	98.4
	Prince of Wales	4501	4529	100.6 *
	Princess Margaret	2728	2713	99.5
	Tuen Mun	5420	5393	99.5
Private Hospital	H.K. Adventist	806	798	99.0
	Shatin Int'l Medical Ctr Union	1295	1290	99.6
Government Maternity Home		1	0	0.0
Total (NT Areas)		15259	15223	99.8
Grand Total		47058	46803	99.5

Note : * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 2002

Vaccination Method 2003	Percentage
Intradermal	68.4
Percutaneous	31.6

APPENDIX 24

Tuberculin Tests and BCG Vaccination of School Children
1962 - 2000

Year	Number (a) Eligible	% Agree for TT	Number TT Tested	Number TT Negative (TT<=9mm)	Number Given BCG	% of TT Tested Given BCG
1962			49567		22903	46.2
1963			34793		10706	30.8
1964			38871		9764	25.1
1965			76407		10845	14.2
1966			77447		10911	14.1
1967	224666	56.1	125975	25794	25766	20.5
1968	208029	68.2	141922	30328	30314	21.4
1969	126906	70.4	89306	16831	16821	18.8
1970	194298	65.7	127680	49655	49547	38.8
1971	213457	68.0	145205	50115	50020	34.4
1972	201537	61.7	124385	54340	54100	43.5
1973	120797	69.4	83882	29713	29554	35.2
1974	295287	60.7	179169	47591	47378	26.4
1975	136175	65.3	88987	38334	(b) 39120	44.0
1976	230861	63.7	147057	77085	76790	52.2
1977	137465	55.4	76143	43752	43502	57.1
1978	134218	66.9	89732	52504	54137	60.3
1979	133697	66.1	88375	49555	49355	55.8
1980	101215	66.8	67633	42419	43830	64.8
1981	111121	68.7	76342	47093	47089	61.7
1982	115042	71.9	82675	52654	52455	63.4
1983	121392	77.9	94578	65487	65627	69.4
1984	71950	85.3	61359	47086	47705	77.7
1985	90771	82.4	74802	56646	56625	75.7
1986	100116	82.0	82057	65251	64985	79.2
1987	84610	79.2	67038	53695	53419	79.7
1988	78806	89.2	70318	58796	59237	84.2
1989	68367	91.3	62390	50747	50794	81.4
1990	121280	86.0	104263	78244	78540	75.3
1991	120705	91.3	110193	75343	75107	68.2
1992	102580	91.2	93533	63550	(c) 63234	67.6
1993	100895	96.3	97189	69723	68598	70.6
1994	91593	94.8	86817	65075	66372	76.5
1995	94614	93.4	88378	65044	64005	72.4
1996	73265	92.3	67625	49619	49113	72.6
1997	61445	97.2	59746	49824	49336	82.6
1998	91523	95.4	87271	74199	74008	84.8
1999	106483	92.1	98069	80322	80103	81.7
2000 (d)	16542	99.0	16377	13603	13209	80.7
2001 onwards	Programme Stopped					

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.

(d) The BCG revaccination programme was stopped since September 2000.

APPENDIX 25

TB Beds in Public Services, 2003

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	154
	Kowloon Hospital	125
	Ruttonjee Hospital	150
	Haven of Hope Hospital	129
	Wong Tai Sin Hospital	165
	Total (Hospital Authority)	723
Custody	Victoria Prison Hospital	-
	Stanley Prison Hospital	24
	Tai Lam Correctional Institution	-
	Total (Custody)	24
	Grand Total (2003)	747
	Grand Total (2002)	799
	Grand Total (2001)	793

APPENDIX 26

Annual Admissions to Hospitals from Government Chest Clinics

1992 - 2003

Year	Total Admissions
1992	5229
1993	5159
1994	5176
1995	5392
1996	4607
1997	4597
1998	4709
1999	5012
2000	5408
2001	5317
2002	5183
2003	4603

Admissions by Clinic	Year 2003
East Kowloon	335
Kowloon	509
Sai Ying Pun	393
Shaukeiwan	246
Shaukeiwan Pneumoconiosis	87
Shek Kip Mei	320
South Kwai Chung	408
Tai Po	89
Tung Chung	44
Wanchai	506
Yan Oi	457
Yaumati	331
Yuen Chau Kok	275
Yung Fung Shee	359
Cheung Chau	15
NT Unit	229
Total	4603

APPENDIX 27

Unlinked Anonymous Screening (UAS) for HIV in TB & Chest Service (2003)

Age	Male	Female	Total
< 20	26	23	49
20-29	71 (1)	76 (1)	147
30-39	59 (1)	67	126 (2)
40-49	93 (1)	46	139 (1)
50-59	101	36	137 (1)
≥ 60	225 (2)	75	300 (2)
Unknown	22	0	22
Total	597 (5)	323 (1)	920 (6)

UAS for HIV in TB & Chest Service (1990 to 2003)

Period	Category	Sample	Number Tested (No. +ve) (% +ve)
1.12.90 - 31.1.91	Outpatient	Blood	1548
5.6.91 - 5.8.91	Inpatient	Blood	485
1.4.92 – 30.6.92	Outpatient	Blood	1469 (2) (0.14%)
1.4.93 – 30.6.93	Outpatient	Blood	1173
Sep 95 – Nov 95	Outpatient	Urine	895 (2) (0.22%)
Sep 96 – Dec 96	Outpatient	Urine	998 (4) (0.40%)
Oct 97 – Jan 98	Outpatient	Urine	1003 (2) (0.20%)
Oct 98 – Jan 99	Outpatient	Urine	833 (4) (0.48%)
Sep 99 – Dec 99	Outpatient	Urine	1166 (8) (0.69%)
Sep 00 – Dec 00	Outpatient	Urine	1018 (5) (0.49%)
Oct 01 – Dec 01	Outpatient	Urine	1071 (4) (0.37%)
Oct 02 – Jan 03	Outpatient	Urine	1000 (8) (0.80%)
Nov 03 – Feb 04	Outpatient	Urine	920 (6) (0.65%)

APPENDIX 28

Number of 'Confirmed' cases of TB in health care staff
Notified to Labour Department (1993 – 2003)

Year	Number
1993	0
1994	1
1995	2
1996	2
1997	10
1998	39
1999	57
2000	39
2001	41
2002	29
2003	30

'Confirmed' Cases of TB in Health Care Staff Notified
to Labour Department (2003) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24		2			2
25 – 29	3	6	2		11
30 – 34	1	2		1	4
35 – 39	1	3			4
40 – 44		2	1	1	4
45 – 49	1	1		1	3
50 – 54				1	1
55 – 59				1	1
60 – 64					
65 – 69					
Total	6	16	3	5	30

Appendix 29 (a)

Cohort of TB Patients in 2002

A	**Number of TB cases in 2002**	**6,602**		
	Number of these cases, by strategy, that are	**DOTS**	**Non-DOTS**	Total
B	**New pulmonary smear-positive**	**1,529**	**363**	1892
C	**New pulmonary smear-negative**	**2,411**	**612**	3023
D	**New pulmonary smear unknown**	**174**	**124**	298
E	**New extra-pulmonary**	**660**	**136**	796
F	**Relapse**	**239**	**29**	268
G	**Treatment after Failure**	**0**	**0**	0
H	**Treatment after Default**	**7**	**1**	8
I	**Other cases not in lines B-H.**	**460**	**81**	541
J	**New pulmonary lab-confirmed cases**	**2,834**	**825**	3659

Note (1): "Pulmonary TB" includes cases with both pulmonary and extrapulmonary involvement. "Extrapulmonary TB" refers to those with extrapulmonary but without pulmonary involvement.

Note (2): The total number for items B to I added together exceeds the number in item A by 224 This is because in Hong Kong, for those cases which have been notified within 2 years, they will be counted as duplicate notifications and not counted in the official statistics. Thus, there were a total of 224 such cases in 2002.

Note (3): New pulmonary lab-confirmed cases are bacteriologically confirmed cases by smear or culture.

Appendix 29 (b)

Cohort of TB patients in 2002 (smear positive cases) - treatment outcomes

			DOTS							non-DOTS	
			New pulmonary smear-positive		Relapse		Treat-after-Failure	Treat-after-Default		New pulmonary smear-positive	
Z	**Cases included in cohort**		**1,529**		**239**		**0**	**7**		**363**	
A	**Cured**		**1,086**	71.0	**145**	60.7	**0**	**0**	0.0	**1**	0.3
B	**Completed**		**126**	8.2	**19**	7.9	**0**	**3**	42.9	**2**	0.6
C	**Died**	(Note 1)	**71**	4.6	**17**	7.1	**0**	**0**	0.0	**2**	0.6
D	**Failed**	(Note 2)	**126**	8.2	**29**	12.1	**0**	**1**	14.3	**1**	0.3
E	**Defaulted**		**51**	3.3	**21**	8.8	**0**	**1**	14.3	**1**	0.3
F	**Transferred out**		**69**	4.5	**8**	3.3	**0**	**2**	28.6	**356**	98.1
			1,529	100.0	239	100.0		7	100.0	363	100.0

For those under DOTS, the treatment success rate (as at 12 month) for (a) new pulmonary smear-positive cases is 79.2% (71.0+8.2%), (b) relapse cases is 68.6% (60.7+7.9%).

