ANNUAL REPORT 2007

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

Tuberculosis (TB) is still a major infectious disease worldwide. Effective anti-TB treatment has been available for half a century. However, with the long course of treatment required to cure the disease, non-adherence and emergence of drug resistance were encountered since the earliest days of chemotherapy. Notwithstanding the increasing coverage of Directly Observed Treatment Short course (DOTS), anti-TB drug resistance remains a grave concern worldwide. The problem is most acute in areas with HIV co-epidemic or gross social inequities, but increasing movement of populations has rendered it a global crisis affecting all countries. Besides multidrug-resistant tuberculosis (MDR-TB) with resistance to at least the two key first-line drugs, isoniazid and rifampicin, there have been accumulating reports of extensively drug-resistant TB (XDR-TB), which is MDR-TB with additional resistance to the fluoroquinolones and one or more of the three injectable drugs – capreomycin, kanamycin and amikacin, in different parts of the world. XDR-TB carries a very poor prognosis with high treatment failure and mortality rates. The mortality reached >90% among HIV-coinfected patients in a recent report from South Africa. Significant epidemiological clustering was also observed, probably reflecting the prolonged period of infectiousness with ineffective treatment, especially in the nosocomial settings.

In Hong Kong, the first public service for TB was established in 1947. Specific treatment with anti-TB drugs was first introduced in 1950, with the use of para-aminosalicylic acid. Later streptomycin was introduced in 1951 and isoniazid in 1952. Effective combination chemotherapy then became available, even though the full course of treatment with these three drugs required as long as 18 months to complete. However, taking a large number of tablets over a prolonged period was not an easy task. Many patients stopped treatment when their symptoms improved after the first few weeks of treatment. Only about one quarter of patients managed to complete treatment. Drug resistance to streptomycin and isoniazid mounted rapidly. In a drug resistance survey conducted in 1962, as high as 70% of previously treated TB patients were infected by tubercle bacilli resistant to one or both of these drugs. To overcome this problem, supervised treatment, which was the forerunner of directly observed treatment (DOT), was introduced on a trial basis in 1960s. Since 1970s, supervised treatment was delivered as part of the TB service. The 6-month standard four-drug short course regimen with isoniazid, rifampicin, pyrazinamide, and streptomycin (or ethambutol) was introduced as early as 1979, and this developed into what later known as Directly Observed Treatment, Short Course (DOTS). Second-line drugs were also used under the guidance drug susceptibility testing (later known as DOTS-plus) for management of drug-resistant cases. The drug resistance problem was subsequently brought under slow but progressive control.

With the implementation of effective case-finding and treatment, the notification rate of TB in Hong Kong has shown an overall downward trend in the past 50 years. The rate decreased from a peak of 697 per 100,000 in 1952 to around 80 per 100,000 in 2007. With the rapid decline in disease incidence, the tuberculin-positive rate decreased among the 6- to 9-year olds from 79.5% in 1967 to 16.9% in 2000, suggesting a very significant decline in the risk of infection. However, with the ageing of the population, up to 40% of the TB patients are aged 65 or above, likely reflecting both the high past TB burden and waning immunity/ increasing co-morbidities with age. The ageing of the TB epidemic itself and the global emergence of multidrug-resistant (MDR-) and extensively drug-resistant tuberculosis (XDR-TB) are also posing increasing difficulty in the control of the disease locally.

Besides further intensification of the existing measures, collaborative efforts are being made in the development of new diagnostic tools and drugs / regimens to meet these new challenges. New interferon-gamma release assays are being compared with the traditional tuberculin skin test in the targeted screening of latent TB infection among close TB contacts, silicosis patients, HIV-infected subjects, and other immuno-compromised individuals including those under treatment with anti-TNF agents. As these new assays are not affected by previous BCG vaccination, they may also play an adjunctive role in the diagnosis of active TB, especially among children with a low background prevalence of latent TB infection. Shorter regimens than those currently available are required to facilitate the treatment of both latent TB infection and active TB disease. Multi-centered clinical trials are underway to explore some of these new treatment-shortening regimens in different parts of the world. As in the previous milestone TB trials that helped to establish the standard 6-month short-course regimen, international collaboration will be actively pursuit in the development and evaluation of new TB treatment regimens. Compassionate use of new drugs / regimens will also be explored in the treatment of MDR- and XDR- TB. It is hoped that some of these researches will translate into effective, safe, and affordable tools suitable for large-scale application to control, and ultimately eliminate, this major killer in the history of mankind.

In July 2007, an incident of air travel involving two TB patients attracted much media publicity. The two patients were spouses, and the husband was having multidrug-resistant TB. They flew from Taiwan with transit at Hong Kong to Nanjing. The three places, viz, Taiwan, Hong Kong, and the Mainland worked together to handle the incident and trace the patients. This set a good example that the three places collaborated in carrying out public health actions in the control of infectious diseases.

In 2007, a number of scientific papers were published by the TB&CS in collaboration with other investigators from different sectors.[1-10] These articles covered diversified aspects from basic science, epidemiology, clinical care to public health control. Besides contributing to the body of scientific evidence, upon which the global TB control and treatment strategies develop, they also helped to provide some of the necessary data to guide our local TB control programme.

During the year, 99,290 patients attended the TB&CS as compared to 99,509 in 2006, and the total attendance was 788,557 in comparison with 798,597 in 2006. Among the 99,290 patients, 24,625 patients were new attendants, of whom 19.3% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (11.7%), active tuberculosis of other forms (3.1%), inactive tuberculosis (7.8%), bronchitis not specified as acute or chronic (13.0%), acute respiratory infection (6.5%), pneumonia (5.1%), malignant neoplasm of trachea and bronchus (1.7%), bronchiectasis (1.2%), asthma (0.7%) and emphysema (0.2%). Among all the attendance, 4,038 hospital admissions were arranged.

Part 1: Tuberculosis

The number of tuberculosis notifications in 2007 was 5,463, making a notification rate of 78.9 per 100,000 population. The corresponding figures in 2006 were 5,766 and 84.1 respectively.

The number of tuberculosis deaths was 231 in 2007 as compared with 294 in 2006. The corresponding tuberculosis mortality rates were 3.3 and 4.3 per 100,000 respectively.

Tuberculosis stayed outside the top ten causes of death in 2007. Tuberculosis deaths accounted for 0.6% of the total registered deaths in Hong Kong. The average age of tuberculosis deaths was 74.2.

In 2007, 99.4% 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 8,359 in 2007 compared with 8,866 in 2006. In 2007, 120 new cases of pneumoconiosis were registered in the TB&CS, and 69 new cases (including 2 cases of asbestos-related lung diseases) were confirmed by the Pneumoconiosis Medical Board. Up to the end of 2007, a total of 5,770 patients had been compensated.

Publications:

1. Perlman DC, Leung CC, Yew WW. Treatment of tuberculosis in HIV-infected patients: we need to know more. Am J Respir Crit Care Med 2007;175:1102-3.
2. Yew WW, Leung CC. Update in tuberculosis 2006. Am J Respir Crit Care Med 2007;175:541-6.
3. Leung CC, Lam TH, Chan WM, Yew WW, Ho KS, Leung G, Law WS, Tam CM, Chan CK, Chang KC. Lower risk of tuberculosis in obesity. Arch Intern Med 2007;167:1297-304.
4. Vynnycky E, Borgdorff MW, Leung CC, Tam CM, Fine PE. Limited impact of tuberculosis control in Hong Kong: attributable to high risks of reactivation disease. Epidemiol Infect 2007 Aug 3:1-10.
5. Chang KC, Leung CC, Yew WW, Tam CM. Standard anti-tuberculosis treatment and hepatotoxicity: do dosing schedules matter? Eur Respir J 2007;29:347-51.
6. Leung CC, Yew WW, Law WS, Tam CM, Leung M, Chung YW, Cheung KW, Chan KW, Fu F. Smoking and tuberculosis among silicotic patients. Eur Respir J 2007;29:745-50.
7. Pai M, Mohan A, Dheda K, Leung CC, Yew WW, Christopher DJ, Sharma SK. Lethal interaction: the colliding epidemics of tobacco and tuberculosis. Expert Rev Anti Infect Ther. 2007;5:385-91.
8. Chu SF, Tam CM, Wong HS, Kam KM, Lau YL, Chiang AK. Association between RANTES functional polymorphisms and tuberculosis in Hong Kong Chinese. Genes Immun 2007;8:475-9.
9. Leung ECC, Leung CC, Tam CM. Delayed presentation and treatment of newly diagnosed pulmonary tuberculosis patients in Hong Kong. Hong Kong Med J 2007;13:221-7.
10. Chan-Yeung M, Dai DL, Cheung AH, Chan FH, Kam KM, Tam CM, Leung CC. Tuberculin skin test reaction and body mass index in old age home residents in Hong Kong. J Am Geriatr Soc 2007;55:1592-7.

NB

The year 2007 was the 60th Anniversary of the Tuberculosis and Chest Service. A brief historical review of the local TB situation is therefore included in the Preface of this Annual Report.

Part 1

TUBERCULOSIS

Part 1 - Tuberculosis: Contents

APPENDIX 1

TB Notifications & Death Rate of Tuberculosis (All Forms)
1947 - 2007

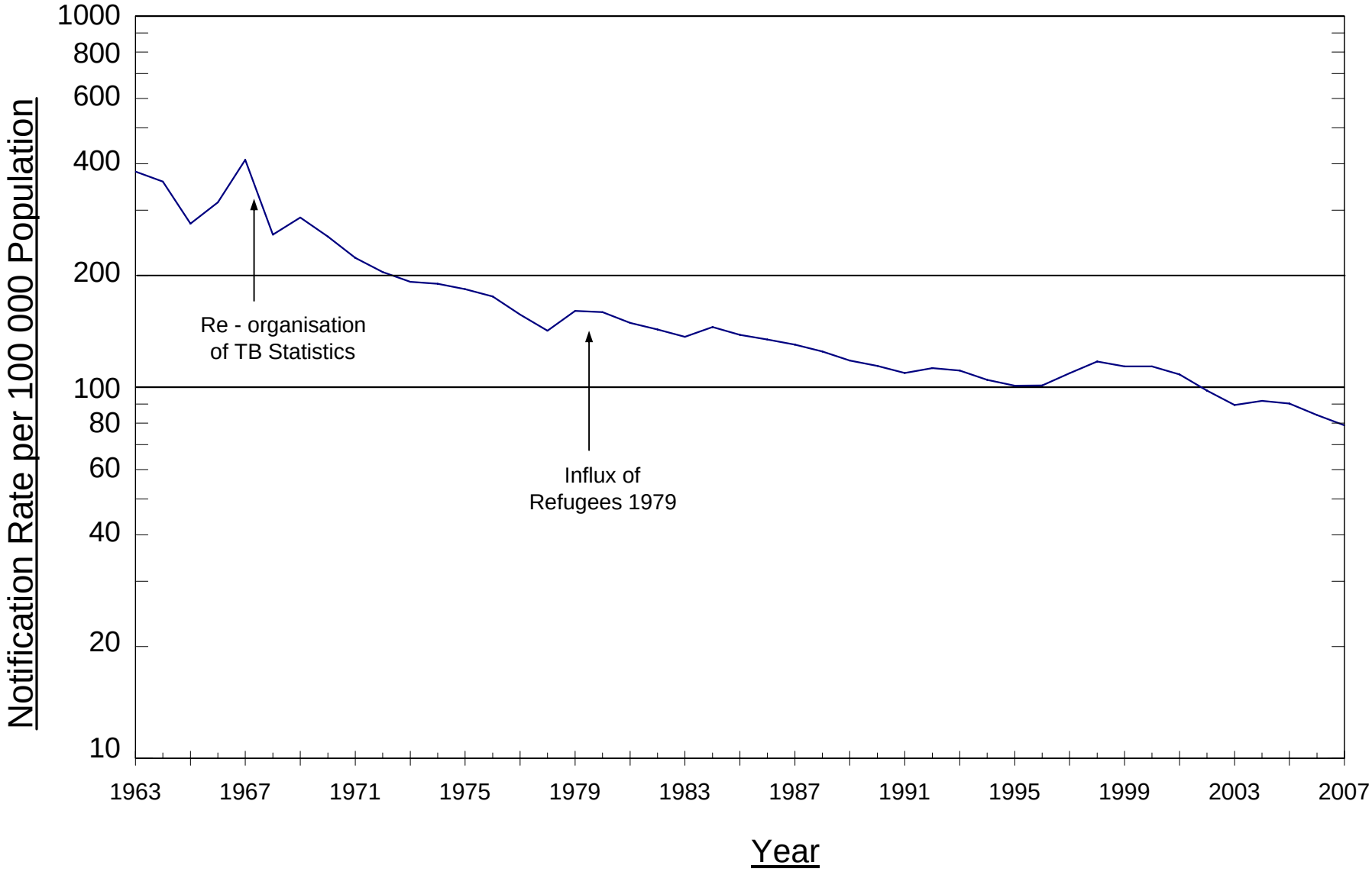
Year	TB Notifications		Notification Rate per 100,000 Pop	TB Deaths	Death Rate per 100,000 Pop	Ratio (Notifications/ Deaths)	Deaths ---------- x 100% Notifications
1947	4855		277.4	1861	106.3	2.61	38.33
1948	6279		348.8	1961	108.9	3.20	31.23
1949	7510		404.4	2611	140.6	2.88	34.77
1950	9067		405.3	3263	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	108.2	311	4.6	23.35	4.28
2002	6602	(0) 186	97.9	267	4.0	24.73	4.04
2003	6024	(0) 177	89.5	275	4.1	21.91	4.57
2004	6226	(0) 110	91.8	286	4.2	21.77	4.59
2005	6160	(0) 77	90.4	271	4.0	22.73	4.40
2006	5766	(0) 58	84.1	294	4.3	19.61	5.10
2007	5463	(0) 56	78.9	231	3.3	23.65	4.23

* 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.

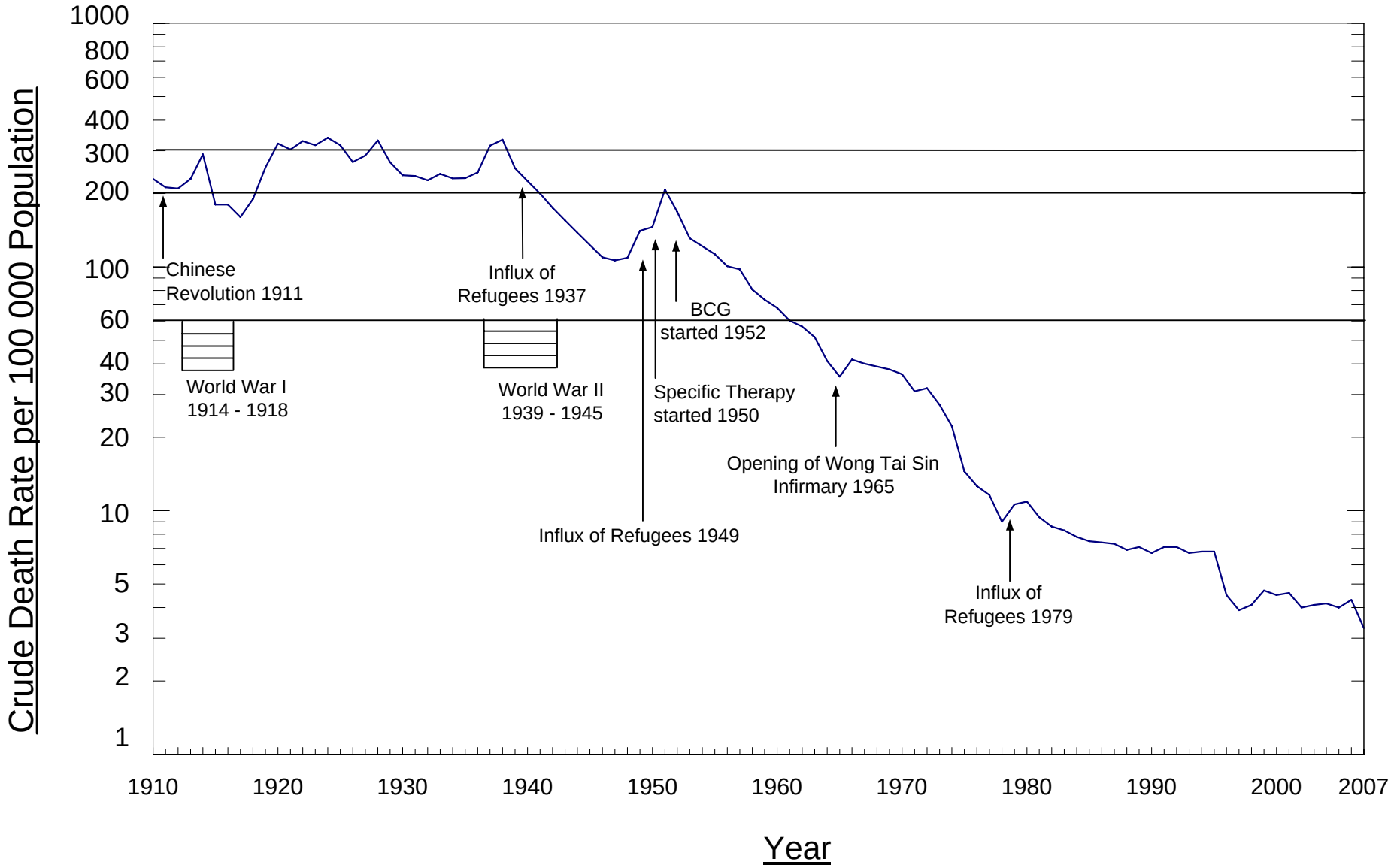
APPENDIX 2

TB Notification Rate (All Forms) 1963-2007



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-2007



APPENDIX 4 (a)

Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2007

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	3	0	3	5.39	0.00	2.80
1	0	0	0			
2	2	0	2			
3	1	0	1			
4	0	0	0			
5-9	2	4	6	1.31	2.81	2.03
10-14	19	17	36	9.02	8.47	8.75
15-19	81	75	156	35.75	34.77	35.27
20-24	117	136	253	52.82	55.46	54.21
25-29	128	191	319	56.46	66.27	61.95
30-34	143	178	321	60.31	56.67	58.24
35-39	132	169	301	54.16	50.87	52.27
40-44	188	136	324	64.03	37.88	49.65
45-49	244	132	376	76.06	39.09	57.10
50-54	298	123	421	107.62	43.79	75.48
55-59	284	100	384	127.87	45.64	87.04
60-64	263	73	336	186.92	55.51	123.44
65-69	285	71	356	233.42	63.22	151.88
70-74	334	127	461	289.68	106.19	196.25
75-79	417	125	542	480.97	127.55	293.45
80-84	281	122	403	587.87	170.15	337.24
85 & over	273	189	462	889.25	281.25	471.91
Total	**3495**	**1968**	**5463**	**106.32**	**54.09**	**78.88**

Appendix 4 (b)

Pulmonary TB Notifications by Age & Sex 2007**

Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
Under 1	2	0	2	2	0	2	1	0	1
1	0	0	0	0	0	0	0	0	0
2	1	0	1	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5-9	2	2	4	1	2	3	0	0	0
10-14	14	10	24	7	3	10	4	1	5
15-19	69	63	132	50	50	100	23	23	46
20-24	107	112	219	82	76	158	41	38	79
25-29	114	143	257	77	99	176	40	51	91
30-34	131	137	268	91	93	184	47	45	92
35-39	110	123	233	78	75	153	41	37	78
40-44	171	102	273	131	65	196	77	37	114
45-49	220	95	315	164	63	227	89	35	124
50-54	273	79	352	204	50	254	110	28	138
55-59	257	69	326	195	47	242	103	26	129
60-64	243	56	299	190	44	234	91	16	107
65-69	265	57	322	219	42	261	108	23	131
70-74	311	95	406	252	73	325	104	25	129
75-79	395	99	494	323	74	397	135	26	161
80-84	270	113	383	237	98	335	84	37	121
85 & over	262	166	428	225	137	362	64	40	104
Total	**3217**	**1521**	**4738**	**2528**	**1091**	**3619**	**1162**	**488**	**1650**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 4(c)

Rate of Pulmonary TB Notifications by Age & Sex 2007**

(Rate per 100,000 Population)

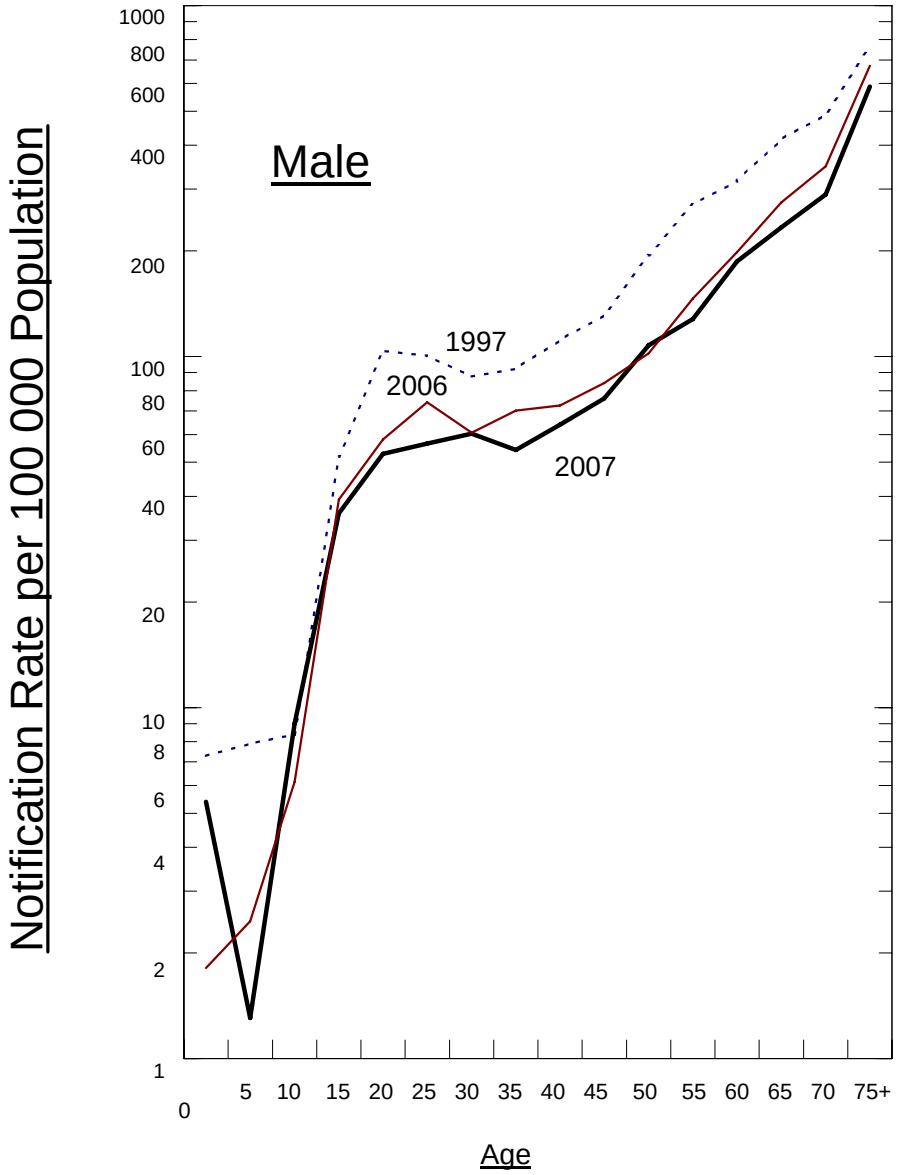
Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0-4	2.7	0.0	1.4	1.8	0.0	0.9	0.9	0.0	0.5
5-9	1.3	1.4	1.4	0.7	1.4	1.0	0.0	0.0	0.0
10-14	6.6	5.0	5.8	3.3	1.5	2.4	1.9	0.5	1.2
15-19	30.5	29.2	29.8	22.1	23.2	22.6	10.2	10.7	10.4
20-24	48.3	45.7	46.9	37.0	31.0	33.9	18.5	15.5	16.9
25-29	50.3	49.6	49.9	34.0	34.4	34.2	17.6	17.7	17.7
30-34	55.3	43.6	48.6	38.4	29.6	33.4	19.8	14.3	16.7
35-39	45.1	37.0	40.5	32.0	22.6	26.6	16.8	11.1	13.5
40-44	58.2	28.4	41.8	44.6	18.1	30.0	26.2	10.3	17.5
45-49	68.6	28.1	47.8	51.1	18.7	34.5	27.7	10.4	18.8
50-54	98.6	28.1	63.1	73.7	17.8	45.5	39.7	10.0	24.7
55-59	115.7	31.5	73.9	87.8	21.5	54.9	46.4	11.9	29.2
60-64	172.7	42.6	109.8	135.0	33.5	86.0	64.7	12.2	39.3
65-69	217.0	50.8	137.4	179.4	37.4	111.3	88.5	20.5	55.9
70-74	269.7	79.4	172.8	218.6	61.0	138.4	90.2	20.9	54.9
75-79	455.6	101.0	267.5	372.5	75.5	214.9	155.7	26.5	87.2
80-84	564.9	157.6	320.5	495.8	136.7	280.3	175.7	51.6	101.3
85 & over	853.4	247.0	437.2	732.9	203.9	369.8	208.5	59.5	106.2
Total	**97.9**	**41.8**	**68.4**	**76.9**	**30.0**	**52.3**	**35.3**	**13.4**	**23.8**

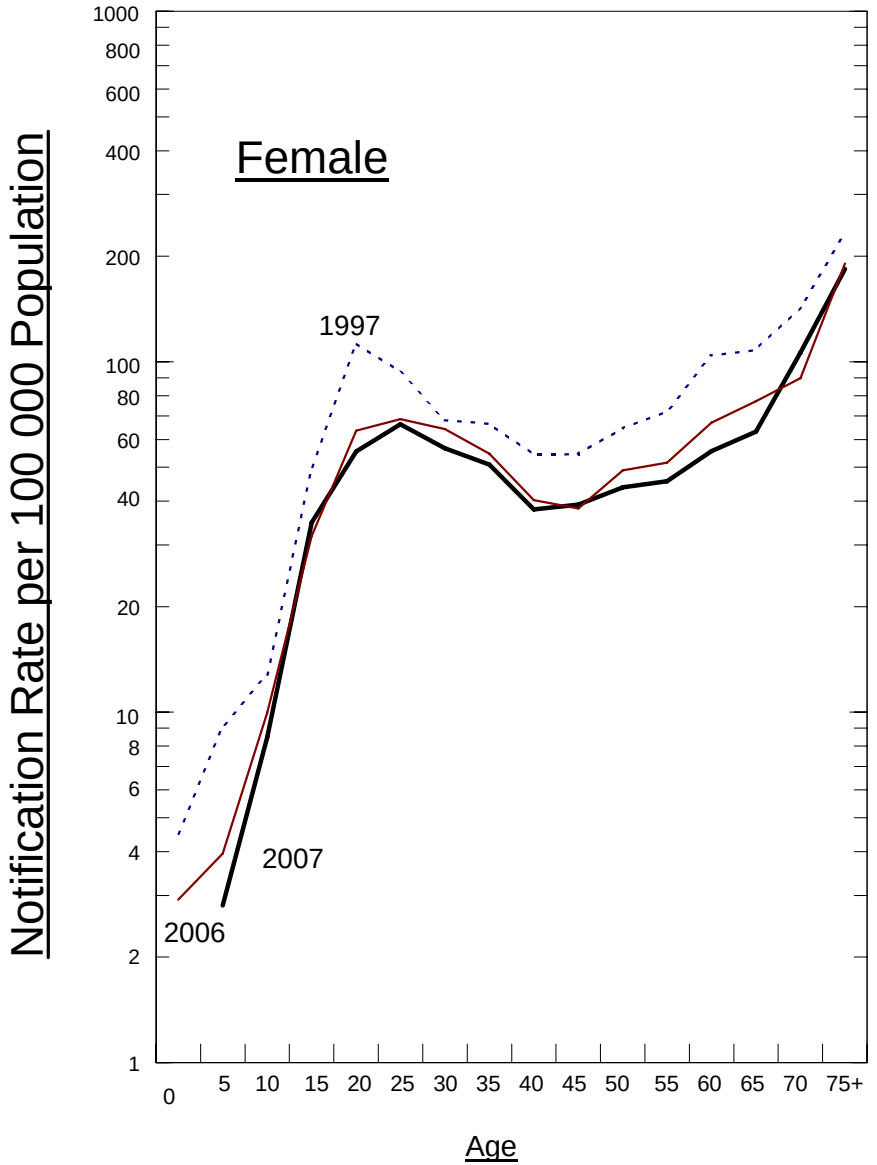
** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

APPENDIX 5

TB Notification Rate by Age & Sex 1997, 2006 & 2007





Appendix 6

Notifications of Tuberculosis by Type by Age & Sex 2007

Age Group	Pulmonary only #			Miliary			Meninges/ CNS			Bones & Joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
2	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1
3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9	2	2	4	-	-	-	-	-	-	-	-	-	-	2	2
10-14	14	8	22	-	-	-	-	2	2	-	-	-	5	7	12
15-19	66	60	126	1	-	1	1	1	2	1	-	1	12	14	26
20-24	102	103	205	1	-	1	-	3	3	-	1	1	14	29	43
25-29	104	136	240	3	1	4	1	1	2	-	-	-	20	53	73
30-34	124	121	245	1	2	3	-	1	1	-	3	3	18	51	69
35-39	102	114	216	2	2	4	1	1	2	2	2	4	25	50	75
40-44	165	97	262	1	2	3	-	1	1	1	-	1	21	36	57
45-49	213	88	301	1	-	1	2	1	3	3	2	5	25	41	66
50-54	264	77	341	4	1	5	2	1	3	1	3	4	27	41	68
55-59	253	68	321	1	-	1	2	5	7	6	2	8	22	25	47
60-64	230	54	284	1	-	1	5	2	7	3	-	3	24	17	41
65-69	258	57	315	1	-	1	2	-	2	2	2	4	22	12	34
70-74	301	87	388	1	2	3	5	-	5	4	6	10	23	32	55
75-79	377	94	471	1	2	3	-	2	2	1	9	10	38	18	56
80-84	262	104	366	-	4	4	-	-	-	1	4	5	18	10	28
85 & over	253	158	411	-	1	1	1	-	1	1	5	6	18	25	43
Total	3093	1428	4521	19	17	36 (a)	22	21	43 (b)	26	39	65 (c)	335	463	798 (d)*

* Including

TB lymph node	427
TB urogenital system	55
TB peritonitis, intestines, mesenteric, appendicitis	67
TB pleural effusion	161
TB laryngitis	9
TB skin	49
TB other sites	30
Unspecified	0

(Note: some cases have more than one site of extrapulmonary TB)

(a) All miliary TB cases has coexisting pulmonary TB; also include 10 cases with coexisting TB of other extrapulmonary sites (among which 2 are meninges/CNS and 2 are bones & joints).

(b) Including 5 cases with coexisting pulmonary TB; also include 1 case with coexisting TB of other extrapulmonary sites.

(c) Including 10 cases with coexisting pulmonary TB.

(d) Including 166 cases with coexisting pulmonary TB.