(Note 1) Among 71 “died”, 3 were related to TB, 46 not related to TB, and 22 unknown.
(Note 2) Among 126 “failed”, all of them were still on treatment at 12 month, with 119 sputum smear converted negative at 7 month, 4 sputum smear still positive at 7 m, and 3 unknown.

Appendix 29 (c)

Cohort of TB patients in 2002 (bacteriologically positive cases) - treatment outcomes

		DOTS								non-DOTS	
		New pulmonary bacteriologically-positive		Relapse		Treat-after-Failure	Treat-after-Default			New pulmonary bacteriologically-positive	
Z	**Cases included in cohort**	**2,834**		**433**		**0**	**7**			**825**	
A	**Cured**	**1,979**	69.8	**262**	60.5	**0**	**0**	0.0		**6**	0.7
B	**Completed**	**272**	9.6	**36**	8.3	**0**	**3**	42.9		**2**	0.2
C	**Died** (Note 1)	**143**	5.0	**33**	7.6	**0**	**0**	0.0		**9**	1.1
D	**Failed** (Note 2)	**214**	7.6	**46**	10.6	**0**	**2**	28.6		**4**	0.5
E	**Defaulted**	**103**	3.6	**37**	8.5	**0**	**0**	0.0		**2**	0.2
F	**Transferred out**	**123**	4.3	**19**	4.4	**0**	**2**	28.6		**802**	97.2
		2,834	100.0	433	100.0		7	100.0		825	100.0

For those under DOTS, the treatment success rate (as at 12 month) for (a) new pulmonary bacteriologically-positive cases is 79.4% (69.8+9.6%), (b) relapse cases is 68.8% (60.5+8.3%).

(Note 1) Among 143 “died”, 7 were related to TB, 95 not related to TB, and 41 unknown.
(Note 2) Among 214 “failed”, all of them were still on treatment at 12 month, with 199 sputum bacteriology converted negative at 7 month, 4 sputum bacteriology still positive at 7 m, and 11 unknown.

Part 2

PNEUMOCONIOSIS

Contents

APPENDIX 1

New Cases of Suspected Pneumoconiosis attending
the Pneumoconiosis Clinic in Hong Kong 1956 - 2003

Year	Number of New Cases Undergoing Assessment					
	Government Workers	Non-government Workers	Total	Cumulative Total	Cumulative Total Compensated	
					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	1017		
1978	12	207	219	1236		
1979	2	210	212	1448		
1980	12	532 (a)	544	1992	386 (a)	-
1981	8	608	616	2608	1332	162
1982	4	511	515	3123	1434	634
1983	2	292	294	3417	1469	945
1984	1	231	232	3649	1477	1140
1985	1	179	180 (b)	3829	1479	1322
1986	3	176	179 (3)	4008	1485	1513
1987	4	166	170 (2)	4178	1485	1679
1988	6	172	178 (4)	4356	1488	1877
1989	-	156	156 (1)	4512	1488	2023
1990	2	147	149 (1)	4661	1489	2142
1991	-	171	171 (1)	4832	1489	2151
1992	2	171	173 (3)	5005	1490	2340
1993	2	247	249 (4)	5254	1492	2492
1994	-	327	327 (7)	5581	1493	2770
1995	9	245	254 (9)	5835	1494	3000
1996	4	193	197 (9)	6032	1494	3119
1997	4	154	158 (7)	6190	1494	3242
1998	2	197	199 (5)	6389	1494	3351
1999	-	291	291 (15)	6680	1494	3505
2000	3	235	238 (11)	6918	1494	3619
2001	6	230	236 (9)	7154	1494	3751
2002	3	212	215 (9)	7369	1494	3868
2003	3	142	145 (c) (6)	7514	1494 (d)	3948

Note :
(a) The Pneumoconiosis Compensation Scheme was initiated in 1980, before that reporting 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 80 of the 145 cases in 2003 had been assesed 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 80 cases.
(d) Under Revised Ordinance 1993 : 583 out of 1494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2003. 278 living pneumoconiotics were each receiving a monthly ex-gratia payment of $4710.00 in 2003.

APPENDIX 2

Age Distribution of Pneumoconiosis Cases 2003

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	4	5
45 - 49	12	15
50 - 54	11	14
55 - 59	13	16
60 - 64	14	17.5
65 - 69	8	10
70 - 74	4	5
75+	14	17.5
Total	80	100

APPENDIX 3

Occupation Distribution of Confirmed Pneumoconiosis 2003

Type of Occupation	Number of Cases	%
Construction Construction/Quarry Others	40 20 20	50 25 25
Total	80	100

APPENDIX 4

Pneumoconiosis Patients by Duration of Exposure to Dust 2003

Duration	Number of Cases	%
<5 years	2	2.5
5 - 9	2	2.5
10 - 14	4	5
15 - 19	7	9
20 - 24	25	31
25 - 29	9	11
30+	27	34
Unknown	4 *	5
Total	80	100

APPENDIX 5

Pneumoconiosis Patients by Degree of Incapacity 2003

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	36
10	14
15	5
20	5
25	4
30	3
35	1
40	3
45	2
50	1
60	-
70	-
80	1
100	1
N. A.	4
Total	80

APPENDIX 6

Confirmed Pneumoconiosis Patients
Classified by Radiological Appearance 2003

Type of Opacity	Profusion 1	2	3	Sub-Total
Small opacities				
Rounded				
p (up to 1.5 mm diameter)	4	-	-	4
q (1.5 to 3.0 mm diameter)	43	7	-	50
r (3.0 to 10.0 mm diameter)	-	3	-	3
Irregular				
s (fine irregular or linear)	2	-	-	2
t (medium irregular)	2	-	-	2
u (coarse irregular)	1	-	-	1
Sub-total	52	10	-	62
Combined opacities	8	5	-	13
N. A.	-	-	-	5
Total				80

10 out of the 80 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)	7
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	1
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	2
Total	10

Appendix 7

Pneumoconiosis Patients with Tuberculosis 2003

Type of T.B.	Number of Cases	%
Bacteriological Positive	21	26
Bacteriological Negative	20	25
No T.B.	35	44
N.A.	4	5
Total	80	100

Appendix 8

Confirmed Pneumoconiosis Patients by Other Particulars 2003

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	67	84
	Non-smoker	9	11
	Unknown	4	5
	Total	80	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	11	14
	No	65	81
	Unknown	4	5
	Total	80	100
General Condition	Good	72	90
	Fair	4	5
	Poor	-	-
	Died	4	5
	Total	80	100

Part 3

ANNEX

Contents

Annex 1 (a)

Treatment Outcomes at 2 year of the 2000 Cohort of TB Patients

"Programme Forms" have been completed for a total of 6189 TB patients who were seen at chest clinics with DOS (date of starting treatment) from 1.1.2000 to 31.12.2000. They are categorised as follows:

Categories		N	%
(A)	New pulmonary, smear positive	1524	24.6
(B)	New pulmonary, smear negative	2906	47.0
(C)	New pulmonary, smear not done/ unknown	223	3.6
(D)	New extra-pulmonary	765	12.4
(E)	Relapse pulmonary, smear positive	223	3.6
(F)	Pulmonary smear-positive retreatment after failure or default	21	0.3
(G)	Other retreatment cases (not included in E and F) [i.e., including relapses (pulmonary, smear negative or unknown or not done; and extrapulmonary) and retreatment after failure or default (pulmonary, smear negative or unknown or not done; and extrapulmonary)]	527	8.5
Total		6189	100.0

Analysis has been done on this cohort of patients and the results are shown in the following Annexes:

Annex 1 (b)	Various age groups (0-19), (20-39), (40-59), (60+), and all age groups
Annex 1 (c)	Pulmonary pretreatment smear positive, pretreatment culture positive, and MDR-TB cases
Annex 1 (d)	New pulmonary smear positive and retreatment pulmonary smear positive cases
Annex 1 (e)	Treatment defaulters (outcome at 2 year = defaulting)

Annex 1 (f)	Sample of the set of "Programme Form" used for the cohort of patients in 2000

Annex 1 (b1)

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Female	140	51.7	883	50.5	496	28.7	626	25.6	2145	34.7
Male	131	48.3	866	49.5	1231	71.3	1816	74.4	4044	65.3
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Residential status										
Permanent resident	244	90.0	1459	83.4	1638	94.8	2426	99.3	5767	93.2
Chinese immigrant	17	6.3	97	5.5	44	2.5	8	0.3	166	2.7
Illegal immigrant	0	0.0	12	0.7	1	0.1	1	0.0	14	0.2
Chinese (other types)	0	0.0	13	0.7	2	0.1	2	0.1	17	0.3
Vietnamese migrants	0	0.0	1	0.1	5	0.3	0	0.0	6	0.1
Others	10	3.7	157	9.0	34	2.0	2	0.1	203	3.3
Unknown	0	0.0	10	0.6	3	0.2	3	0.1	16	0.3
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Ethnicity										
Chinese	257	94.8	1550	88.6	1667	96.5	2420	99.1	5894	95.2
Non-Chinese	13	4.8	189	10.8	53	3.1	10	0.4	265	4.3
Unknown	1	0.4	10	0.6	7	0.4	12	0.5	30	0.5
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Occupation										
Medical	0	0.0	13	0.7	1	0.1	0	0.0	14	0.2
Paramedical	0	0.0	17	1.0	4	0.2	0	0.0	21	0.3
Domestic helper	0	0.0	88	5.0	27	1.6	16	0.7	131	2.1
Not employed	20	7.4	136	7.8	200	11.6	78	3.2	434	7.0
Retired	0	0.0	12	0.7	103	6.0	1440	59.0	1555	25.1
Others	250	92.3	1454	83.1	1365	79.0	856	35.1	3925	63.4
Unknown	1	0.4	29	1.7	27	1.6	52	2.1	109	1.8
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Presentation										
Symptoms	233	86.0	1477	84.4	1498	86.7	2012	82.4	5220	84.3
Post-Rx FU	3	1.1	21	1.2	31	1.8	45	1.8	100	1.6
Self check up	4	1.5	40	2.3	17	1.0	9	0.4	70	1.1
Other check up	12	4.4	96	5.5	73	4.2	115	4.7	296	4.8
Contact examination	15	5.5	48	2.7	12	0.7	37	1.5	112	1.8
High risk screening	0	0.0	5	0.3	5	0.3	6	0.2	16	0.3
Coincidental	0	0.0	25	1.4	52	3.0	172	7.0	249	4.0
Others	0	0.0	24	1.4	29	1.7	37	1.5	90	1.5
Unknown	4	1.5	13	0.7	10	0.6	9	0.4	36	0.6
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Disease Classification										
Pulmonary TB only	194	71.6	1223	69.9	1336	77.4	2040	83.5	4793	77.4
Extrapulmonary TB only	52	19.2	326	18.6	246	14.2	208	8.5	832	13.4
Both	25	9.2	200	11.4	145	8.4	194	7.9	564	9.1
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0

Annex 1 (b2)

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Extrapulmonary TB										
1. Pleura	17	6.3	153	8.7	134	7.8	226	9.3	530	8.6
2. Lymph node	35	12.9	274	15.7	142	8.2	55	2.3	506	8.2
3. Meninges	4	1.5	5	0.3	14	0.8	3	0.1	26	0.4
4. Miliary	2	0.7	11	0.6	8	0.5	14	0.6	35	0.6
5. Bones & joint	4	1.5	19	1.1	19	1.1	32	1.3	74	1.2
6. Genitourinary	1	0.4	20	1.1	19	1.1	26	1.1	66	1.1
7. Abdomen	3	1.1	19	1.1	20	1.2	13	0.5	55	0.9
8. Skin	3	1.1	17	1.0	9	0.5	9	0.4	38	0.6
9. Others	6	2.2	24	1.4	34	2.0	28	1.1	92	1.5
Case category										
1. New case	258	95.2	1631	93.3	1490	86.3	2039	83.5	5418	87.5
2. Relapse < 5 years	9	3.3	53	3.0	56	3.2	62	2.5	180	2.9
3. Relapse > 5 years	0	0.0	54	3.1	150	8.7	325	13.3	529	8.5
4. Rx defaulter < 5 month	3	1.1	7	0.4	18	1.0	15	0.6	43	0.7
5. Rx defaulter > 5 month	1	0.4	4	0.2	13	0.8	1	0.0	19	0.3
6. Previous failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7. Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Disease characteristics (pulmonary cases)										
Pretreatment smear +ve	54	24.7	414	29.1	513	34.6	787	35.2	1768	33.0
Pretreatment culture +ve	122	55.7	807	56.7	942	63.6	1622	72.6	3493	65.2
Extent = 1	133	60.7	947	66.5	845	57.1	1141	51.1	3066	57.2
Extent=1 & cavity=N	*126*	*57.5*	*862*	*60.6*	*772*	*52.1*	*1083*	*48.5*	*2843*	*53.1*
Extent=1 & cavity=Y	*7*	*3.2*	*85*	*6.0*	*73*	*4.9*	*58*	*2.6*	*223*	*4.2*
Extent = 2	62	28.3	342	24.0	448	30.2	789	35.3	1641	30.6
Extent=2 & cavity=N	*52*	*23.7*	*268*	*18.8*	*357*	*24.1*	*687*	*30.8*	*1364*	*25.5*
Extent=2 & cavity=Y	*10*	*4.6*	*74*	*5.2*	*91*	*6.1*	*102*	*4.6*	*277*	*5.2*
Extent=3	20	9.1	96	6.7	154	10.4	260	11.6	530	9.9
Extent=3 & cavity=N	*14*	*6.4*	*73*	*5.1*	*100*	*6.8*	*206*	*9.2*	*393*	*7.3*
Extent=3 & cavity=Y	*6*	*2.7*	*23*	*1.6*	*54*	*3.6*	*54*	*2.4*	*137*	*2.6*
Extent=not specified	4	1.8	38	2.7	34	2.3	44	2.0	120	2.2
Extent=ns & cavity=N	*4*	*1.8*	*36*	*2.5*	*34*	*2.3*	*42*	*1.9*	*116*	*2.2*
Extent=ns & cavity=Y	*0*	*0.0*	*2*	*0.1*	*0*	*0.0*	*2*	*0.1*	*4*	*0.1*
Cavity=N	196	89.5	1239	87.1	1263	85.3	2018	90.3	4716	88.0
Cavity=Y	23	10.5	184	12.9	218	14.7	216	9.7	641	12.0
Condition at 6 month										
1. Rx completed	123	45.4	778	44.5	579	33.5	666	27.3	2146	34.7
2. Still on Rx	128	47.2	805	46.0	1012	58.6	1500	61.4	3445	55.7
3. Changed Rx to others	8	3.0	70	4.0	45	2.6	50	2.0	173	2.8
4. Defaulted	12	4.4	90	5.1	76	4.4	82	3.4	260	4.2
5. Died from TB	0	0.0	0	0.0	1	0.1	13	0.5	14	0.2
6. Died from non-TB	0	0.0	3	0.2	8	0.5	75	3.1	86	1.4
7. Died from unknown	0	0.0	3	0.2	4	0.2	46	1.9	53	0.9
8. Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9. Admitted & not yet back	0	0.0	0	0.0	2	0.1	10	0.4	12	0.2
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0

Annex 1 (b3)

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 1 year										
1. Rx completed / Total	233	86.0	1390	79.5	1341	77.6	1801	73.8	4765	77.0
1. Rx completed / Bacter con	*111*		*673*		*746*		*1222*		*2752*	
1. Rx completed / Rad impro	*190*		*1085*		*1029*		*1409*		*3713*	
1. Rx completed / Other evid	*71*		*430*		*369*		*398*		*1268*	
1. Rx completed / No evid	*2*		*34*		*62*		*67*		*165*	
2. Still on Rx / Total	19	7.0	181	10.3	191	11.1	285	11.7	676	10.9
2. Still on Rx / smear +ve 5m	*1*		*2*		*7*		*2*		*12*	
2. Still on Rx / smear -ve 5m	*11*		*125*		*146*		*217*		*499*	
2. Still on Rx / smear ukn 5m	*7*		*54*		*38*		*66*		*165*	
3. Changed Rx to others	7	2.6	76	4.3	60	3.5	71	2.9	214	3.5
4. Defaulted	12	4.4	95	5.4	110	6.4	77	3.2	294	4.8
5. Failure	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
6. Died from TB	0	0.0	0	0.0	3	0.2	19	0.8	22	0.4
7. Died from non-TB	0	0.0	3	0.2	16	0.9	112	4.6	131	2.1
8. Died from unknown	0	0.0	4	0.2	5	0.3	77	3.2	86	1.4
9. Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Outcome at 2 year										
1. Rx completed / Total	253	93.4	1570	89.8	1550	89.8	2075	85.0	5448	88.0
1. Rx completed / Bacter con	*127*		*804*		*927*		*1518*		*3376*	
1. Rx completed / Rad impro	*215*		*1292*		*1276*		*1754*		*4537*	
1. Rx completed / Other evid	*104*		*710*		*646*		*710*		*2170*	
1. Rx completed / No evid	*2*		*17*		*36*		*42*		*97*	
2. Still on Rx	0	0.0	2	0.1	6	0.3	5	0.2	13	0.2
3. Changed Rx to others	6	2.2	83	4.7	56	3.2	67	2.7	212	3.4
4. Defaulted	12	4.4	86	4.9	90	5.2	68	2.8	256	4.1
5. Failure	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0
6. Died from TB	0	0.0	1	0.1	4	0.2	21	0.9	26	0.4
7. Died from non-TB	0	0.0	3	0.2	16	0.9	124	5.1	143	2.3
8. Died from unknown	0	0.0	4	0.2	5	0.3	81	3.3	90	1.5
9. Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	271	100.0	1749	100.0	1727	100.0	2442	100.0	6189	100.0
Relapse at 2 year after Rx completion										
Number with Rx completed	253	100.0	1570	100.0	1550	100.0	2075	100.0	5448	100.0
1. No relapse	243	96.0	1493	95.1	1499	96.7	1966	94.7	5201	95.5
2. Relapse / Total	2	0.8	22	1.4	9	0.6	21	1.0	54	1.0
2. Relapse / Bacteriological	*1*		*10*		*7*		*14*		*32*	
2. Relapse / Radiological	*1*		*8*		*2*		*10*		*21*	
2. Relapse / Other evidence	*1*		*8*		*1*		*2*		*12*	
3. Unknown	8	3.2	55	3.5	42	2.7	88	4.2	193	3.5