\# Pulmonary TB only, without extrapulmonary site involvement

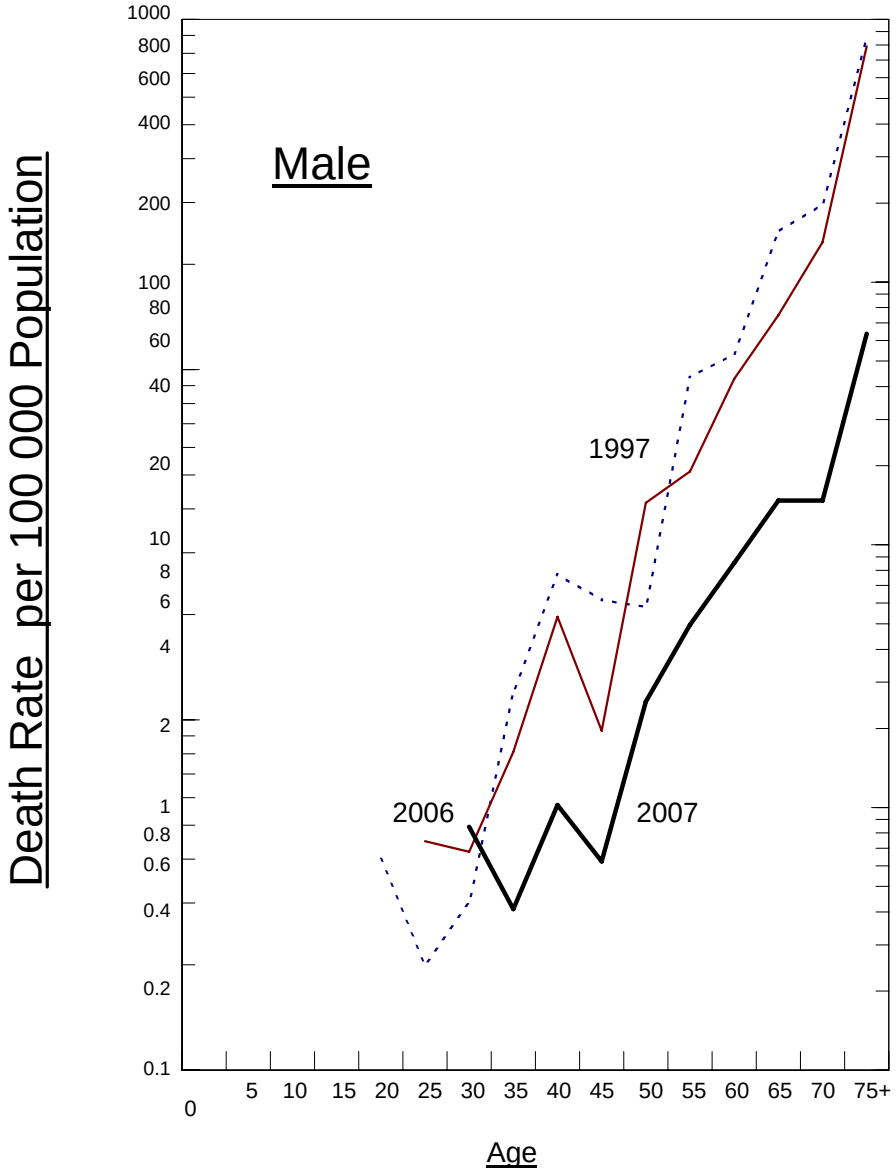
APPENDIX 7

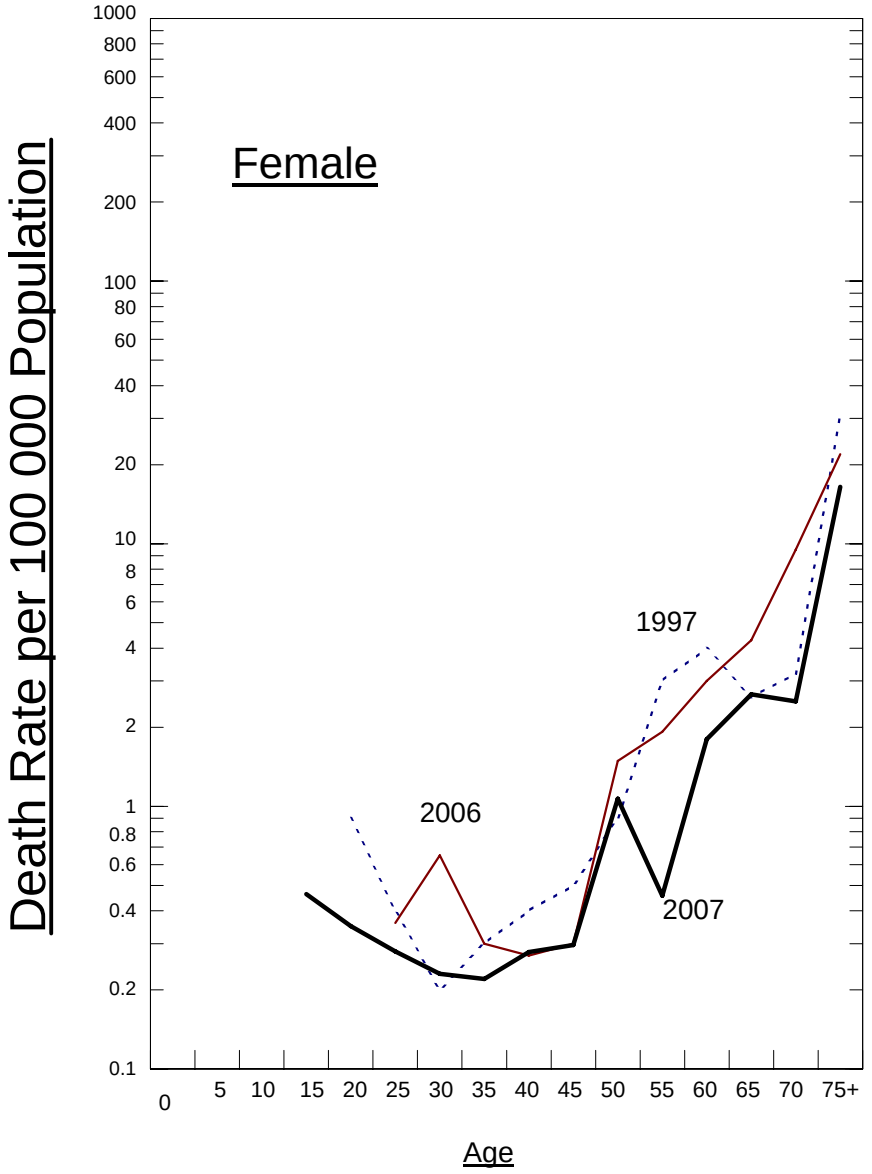
TB Death (All Forms) & Death Rate by Age & Sex 2007

Age Group	Tuberculosis Death (All Forms)			Death Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	0	0	0.00	0.00	0.00
1	0	0	0			
2	0	0	0			
3	0	0	0			
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	1	1	0.00	0.46	0.23
20-24	0	0	0	0.00	0.00	0.00
25-29	0	0	0	0.00	0.00	0.00
30-34	2	0	2	0.84	0.00	0.36
35-39	1	0	1	0.41	0.00	0.17
40-44	3	1	4	1.02	0.28	0.61
45-49	2	1	3	0.62	0.30	0.46
50-54	7	3	10	2.53	1.07	1.79
55-59	11	1	12	4.95	0.46	2.72
60-64	12	0	12	8.53	0.00	4.41
65-69	18	3	21	14.74	2.67	8.96
70-74	17	3	20	14.74	2.51	8.51
75-79	32	9	41	36.91	9.18	22.20
80-84	29	12	41	60.67	16.74	34.31
85 & over	44	18	62	143.32	26.79	63.33
Unknown	1	0	1			
Total	**179**	**52**	**231**	5.45	1.43	3.34

APPENDIX 8

TB Mortality Rate by Age & Sex 1997, 2006 & 2007





Appendix 9

TB Deaths by Type by Age & Sex 2007

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-19	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
40-44	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-
45-49	1	1	2	1	-	1	-	-	-	-	-	-	-	-	-
50-54	6	2	8	-	-	-	-	-	-	-	-	-	1	1	2
55-59	7	1	8	2	-	2	1	-	1	-	-	-	1	-	1
60-64	10	-	10	1	-	1	-	-	-	-	-	-	1	-	1
65-69	14	1	15	2	2	4	-	-	-	-	-	-	2	-	2
70-74	14	2	16	1	1	2	-	-	-	-	-	-	2	-	2
75-79	30	6	36	1	-	1	1	-	1	-	-	-	-	3	3
80-84	26	11	37	1	-	1	-	-	-	-	-	-	2	1	3
85 & over	40	16	56	-	-	-	-	-	-	1	-	1	3	2	5
Unknown	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Total	153	42	195	10	3	13	3	-	3	1	-	1	12	7	19 *

* Breakdown of Deaths from other forms of TB:-	Number
Tuberculous periphral lymphadenopathy	1
Tuberculosis of intestines, peritoneum & mesenteric glands	5
Tuberculous of skin and subcutaneous tissue	1
Tuberculosis of other organ	2
Late effects of Tuberculosis	10
Total	19

Pulmonary TB only, without extrapulmonary site involvement.

APPENDIX 10

Tuberculosis Mortality
1950 - 2007

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
2004	0.00	0.00	0.00	0.8	73.4
2005	0.00	0.00	0.00	0.7	74.3
2006	0.00	0.00	0.00	0.8	73.5
2007	0.00	0.00	0.00	0.6	74.2

APPENDIX 11

Top Ten Causes of Death 2007

Rank	Causes of Death	Detailed List No.	2007		
		ICD 10th Revision	Male	Female	Total
	All Causes		22622	17335	39963 (6)
1	Malignant neoplasms	C00-C97	7600	4716	12316
2	Diseases of heart	I00-I09, I11 I13, I20-I51	3255	3117	6372
3	Cerebrovascular diseases	I60-I69	1779	1734	3513
4	Pneumonia	J12-J18	2723	2255	4978
5	Chronic lower respiratory diseases *	J40-J47	1521	575	2096
6	External causes of morbidity and mortality #	V01-Y89	1223	631	1854
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	656	691	1347
8	Diabetes mellitus	E10-E14	221	285	506
9	Septicaemia	A40-A41	381	356	737
10	Chronic liver disease and cirrhosis	K70,K73-K74	263	138	401
	Tuberculosis (including late effects of tuberculosis)		179	52	231
	All other causes	Residues of all causes	2821	2785	5612 (6)

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
1997 - 2007

Origin	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
East Kowloon Chest Clinic	175	225	118	192	173	144	123	121	132	86	121
Kowloon Chest Clinic	667	529	608	477	413	420	432	330	287	231	220
Sai Ying Pun Chest Clinic (a)	180	216	198	196	194	142	133	148	112	92	108
Shaukiwan Chest Clinic	181	199	158	169	158	148	122	138	111	104	128
Shaukiwan Pneumoconiosis	31	50	29	25	23	27	12	29	10	15	13
Shek Kip Mei Chest Clinic	302	282	266	232	208	180	162	157	140	96	111
South Kwai Chung Chest Clinic	547	531	439	342	339	279	300	261	282	224	187
Tai Po Chest Clinic		98	92	88	84	96	111	112	101	92	79
Wanchai Chest Clinic	502	461	365	375	384	279	264	223	214	191	169
Yan Oi Chest Clinic	428	419	440	425	396	355	320	290	263	238	165
Yaumatei Chest Clinic	280	389	344	339	373	271	233	203	249	204	151
Yuen Chau Kok Chest Clinic		420	395	308	288	223	226	181	148	136	122
Yung Fung Shee Chest Clinic	240	285	331	222	213	218	197	178	174	148	120
NT Chest Clinic (b)	561										
Castle Peak Hospital (Chest Clinic)								5	3	3	4
Cheung Chau Chest Clinic							2	2	3	1	1
Sai Kung Chest Clinic		13	8	4	4	11	7	7	4	9	5
Sheung Shui Chest Clinic		102	97	103	81	96	59	54	64	61	53
Tung Chung Chest Clinic		6	13	26	24	35	22	16	11	15	12
Yuen Long Chest Clinic		94	94	111	96	103	75	80	93	69	64
Sub-total	4094	4319	3995	3634	3451	3027	2800	2535	2401	2015	1833
Grantham Hospital	360	316	296	358	259	249	252	257	165	176	215
Haven of Hope Hospital	72	117	105	141	116	147	119	137	127	124	124
Kowloon Hospital	384	339	426	443	322	237	220	205	113	142	108
Ruttonjee Hospital	333	275	324	326	305	236	223	263	256	264	218
Wong Tai Sin Hospital	442	458	431	352	330	263	166	189	184	140	90
Other Govt. Institutions (c)	5	7	42	43	113	107	84	87	84	60	66
Other H.A. Hospitals	740	1244	1682	2081	2176	2133	1937	2301	2543	2538	2530
Private Practitioners	413	343	157	121	125	130	159	136	156	164	90
Private Hospitals	229	255	54	79	65	73	64	116	131	143	189
Total	7072	7673	7512	7578	7262	6602	6024	6226	6160	5766	5463
% of cases from Chest Clinics among the total	57.9	56.3	53.2	48.0	47.5	45.8	46.5	40.7	39.0	34.9	33.6
% from Chest Hospitals (d)	22.5	19.6	21.1	21.4	18.3	17.1	16.3	16.9	13.7	14.7	13.8
% from Other Public Hospitals	10.5	16.3	22.9	28.0	31.5	33.9	33.5	38.4	42.6	45.1	47.5
% from Private Sector	9.1	7.8	2.8	2.6	2.6	3.1	3.7	4.0	4.7	5.3	5.1

Notes : (a) Including notifications from Cheung Chau Chest Clinic (1997-2002)
(b) Including Yuen Chau Kok Chest Clinic.
(c) Sources are from Public Mortuaries, Prison Hospitals, & Army Hospitals.
(d) 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" 2007

Name of Hospital	No. of TB Notification
Alice Ho Miu Ling Nethersole Hospital	89
Caritas Medical Centre	158
Hong Kong Buddhist Hospital	2
Kwong Wah Hospital	221
North District Hospital	167
Our Lady of Maryknoll Hospital	23
Pamela Youde Nethersole Eastern Hospital	151
Pok Oi Hospital	18
Prince of Wales Hospital	215
Princess Margaret Hospital	192
Queen Elizabeth Hospital	337
Queen Mary Hospital	121
Shatin Hospital	13
Tai Po Hospital	11
Tseung Kwan O Hospital	95
Tuen Mun Hospital	286
Tung Wah Eastern Hospital	6
Tung Wah Hospital	13
United Christian Hospital	265
Wong Chuk Hang Hospital	1
Yan Chai Hospital	146
Total	**2530**

Appendix 13

Tuberculosis Notifications & Notification Rates

by District Council District 2007

District Council District	Notification	Notification Rate (per 100,000 pop.)
Hong Kong Island	963	74.8
Central & Western	174	68.1
Wanchai	434	275.6
Eastern	239	40.3
Southern	116	41.1
Kowloon	1959	96.3
Kowloon City	325	89.0
Kwun Tong	544	93.2
Sham Shui Po	371	99.5
Wong Tai Sin	425	99.9
Yau Tsim Mong	294	102.1
NT (East)	1156	66.0
Islands	83	58.2
Northern	242	83.0
Sai Kung/Tseung Kwan O	243	59.2
Shatin	400	65.6
Tai Po	188	63.5
NT (West)	1350	73.0
Kwai Tsing	440	85.2
Tsuen Wan	175	59.2
Tuen Mun	350	70.1
Yuen Long	385	71.5
Marine	0	
Unknown	11	
Others	24	
Total	**5463**	**78.9**

APPENDIX 14

Establishment & Strength of TB & Chest Service

As at 31.12.2007

Post	Establishment	Strength
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	7	7
Medical & Health Officer	23	20
Contract Doctor	1	1
Senior Nursing Officer	1	1
Nursing Officer	14	12
Registered Nurse	59	66
Contract Nurse	4	4
Enrolled Nurse	92	85
Senior Dispenser	9	8
Dispenser	1	2
Executive Officer I	1	2
Statistical Officer II	2	2
Research Assistant	2	2
Personal Secretary I	1	1
Clerical Officer	16	14
Assistant Clerical Officer	20	21
Clerical Assistant	54	54
Project Assistant	2	2
Office Assistant	11	11
Workman II	46	46
General Worker	3	3
Property Attendant	0	0
Senior Radiographer	3	3
Radiographer I	7	4
Radiographer II	14	9
Contract Radiographer	11	11
Radiographic Technician	5	5
Darkroom Technician	11	11
Darkroom Assistant	1	1

APPENDIX 15

Total Attendances at Chest Clinics

1997 - 2007

Clinic/Hospital	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
East Kowloon Chest Clinic	58862	65220	56317	64102	64820	60729	56132	58535	61835	56737	63191
Kowloon Chest Clinic	120663	117678	112291	119624	106321	98403	97223	86502	77337	73627	67093
Sai Ying Pun Chest Clinic	50875	56233	58380	57916	53854	51808	45437	46974	45159	42034	42770
Shaukiwan Chest Clinic	54639	54732	52446	53011	57215	57968	47541	50828	50699	49667	48207
Shaukiwan Pneumoconiosis	9185	10821	12182	11023	10889	9120	8008	8098	9144	8866	8359
Shek Kip Mei Chest Clinic	72274	75610	68971	70941	71134	65572	60461	60382	60789	57848	58679
South Kwai Chung Chest Clinic	111683	113185	108654	99012	90448	85221	78998	75487	80015	79455	78238
Tai Po Chest Clinic (Full Time)	-	-	-	-	-	7866	33518	30879	35347	35728	34769
Tung Chung (Full Time)	101	3730	4687	4601	6241	6129	6807	1928	-	-	-
Wanchai Chest Clinic	92697	91331	85109	84960	79212	70500	62322	60406	57906	58545	56790
Yan Oi Chest Clinic	69581	70979	78840	79188	72982	66905	66084	70168	72078	72144	70643
Yaumatei Chest Clinic	89759	103198	108226	111959	114499	95700	71378	70294	80708	72180	69549
Yuen Chau Kok Chest Clinic	61160	76626	71273	66192	65190	64748	60339	56322	59328	57680	55454
Yung Fung Shee Chest Clinic	58841	66567	74735	73255	73663	77078	77516	71269	78279	72570	73944
Castle Peak Hospital	1169	1283	1151	868	1010	416	372	373	317	241	240
Cheung Chau Chest Clinic	2808	2943	2706	2611	1640	2404	1944	2032	2066	1589	2318
Sai Kung Chest Clinic	1444	1682	1905	2141	1945	2119	2372	2495	2382	2542	2280
Sheung Shui Chest Clinic	15330	18756	21256	22383	24271	24273	22933	23211	22601	21765	22333
Tai Po Chest Clinic (Part Time)	15760	20350	20758	24688	25636	17761	-	-	-	-	-
Tung Chung (Part Time)	-	-	-	-	-	-	-	2802	5173	4447	4086
Yuen Long Chest Clinic	18742	21677	24075	27603	27208	29393	28702	31054	33056	29344	27960
Hei Ling Chau ATC	2600	2664	1855	3726	2474	2302	2352	1670	585	472	282
Lai Chi Kok Reception Centre	-	-	-	-	-	-	-	723	479	356	519
Shek Pik Prison Hospital	725	173	266	241	291	277	203	211	141	157	188
Stanley Prison Hospital	6053	7380	9062	10468	10532	11977	8829	7459	527	603	665
Total	**914951**	**982818**	**975145**	**990513**	**961475**	**908669**	**839471**	**820102**	**835951**	**798597**	**788557**

Appendix 16

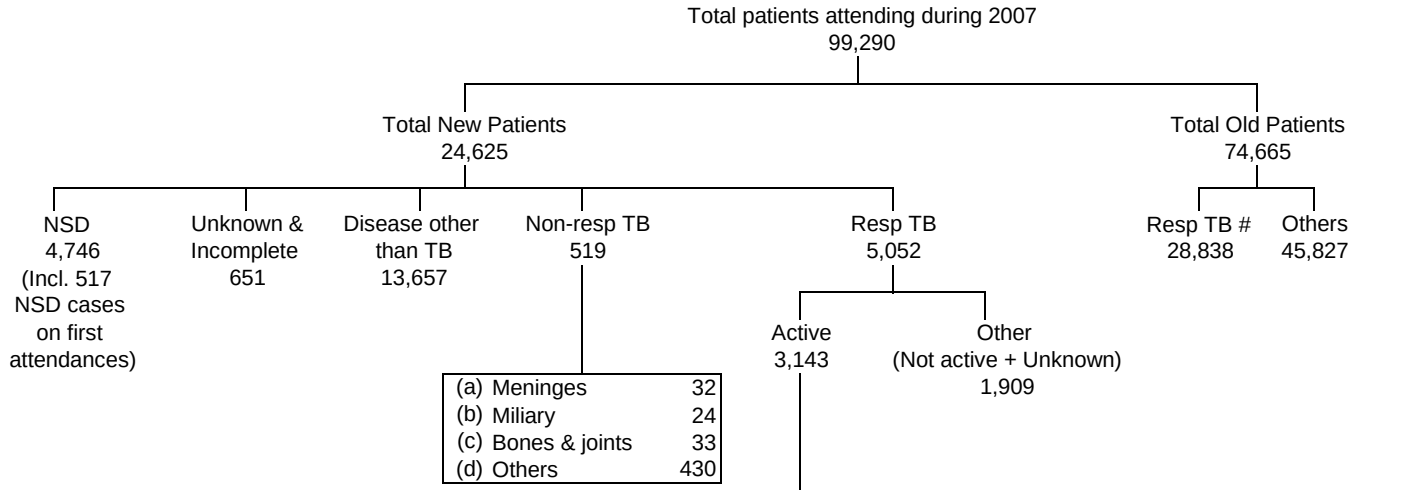
No. of Doctor Sessions, Cases Seen by Doctor and Patient/ Doctor Session 2007

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
Full Time Clinics			
East Kowloon	634	17028	27
Kowloon	1000	25240	25
Pneumoconiosis	516	8058	16
Sai Ying Pun	615	16578	27
Shaukeiwan	516	12731	25
Shek Kip Mei	612	16198	26
South Kwai Chung	1028	28729	28
Tai Po	516	10089	20
Wanchai	1102	20514	19
Yan Oi	864	24999	29
Yaumatei	1011	21630	21
Yuen Chau Kok	848	18375	22
Yung Fung Shee	662	16756	25
Sub-total	**9924**	**236925**	**24**
Part Time Clinics			
Castle Peak	26	240	9
Cheung Chau	26	505	19
Sai Kung	48	797	17
Sheung Shui	296	6300	21
Tung Chung	145	1823	13
Yuen Long	396	7589	19
Sub-total	**937**	**17254**	**18**
Institutions Correctional Ser Dept			
Hei Ling Chau	12	282	24
Lai Chi Kok Reception Center	50	516	10
Shek Pik	13	188	14
Stanley Prison	26	665	26
Sub-total	**101**	**1651**	**16**
Total	**10962**	**255830**	**23**

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

APPENDIX 17

Flow Chart of Patients Attending Chest Clinics 2007 *



Bacteriology	Extent	Number
Negative	1	676
	2	92
	3	25
Positive	1	1143
	2	659
	3	365
Incomplete	1	146
	2	27
	3	10

Bacteriology	Cavity	Number
Negative	Yes	62
	No	731
Positive	Yes	567
	No	1600
Incomplete	Yes	25
	No	158

Previous History of TB	Previous Treatment of TB	Number
No	No	2650
Yes	No	319
Yes	Yes	165
Unknown	Unknown	9

* A total of 99290 patients attended, comprising 74665 old cases and 24625 new cases. Among old cases, 28838 had respiratory TB. Among new cases, 5052 had respiratory TB with 3143 being active, 519 had non-respiratory TB, 13657 had diseases other than TB, 651 had unknown and incomplete diagnoses, and 4746 had NSD (no specific diagnosis). Of the 519 new cases with non-respiratory TB, 32 had TB affecting meninges, 24 had miliary TB, 33 had TB affecting bones and joints, and 430 had TB affecting other sites.

Among the 3143 new cases with active respiratory TB, 2650 had neither previous history of TB nor previous treatment of TB, 319 had previous history of TB but no previous treatment, 165 had previous history of TB with treatment, and 9 had unknown status. In terms of bacteriology (negative, positive, or incomplete) and cavity, 62 were negative with cavity, 731 were negative without cavity, 567 were positive with cavity, 1600 were positive without cavity, 25 were incomplete with cavity, and 158 were incomplete without cavity. In terms of bacteriology and extent of disease (1, 2, or 3), 676 were negative with extent 1, 92 were negative with extent 2, 25 were negative with extent 3, 1143 were positive with extent 1, 659 were positive with extent 2, 365 were positive with extent 3, 146 were incomplete with extent 1, 27 were complete with extent 2, and 10 were incomplete with extent 3.

\# 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 2007

Code	Classification	Total
010	Primary Tuberculosis Infection	5
011	Pulmonary Tuberculosis	2892
012	Other Respiratory Tuberculosis	246
013	Tuberculosis of Meninges	32
014	Tuberculosis of Intestines	26
015	Tuberculosis of Bones & Joints	33
016	Tuberculosis of Genito-urinary System	32
017	Tuberculosis of Other Organs	361
018	Miliary Tuberculosis	24
137	Late effects of Tuberculosis	1909
160-165	Malignant Neoplasm of Respiratory System	412
212	Benign Neoplasm of Respiratory System	2
460-466	Acute Respiratory Infection	1597
470-478	Other Diseases of Upper Resp Tract	110
480-486	Pneumonia	1258
487	Influenza	2
490-491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	3203
492	Emphysema	54
493	Asthma	174
494	Bronchiectasis	300
495-496	Others	273
501	Asbestosis	0
502	Silicosis	4
505	Pneumoconiosis, unspecified	1
506-508	Others	1
510	Empyema	3
511	Pleurisy	93
512	Pneumothorax	39
513-519	Other Diseases of Respiratory System	667
786	Unknown	2585
V71	N.S.D.	1576
	Diseases Other than TB & Resp System	5464
Total		23378

Appendix 19 (a)

Extent of Active Resporary TB in First Attenders at Chest Clinics
2005-2007

Extent *	2005		2006		2007	
	No.	%	No.	%	No.	%
1. Minimal	2222	60.6	2083	60.6	1965	62.5
2. Moderate	979	26.7	900	26.2	778	24.8
3. Extensive	465	12.7	454	13.2	400	12.7
Total	3666	100.0	3437	100.0	3143	100.0
No. of first attenders	29082		25127		24625	
% of active TB	12.6		13.7		12.8	

* 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 2007

	Number	%
Smear +	1224	38.9
Smear - Culture +	891	28.3
Smear - Culture -	806	25.6
Incomplete	222	7.1
Total	3143	100.0

APPENDIX 19 (b1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to June 2007 (Data from Programme Forms)

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	1.69	1.69	13.56	13.56	1.69	0.00	0.00	15.25	59
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	Overall	0.00	1.67	1.67	13.33	13.33	1.67	0.00	0.00	15.00	60
20 - 39	New cases	0.31	1.53	4.59	7.03	5.50	2.45	0.92	1.22	8.87	327
	Previously treated cases	4.55	9.09	18.18	13.64	4.55	13.64	4.55	9.09	22.73	22
	Overall	0.57	2.01	5.44	7.45	5.44	3.15	1.15	1.72	9.74	349
40 - 59	New cases	0.00	0.26	3.64	8.05	8.05	1.56	0.26	0.26	9.87	385
	Previously treated cases	0.00	1.69	13.56	10.17	6.78	6.78	1.69	1.69	15.25	59
	Overall	0.00	0.45	4.95	8.33	7.88	2.25	0.45	0.45	10.59	444
60 up	New cases	0.00	0.18	3.43	6.68	5.60	2.35	0.00	0.18	7.94	554
	Previously treated cases	0.00	0.00	6.52	14.13	14.13	3.26	0.00	0.00	17.39	92
	Overall	0.00	0.15	3.87	7.74	6.81	2.48	0.00	0.15	9.29	646
All	New cases	0.08	0.60	3.70	7.47	6.64	2.11	0.30	0.45	9.06	1325
	Previously treated cases	0.57	1.72	10.34	12.64	10.34	5.75	1.15	1.72	17.24	174
	Overall	0.13	0.73	4.47	8.07	7.07	2.54	0.40	0.60	10.01	1499

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 Laboratory 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) registered during the period January to June 2007 (Data from Programme Forms)

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1325	100	174	100.00	1499	100.00
Susceptible to all 4 drugs	1205	90.94	144	82.76	1349	89.99
Any resistance	120	9.06	30	17.24	150	10.01
H	49	3.70	18	10.34	67	4.47
R	8	0.60	3	1.72	11	0.73
E	1	0.08	1	0.57	2	0.13
S	99	7.47	22	12.64	121	8.07
Monoresistance	88	6.64	18	10.34	106	7.07
H	18	1.36	6	3.45	24	1.60
R	1	0.08	0	0.00	1	0.07
E	0	0.00	0	0.00	0	0.00
S	69	5.21	12	6.90	81	5.40
Multidrug resistance	6	0.45	3	1.72	9	0.60
H+R	2	0.15	1	0.57	3	0.20
H+R+E	0	0.00	1	0.57	1	0.07
H+R+S	3	0.23	1	0.57	4	0.27
H+R+E+S	1	0.08	0	0.00	1	0.07
Other patterns	26	1.96	9	5.17	35	2.33
H+E	0	0.00	0	0.00	0	0.00
H+S	25	1.89	9	5.17	34	2.27
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	0.08	0	0.00	1	0.07
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	1205	90.94	144	82.76	1349	89.99
1 drug	88	6.64	18	10.34	106	7.07
2 drugs	28	2.11	10	5.75	38	2.54
3 drugs	3	0.23	2	1.15	5	0.33
4 drugs	1	0.08	0	0.00	1	0.07

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to December 2006 (Data from Programme Forms)

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	0.93	0.93	2.80	8.41	5.61	1.87	0.93	0.93	8.41	107
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
	Overall	0.93	0.93	2.78	8.33	5.56	1.85	0.93	0.93	8.33	108
20 - 39	New cases	0.32	1.29	5.48	7.10	8.39	2.42	0.32	0.48	11.13	620
	Previously treated cases	10.34	13.79	17.24	13.79	3.45	0.00	13.79	13.79	17.24	29
	Overall	0.77	1.85	6.01	7.40	8.17	2.31	0.92	1.08	11.40	649
40 - 59	New cases	0.39	0.91	4.56	6.65	6.65	1.83	0.65	0.78	9.13	767
	Previously treated cases	2.27	4.55	6.82	10.23	4.55	3.41	3.41	4.55	11.36	88
	Overall	0.58	1.29	4.80	7.02	6.43	1.99	0.94	1.17	9.36	855
60 up	New cases	0.28	0.56	3.17	4.66	5.59	1.02	0.28	0.37	6.89	1074
	Previously treated cases	0.00	0.52	10.42	8.33	9.38	4.17	0.52	0.52	14.06	192
	Overall	0.24	0.55	4.27	5.21	6.16	1.50	0.32	0.39	7.98	1266
All	New cases	0.35	0.86	4.13	6.00	6.58	1.64	0.43	0.55	8.64	2568
	Previously treated cases	1.61	2.90	10.00	9.35	7.42	3.55	2.58	2.90	13.55	310
	Overall	0.49	1.08	4.76	6.36	6.67	1.84	0.66	0.80	9.17	2878

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 Laboratory 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) registered during the period January to December 2006 (Data from Programme Forms)

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2568	100	310	100.00	2878	100.00
Susceptible to all 4 drugs	2346	91.36	268	86.45	2614	90.83
Any resistance	222	8.64	42	13.55	264	9.17
H	106	4.13	31	10.00	137	4.76
R	22	0.86	9	2.90	31	1.08
E	9	0.35	5	1.61	14	0.49
S	154	6.00	29	9.35	183	6.36
Monoresistance	169	6.58	23	7.42	192	6.67
H	55	2.14	12	3.87	67	2.33
R	6	0.23	0	0.00	6	0.21
E	2	0.08	0	0.00	2	0.07
S	106	4.13	11	3.55	117	4.07
Multidrug resistance	14	0.55	9	2.90	23	0.80
H+R	3	0.12	1	0.32	4	0.14
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	6	0.23	3	0.97	9	0.31
H+R+E+S	5	0.19	5	1.61	10	0.35
Other patterns	39	1.52	10	3.23	49	1.70
H+E	1	0.04	0	0.00	1	0.03
H+S	36	1.40	10	3.23	46	1.60
H+E+S	0	0.00	0	0.00	0	0.00
R+E	1	0.04	0	0.00	1	0.03
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	0	0.00	0	0.00
Number of drugs resistant to:						
0 drug	2346	91.36	268	86.45	2614	90.83
1 drug	169	6.58	23	7.42	192	6.67
2 drugs	42	1.64	11	3.55	53	1.84
3 drugs	6	0.23	3	0.97	9	0.31
4 drugs	5	0.19	5	1.61	10	0.35

Appendix 19 (d)

Trend of anti-TB drug resistance (1998-2007) (Data from Programme Forms)

New cases

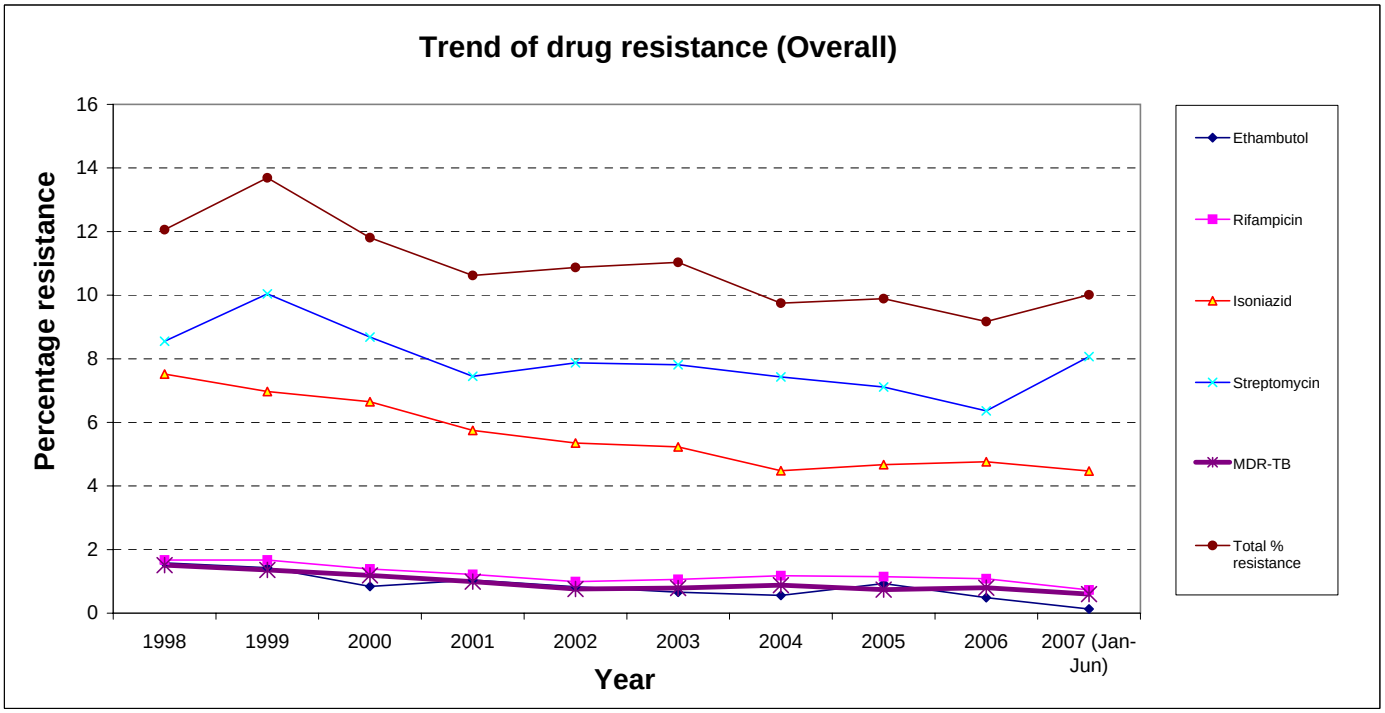
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007 (Jan-Jun)
Ethambutol	1.24	1.11	0.54	0.96	0.65	0.42	0.34	0.54	0.35	0.08
Rifampicin	1.17	0.97	0.61	0.83	0.46	0.69	0.75	0.83	0.86	0.60
Isoniazid	6.78	6.22	5.21	5.02	4.71	4.64	3.65	4.16	4.13	3.70
Streptomycin	7.65	9.34	7.78	7.39	7.40	7.59	6.90	6.72	6.00	7.47
MDR-TB	1.06	0.75	0.47	0.55	0.34	0.46	0.48	0.51	0.55	0.45
Total % resistance	10.89	12.61	10.35	10.39	10.22	10.54	8.84	9.33	8.64	9.06