NB. Bacter con = bacteriological conversion; Radiol impro = radiological improvement; Other evid = other evidence of improvement; No evid = no evidence of improvement

Annex 1 (c1)

Group	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Age group						
0 to 19	54	3.1	122	3.5	0	0.0
Female	26		60		0	
Male	28		62		0	
20 to 39	414	23.4	807	23.1	17	43.6
Female	195		379		8	
Male	219		428		9	
40 to 59	513	29.0	942	27.0	14	35.9
Female	105		197		0	
Male	408		745		14	
60+	787	44.5	1622	46.4	8	20.5
Female	182		377		2	
Male	605		1245		6	
Total	1768	100.0	3493	100.0	39	100.0
Female	508	28.7	1013	29.0	10	25.6
Male	1260	71.3	2480	71.0	29	74.4
Residential status						
Permanent resident	1684	95.2	3337	95.5	35	89.7
Chinese immigrant	35	2.0	72	2.1	0	0.0
Illegal immigrant	3	0.2	6	0.2	2	5.1
Chinese (other types)	7	0.4	8	0.2	0	0.0
Vietnamese migrants	1	0.1	3	0.1	0	0.0
Others	36	2.0	64	1.8	1	2.6
Unknown	2	0.1	3	0.1	1	2.6
Total	1768	100.0	3493	100.0	39	100.0
Ethnicity						
Chinese	1713	96.9	3394	97.2	38	97.4
Non-Chinese	47	2.7	88	2.5	1	2.6
Unknown	8	0.5	11	0.3	0	0.0
Total	1768	100.0	3493	100.0	39	100.0
Occupation						
Medical	5	0.3	9	0.3	0	0.0
Paramedical	3	0.2	8	0.2	0	0.0
Domestic helper	21	1.2	42	1.2	0	0.0
Not employed	128	7.2	236	6.8	3	7.7
Retired	525	29.7	1069	30.6	5	12.8
Others	1059	59.9	2081	59.6	31	79.5
Unknown	27	1.5	48	1.4	0	0.0
Total	1768	100.0	3493	100.0	39	100.0
Presentation						
Symptoms	1603	90.7	3030	86.7	34	87.2
Post-Rx FU	22	1.2	49	1.4	3	7.7
Self check up	4	0.2	16	0.5	0	0.0
Other check up	36	2.0	138	4.0	0	0.0
Contact examination	7	0.4	39	1.1	0	0.0
High risk screening	3	0.2	7	0.2	0	0.0
Coincidental	67	3.8	152	4.4	2	5.1
Others	22	1.2	46	1.3	0	0.0
Unknown	4	0.2	16	0.5	0	0.0
Total	1768	100.0	3493	100.0	39	100.0

Annex 1 (c2)

Group	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Disease classification						
Pulmonary TB only	1668	94.3	3200	91.6	38	97.4
Both pulm & extrapulm	100	5.7	293	8.4	1	2.6
Total	1768	100.0	3493	100.0	39	100.0
Case Category						
1. New case	1524	86.2	3027	86.7	13	33.3
2. Relapse < 5 years	35	2.0	78	2.2	11	28.2
3. Relapse > 5 years	188	10.6	351	10.0	10	25.6
4. Rx defaulter < 5 month	12	0.7	23	0.7	3	7.7
5. Rx defaulter > 5 month	9	0.5	14	0.4	2	5.1
6. Previous failure	0	0.0	0	0.0	0	0.0
7. Others	0	0.0	0	0.0	0	0.0
Total	1768	100.0	3493	100.0	39	100.0
Disease characteristics (pulmonary cases)						
Extent = 1	629	35.6	1677	48.0	16	41.0
Extent=1 & cavity=N	*515*	*29.1*	*1505*	*43.1*	*14*	*35.9*
Extent=1 & cavity=Y	*114*	*6.4*	*172*	*4.9*	*2*	*5.1*
Extent = 2	767	43.4	1300	37.2	18	46.2
Extent=2 & cavity=N	*566*	*32.0*	*1047*	*30.0*	*13*	*33.3*
Extent=2 & cavity=Y	*201*	*11.4*	*253*	*7.2*	*5*	*12.8*
Extent=3	344	19.5	465	13.3	4	10.3
Extent=3 & cavity=N	*230*	*13.0*	*336*	*9.6*	*1*	*2.6*
Extent=3 & cavity=Y	*114*	*6.4*	*129*	*3.7*	*3*	*7.7*
Extent=not specified	28	1.6	51	1.5	1	2.6
Extent=ns & cavity=N	*27*	*1.5*	*50*	*1.4*	*1*	*2.6*
Extent=ns & cavity=Y	*1*	*0.1*	*1*	*0.0*	*0*	*0.0*
Cavity=N	1338	75.7	2938	84.1	29	74.4
Cavity=Y	430	24.3	555	15.9	10	25.6
Condition at 6 months						
1. Rx completed	490	27.7	1139	32.6	0	0.0
2. Still on Rx	1133	64.1	2044	58.5	35	89.7
3. Changed Rx to others	47	2.7	88	2.5	2	5.1
4. Defaulted	50	2.8	124	3.5	2	5.1
5. Died from TB	4	0.2	11	0.3	0	0.0
6. Died from non-TB	25	1.4	55	1.6	0	0.0
7. Died from unknown	16	0.9	28	0.8	0	0.0
8. Others	0	0.0	0	0.0	0	0.0
9. Admitted & not yet back	3	0.2	4	0.1	0	0.0
Total	1768	100.0	3493	100.0	39	100.0

Annex 1 (c3)

Group	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Outcome at 1 year						
1. Rx completed / Total	1358	76.8	2694	77.1	5	12.8
1. Rx completed / Bacter con	*1252*		*2507*		*4*	
1. Rx completed / Rad impro	*1183*		*2314*		*4*	
1. Rx completed / Other evid	*243*		*496*		*0*	
1. Rx completed / No evid	*18*		*8*		*0*	
2. Still on Rx / Total	215	12.2	403	11.5	24	61.5
2. Still on Rx / smear +ve 5m	*9*		*10*		*2*	
2. Still on Rx / smear -ve 5m	*184*		*335*		*22*	
2. Still on Rx / smear ukn 5m	*22*		*58*		*0*	
3. Changed Rx to others	46	2.6	98	2.8	4	10.3
4. Defaulted	76	4.3	153	4.4	4	10.3
5. Failure	0	0.0	0	0.0	0	0.0
6. Died from TB	5	0.3	17	0.5	1	2.6
7. Died from non-TB	43	2.4	84	2.4	1	2.6
8. Died from unknown	25	1.4	44	1.3	0	0.0
9. Others	0	0.0	0	0.0	0	0.0
Total	1768	100.0	3493	100.0	39	100.0
Outcome at 2 year						
1. Rx completed / Total	1561	88.3	3090	88.5	21	53.8
1. Rx completed / Bacter con	*1494*		*2999*		*19*	
1. Rx completed / Rad impro	*1460*		*2853*		*17*	
1. Rx completed / Other evid	*499*		*1000*		*8*	
1. Rx completed / No evid	*14*		*0*		*0*	
2. Still on Rx	8	0.5	10	0.3	2	5.1
3. Changed Rx to others	50	2.8	96	2.7	5	12.8
4. Defaulted	69	3.9	135	3.9	7	17.9
5. Failure	0	0.0	1	0.0	0	0.0
6. Died from TB	8	0.5	21	0.6	3	7.7
7. Died from non-TB	47	2.7	93	2.7	1	2.6
8. Died from unknown	25	1.4	47	1.3	0	0.0
9. Others	0	0.0	0	0.0	0	0.0
Total	1768	100.0	3493	100.0	39	100.0
Relapse at 2 year after Rx completion						
Number with Rx completed	1561	100.0	3090	100.0	21	100.0
1. No relapse	1474	94.4	2952	95.5	19	90.5
2. Relapse / Total	24	1.5	30	1.0	1	4.8
2. Relapse / Bacteriological	*16*		*20*		*1*	
2. Relapse / Radiological	*10*		*14*		*0*	
2. Relapse / Other evidence	*2*		*4*		*0*	
3. Unknown	63	4.0	108	3.5	1	4.8

Annex 1 (c4)