Previously treated cases

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	2.19	2.14	3.92	1.61	0.57
Rifampicin	4.61	6.09	5.98	3.71	4.59	3.41	4.29	3.64	2.90	1.72
Isoniazid	11.84	11.51	15.26	11.80	9.69	9.00	10.46	8.68	10.00	10.34
Streptomycin	13.82	14.45	13.81	10.96	10.97	9.25	11.26	10.08	9.35	12.64
MDR-TB	4.17	5.19	5.36	3.54	3.57	2.92	3.75	2.52	2.90	1.72
Total % resistance	18.86	20.32	20.41	16.36	16.58	14.11	16.35	14.29	13.55	17.24

Overall

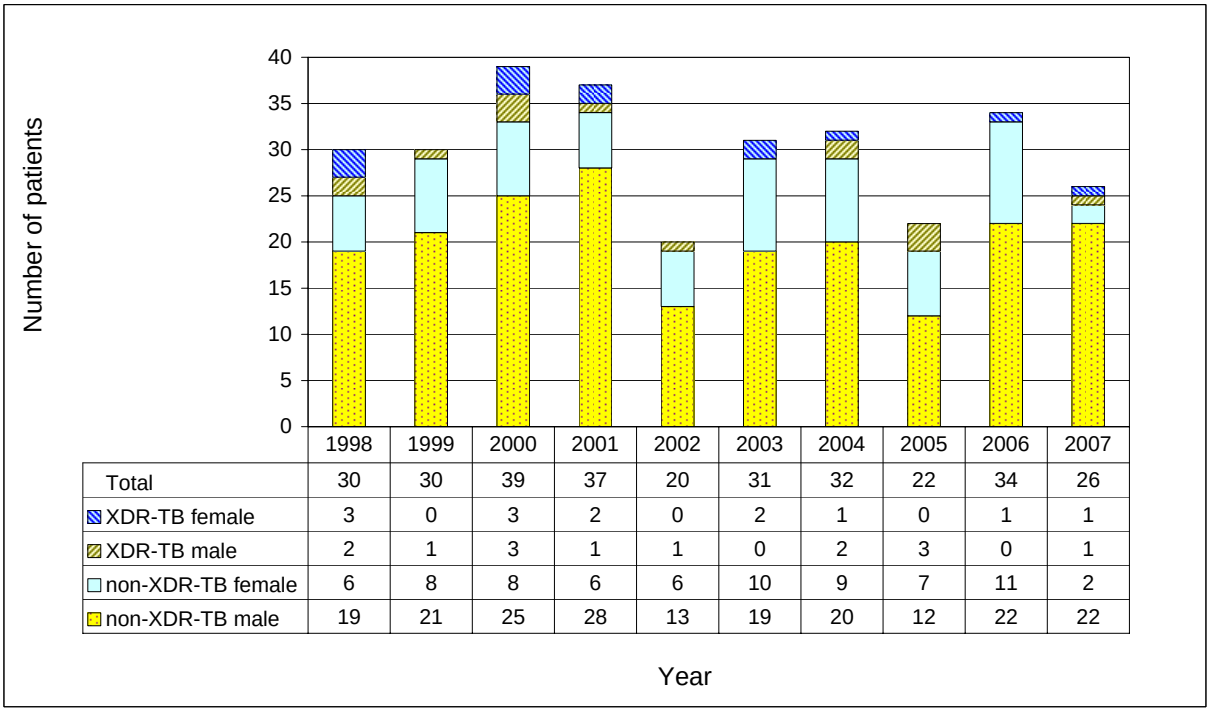
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007 (Jan-Jun)
Ethambutol	1.58	1.43	0.84	1.04	0.83	0.66	0.56	0.93	0.49	0.13
Rifampicin	1.67	1.67	1.39	1.22	0.99	1.06	1.18	1.15	1.08	0.73
Isoniazid	7.52	6.97	6.65	5.75	5.35	5.23	4.48	4.67	4.76	4.47
Streptomycin	8.55	10.04	8.68	7.45	7.87	7.81	7.43	7.11	6.36	8.07
MDR-TB	1.51	1.36	1.19	0.99	0.76	0.79	0.88	0.74	0.80	0.60
Total % resistance	12.06	13.69	11.81	10.62	10.87	11.03	9.75	9.89	9.17	10.01



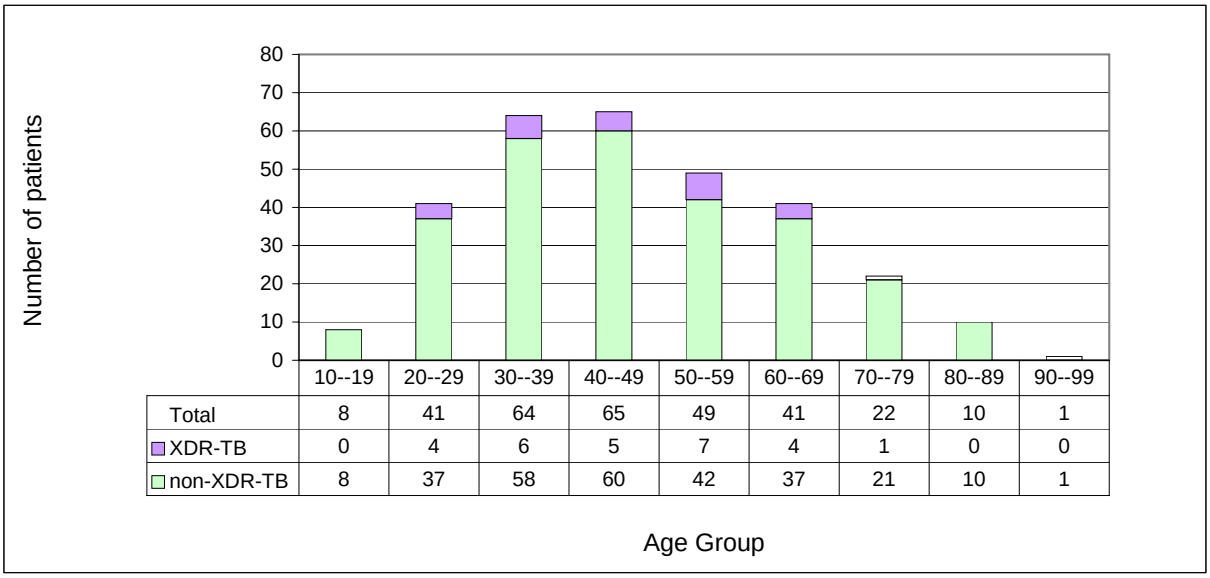
Appendix 19 (e)

MDR-TB and XDR-TB by Sex and Year (Upper Graph) and by Age (Lower Graph) (1998-2007)

Cases of MDR-TB and XDR-TB are identified from four main sources: (1) Programme forms; (2) MDR-TB registry; (3) Prison registry; (4) TB Reference Laboratory. The year to which the case belongs is defined as the year of starting treatment with second-line anti-TB drugs, or if treatment has not been started (e.g., patient died, or no effective second-line drugs are available for treatment), it is defined as the year of reporting MDR-TB.



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	30	30	39	37	20	31	32	22	34	26
XDR-TB female	3	0	3	2	0	2	1	0	1	1
XDR-TB male	2	1	3	1	1	0	2	3	0	1
non-XDR-TB female	6	8	8	6	6	10	9	7	11	2
non-XDR-TB male	19	21	25	28	13	19	20	12	22	22



	10--19	20--29	30--39	40--49	50--59	60--69	70--79	80--89	90--99
Total	8	41	64	65	49	41	22	10	1
XDR-TB	0	4	6	5	7	4	1	0	0
non-XDR-TB	8	37	58	60	42	37	21	10	1

Definitions: MDR-TB = multidrug-resistant tuberculosis [resistant to at least isoniazid and rifampicin]

XDR-TB = extensively drug-resistant tuberculosis [resistant to any fluoroquinolone, and at least one of three injectable second-line drugs (capreomycin, kanamycin, and amikacin), in addition to MDR-TB]

NB: In the above graphs, non-XDR-TB refers to MDR-TB excluding XDR-TB cases

Appendix 20 (a)
Treatment Return 2007

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	168	118	9	7	136	88	14	59	174	87.9	51	32	0	14	1	1	0	8	0	8	0	3.0	164	8	64	0
Kowloon	233	210	24	10	157	91	16	73	225	84.7	42	72	0	22	1	16	0	4	1	0	10	3.1	243	7	57	10
South Kwai Chung	297	229	20	15	181	76	14	108	312	89.9	63	20	0	24	1	7	1	8	1	5	1	1.5	253	0	99	1
Sai Ying Pun	74	133	8	9	107	90	11	63	120	92.4	53	21	0	4	0	6	2	3	0	1	1	1.0	136	0	51	0
Shaukeiwan	188	130	3	5	123	69	2	68	184	88.1	22	17	0	11	1	13	0	5	1	0	3	1.4	191	0	43	4
Shek Kip Mei	132	131	6	10	108	64	5	78	158	87.4	51	18	0	7	0	8	0	7	3	3	6	4.4	107	4	62	0
Tai Po	145	87	8	5	71	32	3	70	101	94.0	15	1	1	6	0	2	3	0	1	0	2	1.6	143	0	19	0
Wanchai	206	130	10	8	114	127	5	80	181	85.0	100	22	0	5	3	25	0	2	1	10	0	3.6	161	0	45	1
Yan Oi	264	173	5	11	192	115	27	94	298	88.3	90	21	0	31	1	9	0	5	0	2	4	1.4	178	11	68	0
Yaumatei	231	188	12	12	121	73	19	112	178	84.8	36	29	0	12	0	15	6	11	0	6	8	4.1	205	2	38	45
Yuen Chau Kok	180	158	11	10	108	35	13	88	156	89.4	29	13	2	7	1	11	0	5	0	0	5	1.8	172	32	0	0
Yung Fung Shee	278	170	10	12	179	50	7	108	222	94.0	38	21	1	13	0	2	4	2	1	0	3	1.1	277	0	89	4
Sub-total	2396	1857	126	114	1597	910	136	1001	2309	88.6	590	287	4	156	9	115	16	60	9	35	43	2.3	2230	64	635	65
Hosp Discharge Clinic																										
East Kowloon	2	0	0	0	0	0	0	0	2	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Part Time Clinics																										
Castle Peak	3	6	0	0	2	0	0	1	4	100.0	0	3	0	0	0	0	0	0	0	0	0	0.0	3	0	0	0
Cheung Chau	3	2	1	1	3	2	1	4	6	90.9	0	0	0	1	0	0	0	0	0	0	0	0.0	0	0	1	0
Sai Kung	19	6	0	0	6	4	0	6	16	71.0	3	1	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Sheung Shui	143	81	2	0	85	35	3	37	99	91.3	44	12	0	4	0	4	1	1	2	0	2	2.7	137	0	121	4
Tung Chung	24	11	0	0	13	8	1	9	17	96.3	6	1	0	0	0	1	1	0	0	0	0	0.0	20	0	0	0
Yuen Long	120	77	4	2	90	34	2	39	100	89.1	27	13	0	2	1	3	1	2	0	0	9	5.8	128	0	106	0
Sub-total	312	183	7	3	199	83	7	96	242	91.4	80	30	0	7	1	8	3	3	2	0	11	3.5	297	0	228	4
Institutions Correctional Services Dept																										
Hei Ling Chau	5	10	9	0	0	0	0	2	0	50.0	1	13	0	0	0	2	0	0	0	0	0	0.0	6	0	0	0
Stanley Prison	24	16	0	0	0	0	0	0	0	0.0	0	11	0	0	0	0	0	0	0	0	0	0.0	29	0	0	0
Shek Pik Prison	12	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	12	0	0	0
Sub-total	41	26	9	0	0	0	0	2	0	50.0	1	24	0	0	0	2	0	0	0	0	0	0.0	47	0	0	0
Total	2751	2066	142	117	1796	993	143	1099	2553	88.8	671	341	4	163	10	125	19	63	11	35	54	2.4	2574	64	863	69

Appendix 20 (b)
Treatment Return 2007

Other Regimen																									
	No. put	Bought in					Treatment completed				Transfer out to		Interrup		Drop out				Complete defaulter				No. still	Unsup	Incomp	No. def.
Name of Clinic/Hospital	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	44	30	3	4	62	19	4	5	30	70.0	18	13	0	6	0	3	0	1	0	5	0	10.0	77	9	44	0
Kowloon	82	10	3	2	34	26	3	3	41	80.0	37	9	0	8	0	2	0	1	0	0	0	0.0	53	1	23	1
South Kwai Chung	66	23	9	2	20	8	2	4	34	80.9	7	0	0	5	0	0	0	1	0	2	1	6.4	72	0	16	0
Sai Ying Pun	96	6	1	1	28	9	0	2	80	96.5	21	5	0	2	0	1	0	0	0	0	0	0.0	30	0	9	0
Shaukeiwan	29	9	1	1	23	11	1	3	26	90.6	7	1	0	2	0	0	0	0	1	0	0	3.1	33	0	16	0
Shek Kip Mei	93	12	0	4	34	20	3	7	41	78.7	18	9	0	9	0	1	0	2	1	0	0	1.6	72	3	21	0
Tai Po	27	7	1	2	8	6	1	4	19	82.1	2	0	0	3	1	0	0	1	0	0	0	0.0	20	0	4	0
Wanchai	45	14	5	6	14	23	2	8	25	82.5	24	4	0	3	0	3	0	1	0	0	0	0.0	37	0	14	0
Yan Oi	85	21	5	2	23	9	0	2	11	72.2	10	3	0	3	0	1	1	0	0	1	0	5.6	113	1	2	0
Yaumatei	23	6	0	0	26	10	2	5	20	73.5	8	3	0	4	0	0	0	2	1	1	1	8.8	18	1	12	2
Yuen Chau Kok	46	32	4	5	11	10	4	8	27	71.4	8	0	0	11	0	2	0	1	0	0	0	0.0	47	21	0	0
Yung Fung Shee	29	4	4	2	10	9	0	5	18	74.2	3	7	0	5	0	0	1	2	0	0	1	3.2	16	0	8	0
Sub-total	665	174	36	31	293	160	22	56	372	80.8	163	54	0	61	1	13	2	12	3	9	3	2.8	588	36	169	3
Hosp Discharge Clinic																										
East Kowloon	2	0	0	0	0	1	0	0	2	0.0	1	0	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	7	1	0	0	1	1	0	0	3	100.0	1	0	0	0	0	0	0	0	0	0	0	0.0	6	0	0	0
Sai Kung	0	0	0	0	1	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	1	0	0	0
Sheung Shui	3	1	0	0	8	1	0	2	6	88.9	2	1	0	1	0	0	0	0	0	0	0	0.0	1	0	8	0
Tung Chung	3	0	0	0	2	1	0	0	4	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	2	0	0	0
Yuen Long	3	1	0	1	3	0	0	1	1	66.7	0	0	0	1	0	0	0	0	0	0	0	0.0	5	0	4	0
Sub-total	16	3	0	1	15	3	0	3	14	89.5	3	1	0	2	0	0	0	0	0	0	0	0.0	15	0	12	0
Institutions Correctional Services Dept																										
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	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
Sub-total	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
Total	683	177	36	32	308	164	22	59	388	81.1	167	55	0	63	1	13	2	12	3	9	3	2.7	603	36	181	3

APPENDIX 20 (c)

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

Name of 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
								at 6M	>6M	%	hospi-tal	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
	<6M																									

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.)

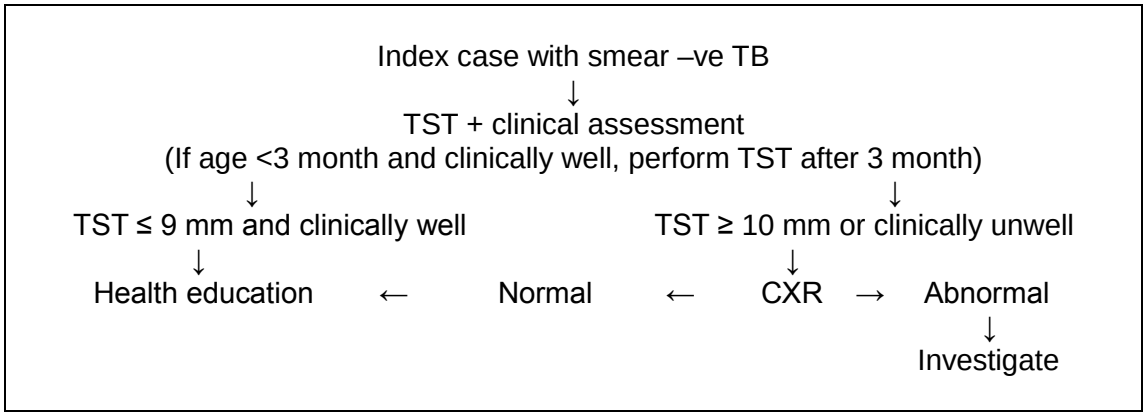
  This item needs to be counted only on the last working day of the month when completing the monthly treatment return.

Appendix 21 (a)

Scheme for Investigation of Close Contacts (Household) in the Tuberculosis & Chest Service, Department of Health

Scenario	Strategy
Index case is smear-negative and the close contact < 5 years old	Tuberculin skin test, with chest X-ray if the test reads 10 mm or more.
Index case is smear-negative and the close contact aged 5 years or more	Chest X-ray
Index case is smear-positive and the close contact < 35 years old	Chest X-ray and tuberculin skin test, with treatment of latent TB infection if appropriate.
Index case is smear-positive and the close contact aged 35 years or more	Chest X-ray, with tuberculin skin test and treatment of latent TB infection after assessment on a case-by-case basis.

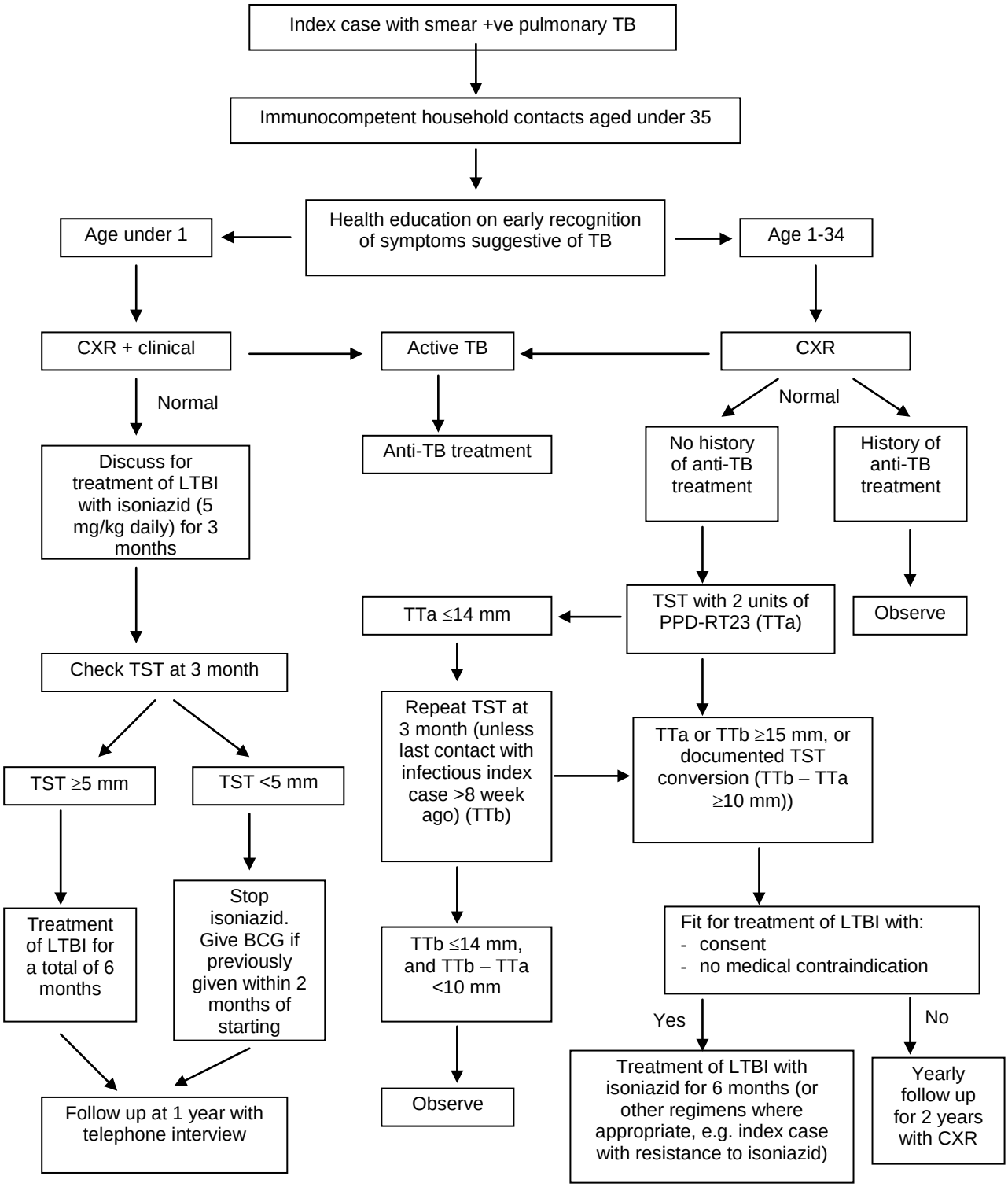
Flow chart for contact investigation of close contacts aged below 5 with smear negative index case *



* If the index case has smear-negative TB and the close contact case is aged below five, the contact case is first evaluated by tuberculin skin test alongside clinical assessment. If the contact case is aged below 3 months and clinically well, the tuberculin test can be postponed until the contact case is 3 months old. If the contact case is clinically well and the tuberculin skin test result is 9 mm or less, health education is all that is required. If the contact case is clinically unwell or the tuberculin skin test result is 10 mm or more, chest X-ray is taken. If chest X-ray is normal, only health education is required. Otherwise, further investigation may be considered.

Appendix 21 (b)

Tuberculin Testing (TST) And Treatment Of Latent Tuberculosis Infection (LTBI) Among Immunocompetent Household Contacts Aged Under 35 Of Smear-positive Pulmonary Tuberculosis (TB) Patients *



* After finding an index case with smear-positive pulmonary TB, tuberculin testing should be arranged for immunocompetent household contacts aged under 35. All of them should receive health education on early recognition of symptoms suggestive of TB in addition to chest X-ray examination. If active TB is likely, consider anti-TB treatment. If chest X-ray is normal, further management depends on the age.

For infants (aged under 1) with normal chest X-ray, if clinical assessment is also normal, discuss for treatment of latent TB infection with isoniazid 5 mg per kg daily for three months. Tuberculin skin test (TST) is to be done at 3 months. A TST response of 5 mm or more indicates that treatment of latent TB infection should be given for a total of 6 months. If TST response is below 5 mm, stop isoniazid. Additionally, repeat BCG vaccination if it has been given within 2 months before starting isoniazid. All infants are followed up at one year by telephone interview.

For contacts aged 1-34 with normal chest X-ray, consider observation in the presence of a history of anti-TB treatment. In the absence of such a history, arrange TST with 2 units of PPD-RT23 (TTa). If response to TTa is 14 mm or less, repeat TST 3 months later (TTb) unless TTa is done more than 8 weeks after the last contact with the infectious index case. If response to TTb is 14 mm or less, or the difference between TTb and TTa is less than 10 mm, consider observation. On the other hand, if response to TTa or TTb is at least 15 mm, or TST conversion is documented with a difference of at least 10 mm between TTb and TTa, consider treatment of latent TB infection with isoniazid for 6 months, after obtaining consent and excluding medical contraindications. Other alternative preventive treatment regimens may also be given where appropriate, for example, presence of bacillary resistance to isoniazid in the index case. If the contact is unfit for preventive treatment, arrange yearly follow up with chest X-ray for two years.

APPENDIX 21 (c)

Examination of Contacts in the Chest Clinics 2007

Particulars	Smear Positive Index Cases		Smear Negative Index Cases		Total	
No. of patients (new & old) listed	1471		3579		5050	
No. of contacts listed	3806		9275		13081	
Number of contacts x-rayed	3780	(100.00%)	9027	(100.00%)	12807	(100.00%)
Results						
(a) NSD & Unknown	3378	(89.37%)	8005	(88.68%)	11383	(88.88%)
(b) Disease other than TB	232	(6.14%)	648	(7.18%)	880	(6.87%)
(c) Inactive respiratory TB	105	(2.78%)	259	(2.87%)	364	(2.84%)
(d) Active respiratory TB						
(radiologically)	19	(0.50%)	35	(0.39%)	54	(0.42%)
A (bacteriogically)	11	(0.29%) > 33 (0.87%)	14	(0.16%) > 52 (0.58%)	25	(0.20%) > 85 (0.66%)
B (incomplete)	3	(0.08%)	3	(0.03%)	6	(0.05%)
(e) Non-respiratory TB	3	(0.08%)	4	(0.04%)	7	(0.05%)
(f) Result not yet known	29	(0.77%)	59	(0.65%)	88	(0.69%)

APPENDIX 22 (a)

Scheme for BCG Administration in Hong Kong, 2007

Population Group		Procedures
Newborns		Direct BCG with intradermal method
Children under the age of 15	Negative BCG history and negative BCG scar	Direct BCG with intradermal method (since September 2000)
	BCG history and / or BCG scar	No action
Primary School Children (aged 6-10)		BCG revaccination programme stopped since September 2000

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)

BCG Vaccinations at Birth 2007

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	3829	3804	99.3
	Queen Mary	4229	4130	97.7
Private Hospital	Canossa	1736	1720	99.1
	H.K. Adventist	1369	1353	98.8
	H.K. Sanatorium	1806	1796	99.4
	Matilda International	1104	969	87.8
	St. Paul's	3087	3055	99.0
Total (HK Island)		17160	16827	98.1
Hospital under HA management	Kwong Wah	5378	5321	98.9
	Queen Elizabeth	5839	5843	100.1 *
	United Christian	4739	4726	99.7
Private Hospital	H.K. Baptist	8789	8657	98.5
	St. Teresa's	6773	6698	98.9
Total (Kowloon)		31518	31245	99.1
Hospital under HA management	Alice H.M.L. Nethersole	-	-	-
	Prince of Wales	6034	6030	99.9
	Princess Margaret	4259	4232	99.4
	Tuen Mun	5388	5378	99.8
Private Hospital	T.W. Adventist	2025	1995	98.5
	Shatin Int'l Medical Ctr Union	4518	4463	98.8
Total (NT Areas)		22224	22098	99.4
Mother & Child Health Centre		-	275	-
Grand Total		70902	70445	99.4

Note: * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 2006

Vaccination Method 2007	Percentage
Intradermal	100.0
Percutaneous	0.0

APPENDIX 23

TB Beds in Public Services, 2007

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	154
	Kowloon Hospital	110
	Ruttonjee Hospital	155
	Haven of Hope Hospital	125
	Wong Tai Sin Hospital	95
	Total (Hospital Authority)	639
Custody	Stanley Prison Hospital	20
Grand Total (2007)		659
Grand Total (2006)		667
Grand Total (2005)		686

APPENDIX 24

Annual Admissions to Hospitals from Government Chest Clinics

1996 - 2007

Year	Total Admissions
1996	4607
1997	4597
1998	4709
1999	5012
2000	5408
2001	5317
2002	5183
2003	4603
2004	4986
2005	4435
2006	4571
2007	4038

Admissions by Clinic	Year 2007
East Kowloon	269
Kowloon	281
Sai Ying Pun	401
Shaukeiwan	219
Shaukeiwan Pneumoconiosis	66
Shek Kip Mei	313
South Kwai Chung	384
Tai Po	69
Tung Chung	31
Wanchai	508
Yan Oi	486
Yaumatei	342
Yuen Chau Kok	210
Yung Fung Shee	278
Cheung Chau	12
NT Unit	169
Total	4038

APPENDIX 25

Unlinked Anonymous Screening (UAS)
for HIV in TB & Chest Service (2007)

Age	Male	Female	Total
< 20	11	13	24
20-29	51	62	113
30-39	53 (2)	53 (1)	106 (3)
40-49	72 (3)	70 (1)	142 (4)
50-59	119 (1)	49	168 (1)
≥ 60	224 (2)	76 (1)	300 (3)
Unknown Age	4	5	9
Unknown Sex/Age	-	-	25
Total	534 (8)	328 (3)	887 (11)

UAS for HIV in TB & Chest Service (1990 to 2007)

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%)
Oct 04 – Feb 05	Outpatient	Urine	1056 (9) (0.85%)
Nov 05 – Jan 06	Outpatient	Urine	841 (7) (0.83%)
Nov 06 – Feb 07	Outpatient	Urine	841 (5) (0.59%)
Nov 07 – Feb 08	Outpatient	Urine	887 (11) (1.24%)

APPENDIX 26

Number of 'Confirmed' cases of TB in health care staff
Notified to Labour Department (1993 – 2007)

Year	Number
1993	0
1994	1
1995	2
1996	2
1997	10
1998	39
1999	57
2000	39
2001	41
2002	29
2003	30
2004	42
2005	30
2006	18
2007	16

'Confirmed' Cases of TB in Health Care Staff Notified
to Labour Department (2007) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24		1			1
25 – 29			1		1
30 – 34		3			3
35 – 39		4			4
40 – 44	1	3			4
45 – 49		2			2
50 – 54					0
55 – 59		1			1
60 – 64					0
65 – 69					0
Total	1	14	1		16

Appendix 27 (a)
Cohort of TB Patients in 2006

		DOTS	non-DOTS	Total
A	New pulmonary smear-positive	1238	299	*1537*
B	New pulmonary smear-negative	2224	534	*2758*
C	New pulmonary smear-unknown/not done	66	84	*150*
D	New extrapulmonary	548	149	*697*
E	Other NEW cases not in lines A-D	0	0	*0*
F	Relapse (pulmonary smear and or culture-positive)	312	82	*394*
G	Treatment after failure (pulmonary smear and or culture-positive)	0	1	*1*
H	Treatment after default (pulmonary smear and or culture-positive)	25	2	*27*
I	Other re-treatment cases not in lines F-H	172	30	*202*
J	Other, not in lines A-I (i.e., history unknown)	0	0	*0*
	Total	**4,585**	**1,181**	*5766*
K	New pulmonary lab-confirmed cases	2494	743	*3237*
L	Total number of TB cases in 2006	5766		

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

New pulmonary smear-positive TB cases, 2006 calendar year (number of patients)

DOTS	0-4	5-14	0-14	15–24	25–34	35–44	45–54	55–64	65+	*Total*
Male	0	1	1	68	73	118	156	137	320	*873*
Female	1	7	8	54	75	59	45	37	87	*365*
Non-DOTS										*1238*
Male	0	2	2	7	11	17	18	24	119	*198*
Female	0	1	1	5	22	14	9	5	45	*101*
										299

New pulmonary smear-negative/smear-unknown/smear-not done TB cases, 2006 calendar year (number of patients)

DOTS	0-4	5-14	0-14	15–24	25–34	35–44	45–54	55–64	65+	*Total*
Male	0	9	9	103	157	160	229	234	616	*1508*
Female	0	10	10	112	170	144	88	63	195	*782*
Non-DOTS										*2290*
Male	0	4	4	7	20	27	35	45	272	*410*
Female	2	4	6	17	23	19	21	13	109	*208*
										618

New extrapulmonary TB cases, 2006 calendar year (number of patients)

DOTS	0-4	5-14	0-14	15–24	25–34	35–44	45–54	55–64	65+	*Total*
Male	0	0	0	26	27	31	27	28	63	*202*
Female	0	2	2	27	61	66	73	51	66	*346*
Non-DOTS										*548*
Male	2	0	2	1	8	9	9	15	38	*82*
Female	0	2	2	3	14	12	6	4	26	*67*
										149

Appendix 27 (b)
Cohorts of TB Patients

Treatment outcomes for cases registered in 2006 calendar year (number of patients)

DOTS	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	*Total*
New pulmonary smear-positive	1238	894	74	62	133	41	27	*1231*
New pulmonary smear-negative/unknown/not done	2290		1803	131	160	104	81	*2279*
New extrapulmonary	548		407	15	69	21	30	*542*
Relapse (pulmonary smear and/or culture-positive)	312	211	22	18	32	18	4	*305*
Treatment after failure (pulmonary smear and or culture-positive)	0	0	0	0	0	0	0	*0*
Treatment after default (pulmonary smear and or culture-positive)	25	5	1	3	6	8	1	*24*
Other re-treatment	172	21	105	5	29	8	3	*171*
non-DOTS								*Total*
New pulmonary smear-positive	299	10	3	7	2	0	5	*27*
New pulmonary smear-negative/unknown/not done	618		47	16	4	0	4	*71*
New extrapulmonary	149		3	0	0	1	1	*5*
Relapse (pulmonary smear and/or culture-positive)	82	2	10	3	1	0	5	*21*
Treatment after failure (pulmonary smear and or culture-positive)	1	1	0	0	0	0	0	*1*
Treatment after default (pulmonary smear and or culture-positive)	2	0	0	0	0	0	0	*0*
Other re-treatment	30	0	1	1	1	0	0	*3*

Note: For those under DOTS, the treatment success rate (as at 12 month) for new pulmonary smear-positive cases is 78.6% [(894+74)/1231]. Among the 133 cases "failed", all of them were still on treatment at 12 m, with 123 sputum smear converted negative at 7 m, 5 sputum smear still positive at 7 m, and 5 unknown.