Group	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Sensitivity pattern						
Streptomycin - R	140	8.9	290	8.7	28	71.8
Streptomycin - S	1428	91.1	3061	91.3	11	28.2
Isoniazid - R	99	6.3	218	6.5	39	100.0
Isoniazid - S	1468	93.7	3130	93.5	0	0.0
Rifampicin - R	25	1.6	49	1.5	39	100.0
Rifampicin - S	1544	98.4	3302	98.5	0	0.0
Ethambutol - R	15	1.0	27	0.8	14	36.8
Ethambutol - S	1549	99.0	3317	99.2	24	63.2
Pyrazinamide - R	11	8.7	25	8.6	14	48.3
Pyrazinamide - S	116	91.3	266	91.4	15	51.7
Ofloxacin - R	3	1.9	11	3.0	8	22.9
Ofloxacin - S	152	98.1	352	97.0	27	77.1
Smear conversion rates						
1. Smear at 2 month = N (a)	993				7	
2. Smear at 2 month = P (b)	137				4	
2. Sm 2m (P); Sm 3m (N) (c)	83				2	
2. Sm 2m (P); Sm 3m (P) (d)	31				2	
2. Sm 2m (P); Sm 3m (U) (e)	23				0	
3. Smear at 2 month = U (f)	499				9	
3. Sm 2m (U); Sm 3m (N) (g)	232				3	
3. Sm 2m (U); Sm 3m (P) (h)	14				0	
3. Sm 2m (U); Sm 3m (U) (i)	253				6	
Overall percentage of smear conversion at 2m = (a)/ [(a)+(b)]	87.9		-		63.6	
Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	96.7		-		85.7	
Culture conversion rates						
1. Culture at 2 month = N (a)			1931		12	
2. Culture at 2 month = P (b)			265		11	
2. Cu 2m (P); Cu 3m (N) (c)			134		6	
2. Cu 2m (P); Cu 3m (P) (d)			41		4	
2. Cu 2m (P); Cu 3m (U) (e)			90		1	
3. Culture at 2 month = U (f)			1297		16	
3. Cu 2m (U); Cu 3m (N) (g)			518		5	
3. Cu 2m (U); Cu 3m (P) (h)			15		2	
3. Cu 2m (U); Cu 3m (U) (i)			764		9	
Overall percentage of culture conversion at 2m = (a)/ [(a)+(b)]	-		87.9		52.2	
Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	-		97.9		79.3	

Annex 1 (d1)

	New pulmonary smear +ve		ReRx pulmonary smear +ve	
	N	**%**	**N**	**%**
Age group				
0 to 19	51	3.3	3	1.2
Female	25		1	
Male	26		2	
20 to 39	386	25.3	28	11.5
Female	184		11	
Male	202		17	
40 to 59	437	28.7	76	31.1
Female	94		11	
Male	343		65	
60+	650	42.7	137	56.1
Female	164		18	
Male	486		119	
Total	1524	100.0	244	100.0
Female	467	30.6	41	16.8
Male	1057	69.4	203	83.2
Residential status				
Permanent resident	1448	95.0	236	96.7
Chinese immigrant	34	2.2	1	0.4
Illegal immigrant	2	0.1	1	0.4
Chinese (other types)	6	0.4	1	0.4
Vietnamese migrants	1	0.1	0	0.0
Others	31	2.0	5	2.0
Unknown	2	0.1	0	0.0
Total	1524	100.0	244	100.0
Ethnicity				
Chinese	1477	96.9	236	96.7
Non-Chinese	41	2.7	6	2.5
Unknown	6	0.4	2	0.8
Total	1524	100.0	244	100.0
Occupation				
Medical	5	0.3	0	0.0
Paramedical	3	0.2	0	0.0
Domestic helper	19	1.2	2	0.8
Not employed	102	6.7	26	10.7
Retired	435	28.5	90	36.9
Others	936	61.4	123	50.4
Unknown	24	1.6	3	1.2
Total	1524	100.0	244	100.0
Presentation				
Symptoms	1400	91.9	203	83.2
Post-Rx FU	2	0.1	20	8.2
Self check up	4	0.3	0	0.0
Other check up	29	1.9	7	2.9
Contact examination	7	0.5	0	0.0
High risk screening	2	0.1	1	0.4
Coincidental	57	3.7	10	4.1
Others	20	1.3	2	0.8
Unknown	3	0.2	1	0.4
Total	1524	100.0	244	100.0

Annex 1 (d2)

	New pulmonary smear +ve		ReRx pulmonary smear +ve	
	N	**%**	**N**	**%**
Disease classification				
Pulmonary TB only	1428	93.7	240	98.4
Both pulm & extrapulm	96	6.3	4	1.6
Total	1524	100.0	244	100.0
Disease characteristics (pulmonary cases)				
Extent = 1	547	35.9	82	33.6
Extent=1 & cavity=N	*442*	*29.0*	*73*	*29.9*
Extent=1 & cavity=Y	*105*	*6.9*	*9*	*3.7*
Extent = 2	660	43.3	107	43.9
Extent=2 & cavity=N	*483*	*31.7*	*83*	*34.0*
Extent=2 & cavity=Y	*177*	*11.6*	*24*	*9.8*
Extent=3	293	19.2	51	20.9
Extent=3 & cavity=N	*203*	*13.3*	*27*	*11.1*
Extent=3 & cavity=Y	*90*	*5.9*	*24*	*9.8*
Extent=not specified	24	1.6	4	1.6
Extent=ns & cavity=N	*23*	*1.5*	*4*	*1.6*
Extent=ns & cavity=Y	*1*	*0.1*	*0*	*0.0*
Cavity=N	1151	75.5	187	76.6
Cavity=Y	373	24.5	57	23.4
Condition at 6 months				
1. Rx completed	474	31.1	16	6.6
2. Still on Rx	927	60.8	206	84.4
3. Changed Rx to others	39	2.6	8	3.3
4. Defaulted	41	2.7	9	3.7
5. Died from TB	2	0.1	2	0.8
6. Died from non-TB	23	1.5	2	0.8
7. Died from unknown	16	1.0	0	0.0
8. Others	0	0.0	0	0.0
9. Admitted & not yet back	2	0.1	1	0.4
Total	1524	100.0	244	100.0
Outcome at 1 year				
1. Rx completed / Total	1185	77.8	173	70.9
1. Rx completed / Bacter con	*1103*		*149*	
1. Rx completed / Rad impro	*1045*		*138*	
1. Rx completed / Other evid	*219*		*24*	
1. Rx completed / No evid	*13*		*5*	
2. Still on Rx / Total	176	11.5	39	16.0
2. Still on Rx / smear +ve 5m	*7*		*2*	
2. Still on Rx / smear -ve 5m	*149*		*35*	
2. Still on Rx / smear ukn 5m	*20*		*2*	
3. Changed Rx to others	40	2.6	6	2.5
4. Defaulted	61	4.0	15	6.1
5. Failure	0	0.0	0	0.0
6. Died from TB	3	0.2	2	0.8
7. Died from non-TB	37	2.4	6	2.5
8. Died from unknown	22	1.4	3	1.2
9. Others	0	0.0	0	0.0
Total	1524	100.0	244	100.0

Annex 1 (d3)

	New pulmonary smear +ve		ReRx pulmonary smear +ve	
	N	**%**	**N**	**%**
Outcome at 2 year				
1. Rx completed / Total	1352	88.7	209	85.7
1. Rx completed / Bacter con	*1303*		*191*	
1. Rx completed / Rad impro	*1273*		*187*	
1. Rx completed / Other evid	*440*		*59*	
1. Rx completed / No evid	*11*		*3*	
2. Still on Rx	3	0.2	5	2.0
3. Changed Rx to others	45	3.0	5	2.0
4. Defaulted	56	3.7	13	5.3
5. Failure	0	0.0	0	0.0
6. Died from TB	5	0.3	3	1.2
7. Died from non-TB	41	2.7	6	2.5
8. Died from unknown	22	1.4	3	1.2
9. Others	0	0.0	0	0.0
Total	1524	100.0	244	100.0
Relapse at 2 year after Rx completion				
Number with Rx completed	1352	100.0	209	100.0
1. No relapse	1278	94.5	196	93.8
2. Relapse / Total	19	1.4	5	2.4
2. Relapse / Bacteriological	*12*		*4*	
2. Relapse / Radiological	*9*		*1*	
2. Relapse / Other evidence	*2*		*0*	
3. Unknown	55	4.1	8	3.8
Smear conversion rates				
1. Smear at 2 month = N (a)	927		136	
2. Smear at 2 month = P (b)	115		25	
2. Sm 2m (P); Sm 3m (N) (c)	71		13	
2. Sm 2m (P); Sm 3m (P) (d)	25		7	
2. Sm 2m (P); Sm 3m (U) (e)	19		5	
3. Smear at 2 month = U (f)	482		83	
3. Sm 2m (U); Sm 3m (N) (g)	224		28	
3. Sm 2m (U); Sm 3m (P) (h)	13		2	
3. Sm 2m (U); Sm 3m (U) (i)	245		53	
Overall percentage of smear conversion at 2m = (a)/ [(a)+(b)]				
	89.0		84.5	
Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]				
	97.0		95.2	

Annex 1 (e1)

Analysis for defaulters

	Female		Male		Total	
Age group	N	%	N	%	N	%
0 to 19	6	9.1	6	3.2	12	4.7
20 to 39	38	57.6	48	25.3	86	33.6
40 to 59	12	18.2	78	41.1	90	35.2
60+	10	15.2	58	30.5	68	26.6
Total	66	100.0	190	100.0	256	100.0

Residential status	N	%
Permanent resident	225	87.9
Chinese immigrant	8	3.1
Illegal immigrant	1	0.4
Chinese (other types)	0	0.0
Vietnamese migrants	1	0.4
Others	20	7.8
Unknown	1	0.4
Total	256	100.0