Treatment outcomes for HIV-positive TB cases registered in 2006 calendar year (number of patients)

	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	*Total*
New pulmonary smear-positive	16	13	0	1	0	1	1	*16*
New pulmonary smear-negative/unknown/not done	9		6	1	0	1	1	*9*
New extrapulmonary	8		6	2	0	0	0	*8*
Relapse (pulmonary smear and/or culture-positive)	1	0	0	0	0	0	1	*1*
Treatment after failure (pulmonary smear and or culture-positive)	0	0	0	0	0	0	0	*0*
Treatment after default (pulmonary smear and or culture-positive)	1	1	0	0	0	0	0	*1*
Other re-treatment	1	0	0	1	0	0	0	*1*
All TB cases	36	14	12	5	0	2	3	*36*

Final treatment outcomes for MDR-TB cases registered in 2004 calendar year (number of patients)

GLC-approved	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Still on treatment	*Total*
New cases	0	0	0	0	0	0	0	0	*0*
Re-treatment cases	0	0	0	0	0	0	0	0	*0*
Other cases	0	0	0	0	0	0	0	0	*0*
Other									
New cases	19	12	0	2	1	1	3	0	*19*
Re-treatment cases	13	5	0	3	0	2	3	0	*13*
Other cases	0	0	0	0	0	0	0	0	*0*

Interim treatment outcomes for MDR-TB cases registered in 2005, 2006 and 2007 calendar year (number of patients)

GLC-approved	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Still on treatment	*Total*
All cases registered in **2005**	0	0	0	0	0	0	0	0	*0*
All cases registered in **2006**	0	0	0	0	0	0	0	0	*0*
All cases registered in **2007**	0								
Other									
All cases registered in **2005**	22	15	0	1	1	2	3	0	*22*
All cases registered in **2006**	34	15	0	6	0	2	7	4	*34*
All cases registered in **2007**	25								

Part 2

PNEUMOCONIOSIS

Part 2 - Pneumoconiosis: Contents

APPENDIX 1

New Cases of Suspected Pneumoconiosis attending
the Pneumoconiosis Clinic in Hong Kong 1956 - 2007

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 (6)	7514	1494	3948
2004	3	138	141 (4)	7655	1494	4021
2005	-	134	134 (2)	7789	1494	4091
2006	-	278	278 (7)	8067	1494	4207
2007	-	120	120 (c) (2)	8187	1494 (d)	4276

Notes :
(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 69 of the 120 cases in 2007 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 69 cases.
(d) Under Revised Ordinance 1993 : 583 out of 1494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2007. 178 living pneumoconiotics were each receiving a monthly ex-gratia payment of $4710.00 in 2007.

APPENDIX 2

Age Distribution of Pneumoconiosis Cases 2007

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	-	-
45 - 49	2	3
50 - 54	19	27
55 - 59	13	19
60 - 64	12	17
65 - 69	9	13
70 - 74	6	9
75+	8	12
Total	69	100

APPENDIX 3

Occupation Distribution of Confirmed Pneumoconiosis 2007

Type of Occupation	Number of Cases	%
Construction Construction/Quarry Others	55 5 9	80 7 13
Total	69	100

APPENDIX 4

Pneumoconiosis Patients by Duration of Exposure to Dust 2007

Duration	Number of Cases	%
<5 years	-	-
5 - 9	1	1
10 - 14	2	3
15 - 19	10	15
20 - 24	12	17
25 - 29	23	33
30+	21	31
Unknown	-	-
Total	69	100

APPENDIX 5

Pneumoconiosis Patients by Degree of Incapacity 2007

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	43
10	13
15	6
20	1
25	2
30	-
35	-
40	-
45	1
50	-
55	-
60	1
70	-
75	1
80	-
100	-
N. A.	1
Total	69

APPENDIX 6

Confirmed Pneumoconiosis Patients
Classified by Radiological Appearance 2007

Type of Opacity	Profusion 1	2	3	Sub-Total
Small opacities				
Rounded				
p (up to 1.5 mm diameter)	16	-	-	16
q (1.5 to 3.0 mm diameter)	34	8	-	42
r (3.0 to 10.0 mm diameter)	-	3	-	3
Irregular				
s (fine irregular or linear)	-	-	-	-
t (medium irregular)	6	-	-	6
u (coarse irregular)	1	-	-	1
Sub-total	57	11	-	68
Combined opacities	-	-	-	-
N. A.	-	-	-	1
Total				69

4 out of the 69 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)	4
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	-
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	-
Total	4

Appendix 7

Pneumoconiosis Patients with Tuberculosis 2007

Type of T.B.	Number of Cases	%
Bacteriological Positive	1	1
Bacteriological Negative	46	67
No T.B.	21	31
N.A.	1	1
Total	69	100

Appendix 8

Confirmed Pneumoconiosis Patients by Other Particulars 2007

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	57	83
	Non-smoker	11	16
	Unknown	1	1
	Total	69	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	22	32
	No	46	67
	Unknown	1	1
	Total	69	100
General Condition	Good	64	93
	Fair	4	6
	Poor	-	-
	Died	1	1
	Total	69	100

Part 3

ANNEX

Part 3 – Annex: Contents

Annex 1 (a)

Treatment Outcomes up to 2 year of the 2004 Cohort of TB Patients

A total of 6226 cases of TB were notified in the year 2004. Among them, 5001 were ever seen at chest clinics (ES) while 1225 were never seen at chest clinics (NS). They are categorised as follows:

Categories		ES	%	NS	%	ES/NS	%
(A)	New pulmonary, smear positive	1314	26.3	258	21.1	1572	25.2
(B)	New pulmonary, smear negative	2332	46.6	505	41.2	2837	45.6
(C)	New pulmonary, smear not done/ unknown	180	3.6	167	13.6	347	5.6
(D)	New extra-pulmonary	529	10.6	143	11.7	672	10.8
(E)	Relapse pulmonary, smear positive	175	3.5	46	3.8	221	3.5
(F)	Pulmonary smear-positive retreatment after failure or default	13	0.3	1	0.1	14	0.2
(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)]	458	9.2	105	8.6	563	9.0
Total		5001	100.0	1225	100.0	6226	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
	for (i) ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 09
	(ii) ES (cases ever seen at chest clinics) - sheet 01 to 03
	(iii) NS (cases never seen at chest clinics) - sheet 01 to 03
Annex 1 (c)	Pulmonary pretreatment smear positive, pretreatment culture positive, and MDR-TB cases
	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 08
Annex 1 (d)	New pulmonary smear positive and retreatment pulmonary smear positive cases
	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 02
Annex 1 (e)	Treatment defaulters (outcome at 2 year = defaulting)
	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 05
Annex 1 (f)	Sources completing Programme Forms PFA, PFB1, PFB2, PFC, and PFD

Annex 1 (g)	Sample of the set of "Programme Forms" (PFA, PFB1, PFB2, PFC, and PFD) used for the cohort of patients in 2004

Discussion

Annex 1 (b) – Various age groups

Among the total of 6226 patients, 220 (3.5%) were aged between 0 and 19, 1519 (24.4%) between 20 and 39, 1735 (27.9%) between 40 and 59, and 2752 (44.2%) above 60. 64.1% were male. 39.1%, 22.9%, and 18.6% were never smokers, ex-smokers, and current smokers respectively. 78.4% were permanent local residents while 79.9% were of Chinese ethnicity. Most of them (75.1%) presented because of symptoms. 10.6% presented as incidental finding to pre-employment, pre-immigration, other body check or incidental to other illness, while 2.1% were diagnosed through contact tracing.

75.2% of patients had pulmonary TB, 11.8% had extra-pulmonary TB and 13.0% had both. TB pleura and TB lymph node accounted for 8.9% and 8.6% of the site of involvement respectively. Among pulmonary TB patients, 35.9% had pretreatment sputum smear +ve, 70.4% had pretreatment culture +ve and 14.7% had cavitary lesion on their chest radiographs.

With regard to co-morbidity factors for TB, 11.3% of TB patients had diabetes mellitus, 4.6% of patients had coexisting malignancy, 0.8% of patients were immuno-suppressed because of either steroid or cytotoxic therapy. HIV infection was reported for 0.5% of cases. 4.2% of all TB patients were reported to be hepatitis B carrier while 0.5% had chronic active hepatitis.

62.2% of patients were on 6 months short course chemotherapy for TB or other standard regimen based on HREZS. Treatment side effect was reported in 42.2% of patients. 15.5% were GI side effects, 13.0% were skin rash, 5.3% had transient rise in liver enzyme and 6.6% had frank hepatitis.

Among the 5001 patients ever seen in chest clinic, 74.9% received >90% DOT in initial 2 months, while 61.1% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 29.6%, 79.3% and 87.7% respectively. Death rates at corresponding periods were 3.2%, 5.0% and 5.3% respectively.

Among the 436 patients never seen in chest clinic, 3.3% received >90% DOT in initial 2 months, while 3.1% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 1.6%, 3.0% and 3.5% respectively. Death rates at corresponding periods were 1.4%, 1.6% and 1.6% respectively. However, a high percentage of the programme forms of this group of patients were not completed.

Annex 1 (c) – Pulmonary pretreatment smear +ve, culture +ve, and MDR-TB cases

Regarding patients with pulmonary TB, 1807 were pretreatment smear +ve, 3863 were pretreatment culture +ve, and 28 were MDR-TB patients.

In the initial 2 months, over 60% of pretreatment smear +ve or culture +ve patients and 85.7% of MDR-TB received >90% DOT. The corresponding percentages were around 50-60% for all three groups of patients in subsequent 4 months.

Overall sputum smear conversion rate at 2 months were 88.7% for smear +ve patients and 66.7% for MDRTB patients. Culture conversion rate at 2 months were 85.0% for culture +ve patients and 41.2% for MDR-TB patients.

Treatment success rates for smear +ve patients at 6 months, 12 months and 24 months were 19.1%, 65.7% and 72.8% respectively. Those for culture +ve patients were 23.6%, 63.3% and 70.6% respectively. Those for MDR-TB patients were 3.6%, 3.6% and 50.0% respectively. 4 out of 28 MDR-TB patients defaulted treatment at 24 months.

Annex 1 (d) – New and retreatment pulmonary smear +ve cases

Treatment success rates for new pulmonary smear +ve patients at 6 months, 12 months and 24 months were 21.3%, 67.2% and 73.7% respectively. The corresponding treatment success rates for retreatment pulmonary smear +ve patients were 4.3%, 55.7% and 67.2% respectively.

Annex 1 (e) – Treatment defaulters

There were 180 treatment defaulters at 24 months in the 2004 cohort. Majority (65.0%) were aged between 20 to 59, 29.4% worked full time, 5.0% part time, 24.4% retired, and 28.9% unemployed. 80.0% were new case, 12.8% were relapse, 6.7% were retreatment after default cases, and 0.6% were retreatment after failure of previous treatment cases. 35.5% had pretreatment smear +ve and 17.8% had cavitary lesions on the chest radiograph. 65.0% of patients lost contact after default and 10.0% of patients were retreated after default.

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 01

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Female	124	56.4	823	54.2	527	30.4	764	27.8	2238	35.9
Male	96	43.6	696	45.8	1208	69.6	1988	72.2	3988	64.1
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Marital status										
Single	185	84.1	761	50.1	179	10.3	137	5.0	1262	20.3
Married	1	0.5	516	34.0	1240	71.5	1848	67.2	3605	57.9
Separated	0	0.0	5	0.3	16	0.9	13	0.5	34	0.5
Divorce	0	0.0	24	1.6	67	3.9	29	1.1	120	1.9
Widowed	0	0.0	3	0.2	10	0.6	124	4.5	137	2.2
Not recorded	34	15.5	210	13.8	223	12.9	601	21.8	1068	17.2
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Smoking status										
Never	152	69.1	822	54.1	654	37.7	809	29.4	2437	39.1
Ex-smoker	19	8.6	155	10.2	338	19.5	916	33.3	1428	22.9
Current smoker	16	7.3	307	20.2	494	28.5	338	12.3	1155	18.6
Not recorded	33	15.0	235	15.5	249	14.4	689	25.0	1206	19.4
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Institution-related										
Yes	161	73.2	200	13.2	108	6.2	507	18.4	976	15.7
No	50	22.7	1133	74.6	1422	82.0	1808	65.7	4413	70.9
Not recorded	9	4.1	186	12.2	205	11.8	437	15.9	837	13.4
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Institution										
Client	109	-	101	-	40	-	319	-	569	-
Staff	1	-	52	-	35	-	8	-	96	-
Institution type										
Old age home	39	-	14	-	20	-	330	-	403	-
School	119	-	81	-	26	-	135	-	361	-
Hospital	0	-	29	-	11	-	9	-	49	-
Handicapped	1	-	19	-	9	-	6	-	35	-
Prison	0	-	33	-	22	-	1	-	56	-
Others	2	-	17	-	11	-	8	-	38	-
Living situation										
Street-sleeper	0	0.0	1	0.1	8	0.5	4	0.1	13	0.2
Cubicle bed space	0	0.0	1	0.1	1	0.1	13	0.5	15	0.2
Institution	2	0.9	48	3.2	33	1.9	330	12.0	413	6.6
Work quarter	0	0.0	38	2.5	5	0.3	2	0.1	45	0.7
Alone (not above)	1	0.5	88	5.8	172	9.9	302	11.0	563	9.0
With friends	4	1.8	77	5.1	27	1.6	18	0.7	126	2.0
With family	177	80.5	1050	69.1	1272	73.3	1528	55.5	4027	64.7
Not recorded	36	16.4	216	14.2	217	12.5	555	20.2	1024	16.4
Residential status										
Permanent resident	168	76.4	1083	71.3	1456	83.9	2174	79.0	4881	78.4
Chinese immigrant	13	5.9	79	5.2	30	1.7	25	0.9	147	2.4
Imported worker	0	0.0	125	8.2	22	1.3	0	0.0	147	2.4
Tourist - 2 way permit Chinese	1	0.5	19	1.3	6	0.3	3	0.1	29	0.5
Other tourist	1	0.5	1	0.1	0	0.0	2	0.1	4	0.1
Vietnamese	2	0.9	8	0.5	0	0.0	0	0.0	10	0.2
Illegal immigrants	0	0.0	6	0.4	3	0.2	0	0.0	9	0.1
Not recorded	35	15.9	198	13.0	218	12.6	548	19.9	999	16.0
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 02