Ethnicity	N	%
Chinese	234	91.4
Non-Chinese	22	8.6

Occupation	N	%
Medical	0	0.0
Paramedical	0	0.0
Domestic helper	10	3.9
Not employed	22	8.6
Retired	47	18.4
Others	171	66.8
Unknown	6	2.3
Total	256	100.0

Presentation	N	%
Symptoms	206	80.5
Post-Rx FU	6	2.3
Self check up	5	2.0
Other check up	13	5.1
Contact examination	6	2.3
High risk screening	3	1.2
Coincidental	11	4.3
Others	3	1.2
Unknown	3	1.2
Total	256	100.0

Disease Classification	N	%
Pulmonary TB only	224	87.5
Extrapulmonary TB only	24	9.4
Both	8	3.1
Total	256	100.0

Defaulting at month

Month	N	%
0	5	2.0
1	57	22.3
2	39	15.2
3	27	10.5
4	21	8.2
5	25	9.8
6	13	5.1
7	6	2.3
8	6	2.3
9	5	2.0
10	4	1.6
11	3	1.2
12	1	0.4
13	2	0.8
14	1	0.4
15	2	0.8
16	0	0.0
17	0	0.0
18	1	0.4
19	1	0.4
20	0	0.0
Unknown	37	14.5
Total	256	100.0

New course of treatment started

Rx restarted	N	%
Yes	53	20.7
No	128	50.0
Unknown	75	29.3
Total	256	100.0

Annex 1 (e2)

Analysis for defaulters

Case category	N	%
1. New case	205	80.1
2. Relapse < 5 years	11	4.3
3. Relapse > 5 years	17	6.6
4. Rx defaulter < 5 month	15	5.9
5. Rx defaulter > 5 month	8	3.1
6. Previous failure	0	0.0
7. Others	0	0.0
Total	256	100.0

Disease characteristics (pulmonary cases)	N	%
Pretreatment smear +ve	69	27.0
Pretreatment culture +ve	135	52.7
Extent = 1	136	53.1
Extent=1 & cavity=N	*126*	*49.2*
Extent=1 & cavity=Y	*10*	*3.9*
Extent = 2	74	28.9
Extent=2 & cavity=N	*58*	*22.7*
Extent=2 & cavity=Y	*16*	*6.3*
Extent=3	18	7.0
Extent=3 & cavity=N	*12*	*4.7*
Extent=3 & cavity=Y	*6*	*2.3*
Extent=not specified	4	1.6
Extent=ns & cavity=N	*4*	*1.6*
Extent=ns & cavity=Y	*0*	*0.0*
Cavity=N	200	78.1
Cavity=Y	32	12.5

PRF FORM 1/2 (To be completed at 6 mo from DOS) PRF1/2-1-1-97(Rev)

Name: _____ **Sex:** *M / F* * **Age:** __ __ **DOS:** __ __ / __ __ / 19 __ __

Clinic No.: _____ **HKID No.:** _____-(__) or *Passport / Birth Cert* * **No.:** _____

Resident status: PResidents / CImmigrants / IImmigrants / cHOther / VMigrants / OThers / UNknown / NOne of above *
Ethnicity: CHinese / NOn-Chinese *
Occupation (in the past 6 months): MEdical / PAramedical / DOmestiche / NOtemployed / REtired / OThers / UNknown *

Last follow-up date: __ __ / __ __ / 19 __ __ **(≡** _____ **month from DOS)**

Part A: Presented this time mainly because of (choose 1 item only):

Symptoms	❍ (1)	**Post-Rx FU**	❍ (2)	**Self check-up**	❍ (3)
Other check-up	❍ (4)	**Contact exam.**	❍ (5)	**H-risk screening**	❍ (6)
Coincidental finding during investigation of other diseases		❍ (7)		**Others**	❍ (8)

_____

Part B: Disease classification (choose ≥ 1 item)

- **Pulmonary Tuberculosis** ❍ (P)
- **Extra-pulmonary Tuberculosis** ❍ (E)

pleura	❍ (1)	**miliary**	❍ (4)	**skin**	❍ (8)
lymph node	❍ (2)	**bone & joint**	❍ (5)	**others**	❍ (9)
meninges	❍ (3)	**genito-urinary**	❍ (6)		
		abdomen	❍ (7)	_____	

Diagnosis based on
(choose ≥ 1 item): Clinical ❍ (CL) / Radiological ❍ (RA) / Bacteriological ❍ (BA) / Histological ❍ (HI) *

Part C: Extent of disease (for pulmonary tuberculosis only)
Cavity: *Y / N* *

Minimal Disease (<RUL)	❍ (1)
Moderate Disease (>RUL)	❍ (2)
Extensive Disease (> a lung)	❍ (3)

Part D: Case category (choose 1 item only)

- **New case (previous treatment < 1 month)** ❍ (1)
- **Retreatment case (previous treatment > 1 month): DOS for last episode:** __ __ / __ __ / 19 __ __
  - **(a) Relapse (previously considered cured):**
    - **within 5 years from last dose of last course of treatment** ❍ (2)
    - **more than 5 years from last dose of last course of treatment** ❍ (3)
  - **(b) Previous treatment defaulter (treatment interval ≤ 5 months for the last episode)** ❍ (4)
  - **(c) Previous treatment defaulter (treatment interval > 5 months for the last episode)** ❍ (5)
  - **(d) Previous failure** ❍ (6)
- **Others (please specify)**_____ ❍ (7)

Part E: Condition at 6 month (from DOS) (choose only 1 of the items from (1) to (7))

- **Treatment completed, or to be completed in ≤ 2 weeks** ❍ (1)
- **Still on treatment (beyond 6 month)** ❍ (2)
- **Changed to be treated by GP/other doctors at** _____ **month from DOS** ❍ (3)
- **Defaulted/refused treatment for ≥ 2 months since** _____ **month from DOS** ❍ (4)
- **Died at** _____ **month: from TB-related causes** ❍ (5)
  from non-TB causes: _____ ❍ (6)
  from unknown cause ❍ (7)
- **Others (please specify)** _____ ❍ (8)
- **Admitted to chest hospital and not yet referred back (with unknown status)** ❍ (9)

Part F: Sputum results

	Pre-Rx	At 2 month	At 3 month
smear	❍ P ❍ N ❍ U	❍ P ❍ N ❍ U	❍ P ❍ N ❍ U
culture (MTB)	❍ P ❍ N ❍ U	❍ P ❍ N ❍ U	❍ P ❍ N ❍ U
culture (NTM)	❍ P	❍ P	❍ P

Part G: Pre-Rx sensitivity test results

S	❍S ❍R	**Z**	❍S ❍R	**Cyclo**	❍S ❍R		**(YFS**	❍ (1)
H	❍S ❍R	**Ofl**	❍S ❍R	**Others:**		**Source of ST (**	**(TGH**	❍ (2)
R	❍S ❍R	**Ethi**	❍S ❍R		❍S ❍R		**(RH**	❍ (3)
E	❍S ❍R	**Kana**	❍S ❍R	_____	❍S ❍R		**(HOH**	❍ (4)
							(Others	❍ (5)

Completed by Dr _____ **on** __ __ / __ __ / 19 __ __ _____ **Chest Clinic**

PRF FORM 3 (To be completed at 1 year from DOS) **PRF3-1-1-97(Rev)**

Clinic No.: __ __ - __ - __ __ __ __ __ - __ **DOS: __ __ / __ __ / 19 __ __**

HKID No.: __ - __ __ __ __ __ __ - (__) **or *Passport / Birth Certificate* * No.: _____**

Last follow-up date: __ __ / __ __ / 19 __ __ (≡ _____ month from DOS)

Part H: Outcome at 1 year (from DOS)

(I) Sputum results between 5 month and 1 year from DOS

smear	❍ **P**	❍ **N**	❍ **U**	**)**
culture (MTB)	❍ **P**	❍ **N**	❍ **U**	**) (report as positive if any one month is positive)**
culture (NTM)	❍ **P**			**) (excluding false positives)**

(II) Outcome at around the time of the last dose of treatment (ignore events afterwards)(choose 1 item only):

- **Cured / treatment completed** ❍ **(1)**
  - **bacteriological conversion** ❍ **(a)**
  - **radiological improvement** ❍ **(b)**
  - **other evidence of clinical response** ❍ **(c)**
  - **no available evidence of response** ❍ **(d)**
- **Still on treatment (beyond 1 year)** ❍ **(2)**
- **Changed to be treated by GP/other doctors at _____ month** ❍ **(3)**
- **Defaulted treatment at _____ month** ❍ **(4)**
- **Failure** ❍ **(5)**
- **Died: from TB-related causes** ❍ **(6)**
  from non-TB causes: _____ ❍ **(7)**
  from unknown cause ❍ **(8)**
- **Others (e.g. incorrect diagnosis)**

  _____ ❍ **(9)**

Part I: Total interval of treatment (from DOS to date of last dose of treatment)(including those who defaluted, died, etc.)

= _____ months / still on treatment * (fill in an integer for the number of months, which can be less than 6)

Completed by Dr _____ on __ __ / __ __ / 19 __ __ **_____ Chest Clinic**

PRF FORM 4 (To be completed at 2 year from DOS) **PRF4-1-1-97(Rev)**

Clinic No.: __ __ - __ - __ __ __ __ __ - __ **DOS: __ __ / __ __ / 19 __ __**

HKID No.: __ - __ __ __ __ __ __ - (__) **or *Passport / Birth Certificate* * No.: _____**

Last follow-up date: __ __ / __ __ / 19 __ __ (≡ _____ month from DOS)

Part J: Total interval of treatment (from DOS to date of last dose of treatment)(including those who defaluted, died, etc.):

- ***≤ 12 months / _____ months*** * ❍ **(1)**
  (Date of last dose of treatment = __ __ / __ __ / 19 __ __)
- **Still on treatment (beyond 2 year)** ❍ **(2)**

Part K: Outcome at 2 year (from DOS):

(I) Outcome at around the time of the last dose of treatment (ignore events afterwards)(choose 1 item only):

- **Cured / treatment completed** ❍ **(1)**
  - **bacteriological conversion** ❍ **(a)**
  - **radiological improvement** ❍ **(b)**
  - **other evidence of clinical response** ❍ **(c)**
  - **no available evidence of response** ❍ **(d)**
- **Still on treatment (beyond 2 year)** ❍ **(2)**
- **Changed to be treated by GP/other doctors _____ month** ❍ **(3)**
- **Defaulted treatment at _____ month** ❍ **(4)**
- **Failure** ❍ **(5)**
- **Died: from TB-related causes** ❍ **(6)**
  from non-TB causes: _____ ❍ **(7)**
  from unknown cause ❍ **(8)**
- **Others (e.g. incorrect diagnosis)**

  _____ ❍ **(9)**

(II) Status at 2 year:

(a) **Loss to follow up at _____ month from DOS ❍ (LO) / Still being followed up ❍ (FU)** *

(b)
- **Still alive** ❍ **(AL)**
- **Died at _____ month from DOS:** ❍ **(DI)**
  - **from TB-related causes** ❍ **(1)**
  - **from non-TB causes: _____** ❍ **(2)**
  - **from unknown cause** ❍ **(3)**
- **Unknown survival status** ❍ **(UN)**

(III) For those "Cured / treatment completed" cases (see item (1) of Part K(I)), the status at last FU date:

- **No relapse** ❍ **(NR)**
- **Relapse at _____ month from DOS:** ❍ **(RE)**
  - **Bacteriological relapse** ❍ **(1)**
  - **Radiological relapse** ❍ **(2)**
  - **Other evidence of relapse** ❍ **(3)**

  _____

(IV) Has a new course of treatment been restarted after the outcome in Part K(I) or (III): Y / N *

If yes, the new DOS is __ __ / __ __ / __ __.

Completed by Dr _____ on __ __ / __ __ / 19 __ __ **_____ Chest Clinic**

Annex 2 (a)

TB Among Chinese New Immigrants

Number of all notified TB cases and TB cases who are Chinese new immigrants (with years of arrival in Hong Kong)

	Years of arrival	1999	2000	2001	2002	2003
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	47	36	42	43	66
	≤2 year	32	20	36	30	15
	≤3 year	26	18	26	13	15
	≤4 year	13	26	25	20	16
	≤5 year	18	15	28	26	24
	≤6 year	12	17	12	30	22
	≤7 year	18	20	23	24	19
	Total	166	152	192	186	177
Overall notified TB cases		7512	7578	7262	6602	6024

The above table shows the number of all notified TB cases in Hong Kong from 1999 to 2003 and the number of TB cases among the Chinese new immigrants (staying in Hong Kong less than 7 years) according to the number of years they have arrived in Hong Kong. The numbers are in general higher in the first year of arrival. This phenomenon has also been observed in the immigrants of some other countries. The exact reason is unknown although some postulate that the stress experienced by the new immigrants upon arrival may be a factor.

In Annex 2 (b), the tables show the number of notified TB cases among the Chinese new immigrants by age and sex, and the estimated rates. In Annex 2 (c), the table shows the number of all notified TB cases in Hong Kong by age and sex, and the rates.

As shown from Annex 2 (c), the rates of TB among males are in general higher than that among females, and higher in the older age groups. The overall rates (per 100,000) from 1999 to 2003 are 113.7, 113.7, 108.0, 97.3 and 88.5 respectively.

From Annex 2 (b), the overall estimated rates (per 100,000) among the new immigrants from 1999 to 2003 are 48.9, 41.8, 50.6, 49.1 and 47.7 respectively. The rates are lower than those of the general Hong Kong population. Although Mainland China has been classified by the World Health Organisation as among one of the high TB burden countries in the world, the new immigrants coming to Hong Kong are likely to be a “selected” group. Their demographics and health condition may be quite different from and not representative of the whole population in China. For example, they may be younger, more ‘fit’, or with better socioeconomic condition. Hence, the rate of TB among this group may be lower.

Annex 2 (b)

TB Notification and Estimated Rates Among Chinese New Immigrants By Age & Sex (1999-2003)

Notified TB cases who are Chinese new immigrants (coming to HK < 7 years), by age and sex

	1999	1999	1999	2000	2000	2000	2001	2001	2001	2002	2002	2002	2003	2003	2003
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	10	8	18	7	8	15	10	20	30	15	13	28	12	12	24
20-39	16	76	92	14	69	83	26	77	103	16	77	93	23	77	100
40-59	5	34	39	6	31	37	14	32	46	12	34	46	8	21	29
60+	11	6	17	10	7	17	7	6	13	9	10	19	12	12	24
Total	42	124	166	37	115	152	57	135	192	52	134	186	55	122	177

Estimated rate of TB (per 100,000) among Chinese new immigrants (coming to HK < 7 years)

	1999	1999	1999	2000	2000	2000	2001	2001	2001	2002	2002	2002	2003	2003	2003
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	12.7	11.1	11.9	8.3	10.2	9.2	11.6	24.4	17.9	17.8	16.0	16.9	15.4	15.8	15.6
20-39	66.0	78.2	75.8	59.8	64.6	63.7	102.5	67.0	73.4	65.3	64.5	64.7	96.8	59.5	65.3
40-59	62.6	70.2	69.1	76.5	62.1	64.1	172.6	65.6	80.9	148.8	73.0	84.2	96.3	51.7	59.3
60+	445.9	73.4	159.7	375.2	64.5	125.8	256.9	52.0	91.2	326.8	83.8	129.3	447.4	97.4	159.9
Total	37.0	54.9	48.9	31.4	46.7	41.8	46.7	52.5	50.6	43.6	51.7	49.1	48.8	47.2	47.7

Annex 2 (c)

TB Notification and Rates (All Cases) By Age & Sex (1999-2003)

All TB cases by age and sex

	1999	1999	1999	2000	2000	2000	2001	2001	2001	2002	2002	2002	2003	2003	2003
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	145	184	329	160	176	336	150	171	321	139	140	279	139	126	265
20-39	1000	954	1954	948	967	1915	951	983	1934	778	883	1661	744	832	1576
40-59	1359	557	1916	1390	552	1942	1303	604	1907	1215	528	1743	1150	484	1634
60+	2383	930	3313	2475	910	3385	2268	832	3100	2157	762	2919	1895	654	2549
Total	4887	2625	7512	4973	2605	7578	4672	2590	7262	4289	2313	6602	3928	2096	6024

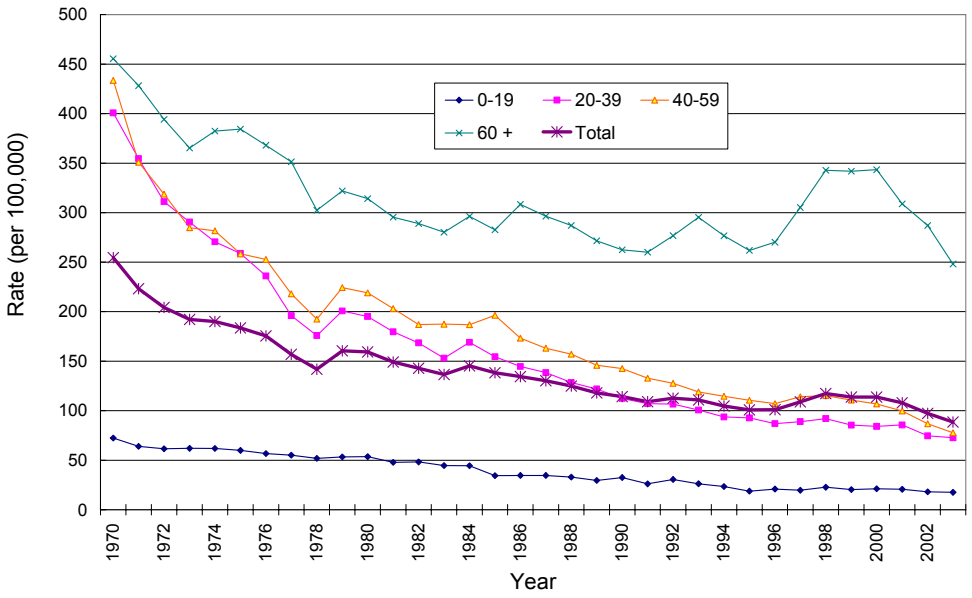
Rate of TB (all notified cases) (per 100,000)

	1999	1999	1999	2000	2000	2000	2001	2001	2001	2002	2002	2002	2003	2003	2003
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	17.4	23.5	20.3	19.5	23.0	21.2	18.7	22.8	20.7	17.6	18.8	18.2	17.9	17.3	17.6
20-39	93.2	78.5	85.4	90.0	79.2	84.2	91.9	80.2	85.6	76.6	73.0	74.7	75.3	70.5	72.7
40-59	152.0	66.4	110.6	149.4	62.3	106.9	134.5	64.2	99.8	120.9	52.6	86.7	110.7	45.5	77.7
60+	514.9	183.6	341.8	524.4	176.8	343.1	470.4	159.3	308.6	442.3	143.6	286.7	384.6	122.3	248.1
Total	149.7	78.6	113.7	151.8	76.9	113.7	142.1	75.3	108.0	130.0	66.3	97.3	119.2	59.7	88.5

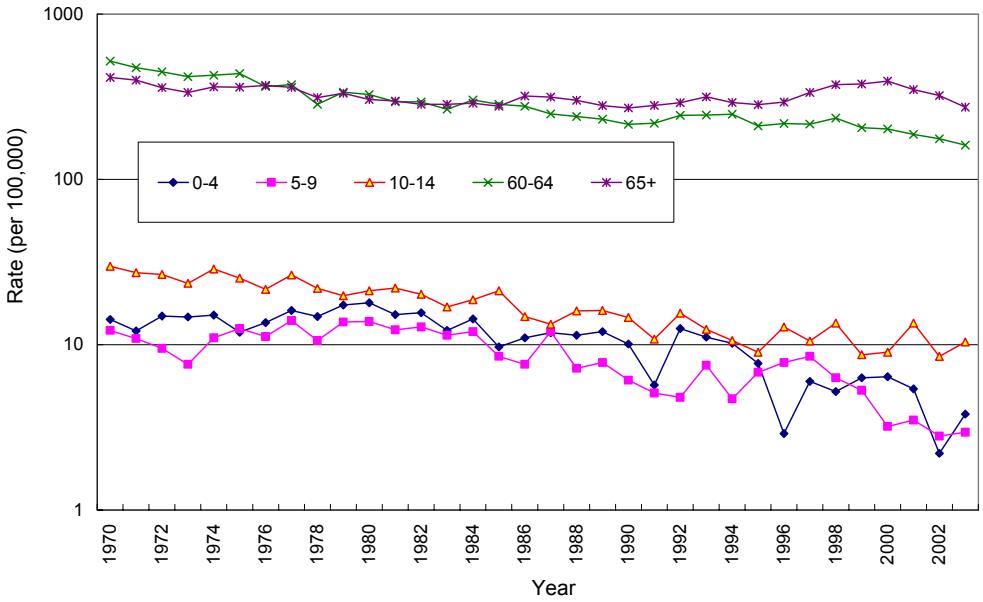
Annex 3

Trend of age-specific TB notification rates (1970-2003)

Age-specific TB notification rate (Both sexes 1970-2003)



Age-specific TB notification rate (Both sexes 1970-2003)



- All the age-specific TB notification rates, particularly those of the younger age groups, show a generally declining trend.
- TB cases can develop from progressive primary infection, exogenous re-infection, or endogenous reactivation. The trend of progressive primary infection is best reflected by the trends of the younger age groups, in particular that of the 0-4 age group. On the other hand, endogenous reactivation is better reflected by the trends of the older age groups, which generally show slower rates of decline than those of the younger age groups.
- The transient increase in rates for the age group 60+ during the period 1997 to 2000 (top graph) is likely due to strengthened surveillance measures targeting at bacteriologically positive and death cases through laboratory data and data from death certificates.

Part 4

SUPPLEMENT

Contents

FORM 1

QUARANTINE AND PREVENTION OF DISEASE ORDINANCE

(Cap. 141)

TUBERCULOSIS NOTIFICATION

Particulars of Infected Person

<table>
<tr><td colspan="3">Name in English</td><td colspan="2">Name in Chinese</td><td colspan="2">Age/Sex:</td><td>I.D. Card/Passport No.</td></tr>
<tr><td colspan="7">Address:</td><td>Telephone Number:</td></tr>
<tr><td colspan="7">Place of Work/
School Attended:</td><td>Telephone Number:</td></tr>
<tr><td colspan="2">Site of TB</td><td colspan="3">Sputum</td><td colspan="2">Disposal</td><td rowspan="5">Hospital/Clinic sent to (if any):</td></tr>
<tr><td>Resp. System</td><td></td><td></td><td>Smear</td><td>Culture</td><td>On Treatment</td><td></td></tr>
<tr><td>Meninges</td><td></td><td>Positive</td><td></td><td></td><td>On Observation</td><td></td></tr>
<tr><td>Bone & Joint</td><td></td><td>Negative</td><td></td><td></td><td>Referred</td><td></td><td rowspan="3">Hospital No.:</td></tr>
<tr><td>Other(s)</td><td></td><td>Unknown</td><td></td><td></td><td>Died</td><td></td></tr>
<tr><td colspan="8">Duration of stay in Hong Kong: _____ Years
Does patient have a history of past treatment for tuberculosis? __Yes __No
If yes, please state the YEAR in which he first received treatment: _____</td></tr>
</table>

Notified under the Prevention of the Spread of Infectious Diseases Regulations by

Dr. _____ on _____ / _____ / _____
(Full Name in BLOCK Letters) (Date)

Telephone Number: _____ _____
(Signature)

(Please DELETE whichever is not applicable)

"I will arrange for examination of contacts myself."

"Please arrange for examination of contacts to be done by the Government Chest Service."

Further Remarks:

DH 1A(s)(Rev.99)

OCCUPATIONAL SAFETY AND HEALTH ORDINANCE
NOTIFICATION OF OCCUPATIONAL DISEASES

To : Commissioner for Labour

PARTICULARS OF PATIENT

Name: _____ HKID/Passport no.: _____

Male/Female* Date of birth: ___ /___ /____ Occupation: _____

Home address: _____

_____

Telephone no. (Home) _____ (Office) _____ (Pager/Mobile) _____

Name and address of employer: _____

Telephone no. of employer: _____

For Internal use:
Code: _____
Code: _____
Code: _____
Code:

NOTIFIABLE OCCUPATIONAL DISEASES (*Please put a tick in*)

1	Radiation Illness	18	Lead Poisoning	35	Chrome Ulceration
2	Heat Cataract	19	Manganese Poisoning	36	Urinary Tract Cancer
3	Compressed Air Illness	20	Phosphorus Poisoning	37	Peripheral Polyneuropathy
4	Cramp of Hand or Forearm	21	Arsenic Poisoning	38	Localised Papillomatous or Keratotic New Skin Growth
5	Beat Hand	22	Mercury Poisoning	39	Occupational Vitiligo
6	Beat Knee	23	Carbon Bisulphide Poisoning	40	Occupational Dermatitis
7	Beat Elbow	24	Benzene Poisoning	41	Chemical Induced Upper Respiratory Tract Inflammation
8	Tenosynovitis of Hand or Forearm	25	Poisoning by Nitro-, Amino-, or Chloro- Derivatives of Benzene	42	Nasal or Paranasal Sinus Cancer
9	Anthrax	26	Dinitrophenol Poisoning	43	Byssinosis
10	Glanders	27	Poisoning by Halogen Derivatives of Hydrocarbons	44	Occupational Asthma
11	Leptospirosis	28	Diethylene Dioxide Poisoning	45	Silicosis
12	Extrinsic Allergic Alveolitis	29	Chlorinated Naphthalene Poisoning	46	Asbestos-Related Diseases
13	Brucellosis	30	Poisoning by Oxides of Nitrogen	47	Occupational Deafness
14	Tuberculosis in health care workers	31	Beryllium Poisoning	48	Carpal Tunnel Syndrome
15	Parenterally Contracted Viral Hepatitis in health care workers	32	Cadmium Poisoning	49	Legionnaires' Disease
16	Streptococcus suis Infection	33	Dystrophy of the Cornea		
17	Avian Chlamydiosis	34	Skin Cancer		

Diagnosis: Confirm/Suspect* Date of onset of illness: ___ / _____ / _____

Follow-up of patient: Treated/Referred to hospital/Others(specify)*: _____

Other relevant information: _____

Name of notifying medical practitioner: _____

Address of notifying medical practitioner: _____

_____

Telephone no. of notifying medical practitioner: _____

Date: _____ Signature: _____

**Delete whichever is inapplicable*

*Please return this form by **fax (no. 25812049)** or by **mail** to Occupational Health Service, Labour Department, 15/F Harbour Building, 38 Pier Road, Central, Hong Kong.*

For details of Notifiable Occupational Diseases and their related occupations, please refer to Schedule 2 of the Occupational Safety & Health Ordinance and to the Labour Department publication "Guidance Notes on the Diagnosis of Notifiable Occupational Diseases". Enquiry telephone no. : 2852 4041.

Please
affix
stamp

Occupational Health Service
Labour Department
15/F, Habour Building
38, Pier Road
Central
Hong Kong