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Place of birth										
Hong Kong	136	61.8	816	53.7	764	44.0	401	14.6	2117	34.0
Mainland China	44	20.0	319	21.0	661	38.1	1619	58.8	2643	42.5
Others	7	3.2	197	13.0	92	5.3	109	4.0	405	6.5
Not recorded	33	15.0	187	12.3	218	12.6	623	22.6	1061	17.0
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Ethnicity										
Chinese	179	81.4	1130	74.4	1470	84.7	2193	79.7	4972	79.9
Other Asian	5	2.3	173	11.4	53	3.1	14	0.5	245	3.9
Caucasian	1	0.5	12	0.8	5	0.3	5	0.2	23	0.4
Others	1	0.5	8	0.5	1	0.1	1	0.0	11	0.2
Not recorded	34	15.5	196	12.9	206	11.9	539	19.6	975	15.7
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Previous BCG history										
Yes	164	74.5	860	56.6	464	26.7	91	3.3	1579	25.4
No	3	1.4	113	7.4	327	18.8	909	33.0	1352	21.7
Unknown	53	24.1	546	35.9	944	54.4	1752	63.7	3295	52.9
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
BCG scar										
Yes	146	-	837	-	459	-	95	-	1537	-
No	37	-	426	-	990	-	1852	-	3305	-
Evidence of previous BCG										
BCG history +ve or scar +ve	172	78.2	951	62.6	563	32.4	129	4.7	1815	29.2
Employment status										
Full-time	16	7.3	826	54.4	692	39.9	99	3.6	1633	26.2
Part-time	2	0.9	63	4.1	92	5.3	28	1.0	185	3.0
Retired	1	0.5	3	0.2	91	5.2	1589	57.7	1684	27.0
Unemployed	22	10.0	230	15.1	429	24.7	134	4.9	815	13.1
Housewife	2	0.9	128	8.4	204	11.8	354	12.9	688	11.1
Student	143	65.0	69	4.5	1	0.1	1	0.0	214	3.4
Not recorded	34	15.5	200	13.2	226	13.0	547	19.9	1007	16.2
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Occupation										
Blue collar	8	3.6	379	25.0	507	29.2	106	3.9	1000	16.1
White collar	7	3.2	360	23.7	168	9.7	18	0.7	553	8.9
Medical	0	0.0	5	0.3	2	0.1	3	0.1	10	0.2
Nursing	0	0.0	21	1.4	3	0.2	0	0.0	24	0.4
Paramedical	0	0.0	3	0.2	4	0.2	0	0.0	7	0.1
Supporting health staff	1	0.5	4	0.3	8	0.5	3	0.1	16	0.3
Not applicable	150	68.2	478	31.5	755	43.5	2028	73.7	3411	54.8
Not recorded	54	24.5	269	17.7	288	16.6	594	21.6	1205	19.4
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
First presentation										
Private doctor	33	15.0	338	22.3	238	13.7	146	5.3	755	12.1
Private hospital	4	1.8	23	1.5	25	1.4	17	0.6	69	1.1
GOPC	7	3.2	46	3.0	77	4.4	79	2.9	209	3.4
Chest Clinic	33	15.0	190	12.5	276	15.9	338	12.3	837	13.4
Other DH Clinic	4	1.8	37	2.4	27	1.6	29	1.1	97	1.6
HA Clinic	5	2.3	47	3.1	65	3.7	87	3.2	204	3.3
HA Hospital	99	45.0	631	41.5	814	46.9	1539	55.9	3083	49.5
Mainland	2	0.9	19	1.3	12	0.7	13	0.5	46	0.7
Overseas	1	0.5	3	0.2	4	0.2	4	0.1	12	0.2
Not recorded	32	14.5	185	12.2	197	11.4	500	18.2	914	14.7
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 03

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Symptomatic on presentation										
Y	165	75.0	1173	77.2	1359	78.3	1979	71.9	4676	75.1
N	21	9.5	162	10.7	179	10.3	272	9.9	634	10.2
Not recorded	34	15.5	184	12.1	197	11.4	501	18.2	916	14.7
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Chest symptoms	124	-	814	-	982	-	1499	-	3419	-
Systemic symptoms	27	-	179	-	224	-	375	-	805	-
Other site-specific symptoms	29	-	284	-	276	-	267	-	856	-
Reason for presentation										
Symptom	160	72.7	1133	74.6	1299	74.9	1864	67.7	4456	71.6
Contact screening	17	7.7	38	2.5	42	2.4	34	1.2	131	2.1
Pre-employment	2	0.9	48	3.2	19	1.1	1	0.0	70	1.1
Pre-emigration	0	0.0	3	0.2	2	0.1	2	0.1	7	0.1
Other body check	2	0.9	74	4.9	82	4.7	91	3.3	249	4.0
Incidental to other illness	6	2.7	29	1.9	78	4.5	221	8.0	334	5.4
Others	0	0.0	4	0.3	4	0.2	15	0.5	23	0.4
Not recorded	33	15.0	190	12.5	209	12.0	524	19.0	956	15.4
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Contact with TB patients										
Yes	27	12.3	131	8.6	110	6.3	80	2.9	348	5.6
No	160	72.7	1197	78.8	1419	81.8	2132	77.5	4908	78.8
Not recorded	33	15.0	191	12.6	206	11.9	540	19.6	970	15.6
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Contact type										
Household	19	-	78	-	71	-	60	-	228	-
Work	2	-	21	-	10	-	2	-	35	-
Casual	2	-	9	-	13	-	5	-	29	-
Time of contact										
Within 2 year	17	-	51	-	40	-	21	-	129	-
Over 2 year	5	-	44	-	42	-	25	-	116	-
Previous chemoprophylaxis										
Yes	0	-	8	-	9	-	23	-	40	-
Reason for chemoprophylaxis										
Contact	0	-	2	-	0	-	1	-	3	-
Silicosis	0	-	0	-	0	-	1	-	1	-
HIV	0	-	2	-	1	-	2	-	5	-
Old scar on CXR	0	-	0	-	1	-	2	-	3	-
Others	0	-	0	-	1	-	5	-	6	-
Disease Classification										
Pulmonary TB only	156	70.9	1029	67.7	1285	74.1	2211	80.3	4681	75.2
Extrapulmonary TB only	32	14.5	238	15.7	250	14.4	215	7.8	735	11.8
Both	32	14.5	252	16.6	200	11.5	326	11.8	810	13.0
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 04

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Extrapulmonary TB										
Pleura	21	9.5	158	10.4	134	7.7	242	8.8	555	8.9
Lymph node	32	14.5	244	16.1	155	8.9	104	3.8	535	8.6
Meninges	1	0.5	13	0.9	18	1.0	10	0.4	42	0.7
Miliary	1	0.5	19	1.3	16	0.9	34	1.2	70	1.1
Abdomen	3	1.4	18	1.2	33	1.9	38	1.4	92	1.5
Bone and joint (not spine)	0	0.0	9	0.6	15	0.9	27	1.0	51	0.8
Spine	1	0.5	4	0.3	8	0.5	17	0.6	30	0.5
Genito-urinary tract	2	0.9	10	0.7	24	1.4	39	1.4	75	1.2
Naso/oro-pharynx	0	0.0	6	0.4	11	0.6	2	0.1	19	0.3
Larynx	0	0.0	2	0.1	4	0.2	4	0.1	10	0.2
Pericardium	1	0.5	1	0.1	2	0.1	6	0.2	10	0.2
Skin	3	1.4	15	1.0	27	1.6	19	0.7	64	1.0
Other sites	1	0.5	13	0.9	19	1.1	15	0.5	48	0.8
Case category										
New case	214	97.3	1431	94.2	1494	86.1	2289	83.2	5428	87.2
Relapse	5	2.3	73	4.8	223	12.9	445	16.2	746	12.0
Treatment after default	1	0.5	14	0.9	16	0.9	16	0.6	47	0.8
Failure of previous treatment	0	0.0	1	0.1	2	0.1	2	0.1	5	0.1
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Disease characteristics (pulmonary cases)										
Pretreatment smear +ve	69	36.7	424	33.1	581	39.1	900	35.5	1974	35.9
Pretreatment culture +ve	139	73.9	818	63.9	1003	67.5	1903	75.0	3863	70.4
Extent = 1	70	37.2	632	49.3	691	46.5	926	36.5	2319	42.2
Extent=1 & cavity=N	*62*	*33.0*	*554*	*43.2*	*585*	*39.4*	*863*	*34.0*	*2064*	*37.6*
Extent=1 & cavity=Y	*8*	*4.3*	*78*	*6.1*	*106*	*7.1*	*63*	*2.5*	*255*	*4.6*
Extent = 2	53	28.2	271	21.2	361	24.3	613	24.2	1298	23.6
Extent=2 & cavity=N	*37*	*19.7*	*193*	*15.1*	*245*	*16.5*	*504*	*19.9*	*979*	*17.8*
Extent=2 & cavity=Y	*16*	*8.5*	*78*	*6.1*	*116*	*7.8*	*109*	*4.3*	*319*	*5.8*
Extent=3	23	12.2	108	8.4	168	11.3	302	11.9	601	10.9
Extent=3 & cavity=N	*14*	*7.4*	*57*	*4.4*	*84*	*5.7*	*219*	*8.6*	*374*	*6.8*
Extent=3 & cavity=Y	*9*	*4.8*	*51*	*4.0*	*84*	*5.7*	*83*	*3.3*	*227*	*4.1*
Extent=not specified	42	22.3	270	21.1	265	17.8	696	27.4	1273	23.2
Extent=ns & cavity=N	*42*	*22.3*	*268*	*20.9*	*264*	*17.8*	*692*	*27.3*	*1266*	*23.1*
Extent=ns & cavity=Y	*0*	*0.0*	*2*	*0.2*	*1*	*0.1*	*4*	*0.2*	*7*	*0.1*
Cavity=N	155	82.4	1072	83.7	1178	79.3	2278	89.8	4683	85.3
Cavity=Y	33	17.6	209	16.3	307	20.7	259	10.2	808	14.7
Mode of diagnosis										
Bacteriological	157	71.4	991	65.2	1193	68.8	2174	79.0	4515	72.5
Histological	12	5.5	163	10.7	179	10.3	132	4.8	486	7.8
Clinical-radiological	34	15.5	261	17.2	277	16.0	284	10.3	856	13.7
Clinical only	0	0.0	3	0.2	5	0.3	7	0.3	15	0.2
Not recorded	17	7.7	101	6.6	81	4.7	155	5.6	354	5.7
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Histology										
Typical (with caseation)	10	-	80	-	55	-	46	-	191	-
Granulomatous inflammation	14	-	144	-	164	-	151	-	473	-
Other	7	-	43	-	29	-	17	-	96	-
Ziehl-Neelzen staining										
Positive	14	-	132	-	144	-	101	-	391	-

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 05

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Risk factors for TB										
Yes	2	0.9	91	6.0	460	26.5	875	31.8	1428	22.9
Diabetes mellitus	0	0.0	17	1.1	236	13.6	452	16.4	705	11.3
Lung cancer	0	0.0	0	0.0	15	0.9	58	2.1	73	1.2
Other malignancies	0	0.0	11	0.7	59	3.4	140	5.1	210	3.4
On cytotoxic drugs	0	0.0	0	0.0	6	0.3	5	0.2	11	0.2
On steroid	1	0.5	5	0.3	14	0.8	15	0.5	35	0.6
Chronic renal failure	0	0.0	2	0.1	9	0.5	32	1.2	43	0.7
HIV	0	0.0	16	1.1	11	0.6	6	0.2	33	0.5
Silicosis	0	0.0	1	0.1	23	1.3	25	0.9	49	0.8
Alcoholism	0	0.0	12	0.8	61	3.5	43	1.6	116	1.9
Drug abuser	1	0.5	19	1.3	48	2.8	9	0.3	77	1.2
Gastrectomy	0	0.0	2	0.1	6	0.3	11	0.4	19	0.3
General debilitation	0	0.0	0	0.0	3	0.2	220	8.0	223	3.6
Others	0	0.0	12	0.8	19	1.1	28	1.0	59	0.9
Factors affecting treatment choices										
Yes	11	5.0	109	7.2	238	13.7	630	22.9	988	15.9
Hepatitis-B carrier	6	2.7	64	4.2	106	6.1	85	3.1	261	4.2
Chronic active hepatitis	0	0.0	5	0.3	16	0.9	13	0.5	34	0.5
Impaired renal function	0	0.0	3	0.2	8	0.5	72	2.6	83	1.3
Chronic renal failure	0	0.0	0	0.0	6	0.3	17	0.6	23	0.4
Impaired vision	2	0.9	11	0.7	50	2.9	334	12.1	397	6.4
Impaired heaering	0	0.0	1	0.1	10	0.6	43	1.6	54	0.9
Known drug reaction	0	0.0	2	0.1	2	0.1	7	0.3	11	0.2
Known drug resistance	1	0.5	6	0.4	4	0.2	9	0.3	20	0.3
Gout	0	0.0	2	0.1	9	0.5	61	2.2	72	1.2
Idiopathic thromb. purpura	1	0.5	2	0.1	2	0.1	6	0.2	11	0.2
Others	0	0.0	23	1.5	39	2.2	78	2.8	140	2.2
6-month short course treatment										
Yes	67	30.5	415	27.3	333	19.2	251	9.1	1066	17.1
2HRZE+4HR	63	28.6	381	25.1	305	17.6	205	7.4	954	15.3
2HRZS+4HR	0	0.0	9	0.6	13	0.7	23	0.8	45	0.7
Other standard regimen based on HRZES										
Yes	92	41.8	709	46.7	882	50.8	1124	40.8	2807	45.1
Treatment side effects										
Yes	72	32.7	581	38.2	807	46.5	1165	42.3	2625	42.2
GI upset	35	15.9	258	17.0	272	15.7	399	14.5	964	15.5
Skin rash	19	8.6	171	11.3	256	14.8	364	13.2	810	13.0
Visual	5	2.3	26	1.7	62	3.6	106	3.9	199	3.2
Transient rise liver enzyme	12	5.5	67	4.4	110	6.3	138	5.0	327	5.3
Hepatitis	9	4.1	71	4.7	143	8.2	191	6.9	414	6.6
Vestibular	1	0.5	15	1.0	13	0.7	22	0.8	51	0.8
Arthropathy	3	1.4	28	1.8	55	3.2	100	3.6	186	3.0
Fever-chill	3	1.4	29	1.9	46	2.7	31	1.1	109	1.8
Dizziness	3	1.4	28	1.8	50	2.9	76	2.8	157	2.5
Thrombocytopenia	0	0.0	7	0.5	7	0.4	20	0.7	34	0.5
Leucopenia	0	0.0	3	0.2	2	0.1	8	0.3	13	0.2
Flush face	1	0.5	3	0.2	6	0.3	10	0.4	20	0.3
Others	7	3.2	40	2.6	69	4.0	132	4.8	248	4.0
Consequence of side effects										
Rx temporarily withheld	38	17.3	257	16.9	437	25.2	687	25.0	1419	22.8
Desensitiation or drug trial	21	9.5	151	9.9	284	16.4	484	17.6	940	15.1
Change in dosage/frequency	10	4.5	132	8.7	188	10.8	265	9.6	595	9.6
Change of drugs	22	10.0	183	12.0	327	18.8	611	22.2	1143	18.4

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 06

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Treatment supervision										
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)										
>90%	149	67.7	945	62.2	1142	65.8	1550	56.3	3786	60.8
>75%	14	6.4	160	10.5	134	7.7	102	3.7	410	6.6
>50%	7	3.2	89	5.9	89	5.1	78	2.8	263	4.2
>25%	8	3.6	30	2.0	62	3.6	50	1.8	150	2.4
≤25%	4	1.8	49	3.2	40	2.3	92	3.3	185	3.0
Not recorded	38	17.3	246	16.2	268	15.4	880	32.0	1432	23.0
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	114	51.8	743	48.9	902	52.0	1337	48.6	3096	49.7
>75%	17	7.7	194	12.8	191	11.0	137	5.0	539	8.7
>50%	22	10.0	119	7.8	119	6.9	87	3.2	347	5.6
>25%	18	8.2	82	5.4	107	6.2	56	2.0	263	4.2
≤25%	9	4.1	89	5.9	103	5.9	142	5.2	343	5.5
Not recorded	40	18.2	292	19.2	313	18.0	993	36.1	1638	26.3
Under supervision by relatives (initial 2 months)										
>90%	3	1.4	3	0.2	9	0.5	22	0.8	37	0.6
>75%	1	0.5	7	0.5	5	0.3	6	0.2	19	0.3
>50%	0	0.0	7	0.5	3	0.2	9	0.3	19	0.3
>25%	0	0.0	5	0.3	4	0.2	5	0.2	14	0.2
≤25%	140	63.6	1002	66.0	1108	63.9	1459	53.0	3709	59.6
Not recorded	76	34.5	495	32.6	606	34.9	1251	45.5	2428	39.0
Under supervision by relatives (subsequent 4 months)										
>90%	2	0.9	2	0.1	12	0.7	28	1.0	44	0.7
>75%	2	0.9	14	0.9	12	0.7	12	0.4	40	0.6
>50%	5	2.3	12	0.8	10	0.6	6	0.2	33	0.5
>25%	3	1.4	8	0.5	5	0.3	5	0.2	21	0.3
≤25%	130	59.1	954	62.8	1060	61.1	1379	50.1	3523	56.6
Not recorded	78	35.5	529	34.8	636	36.7	1322	48.0	2565	41.2
Supplied for unsupervised treatment (initial 2 months)										
<5%	142	64.5	954	62.8	1109	63.9	1527	55.5	3732	59.9
<10%	8	3.6	50	3.3	61	3.5	56	2.0	175	2.8
<15%	6	2.7	61	4.0	48	2.8	32	1.2	147	2.4
<25%	2	0.9	60	3.9	55	3.2	44	1.6	161	2.6
<50%	9	4.1	54	3.6	61	3.5	51	1.9	175	2.8
≥50%	4	1.8	38	2.5	58	3.3	65	2.4	165	2.7
Not recorded	49	22.3	302	19.9	343	19.8	977	35.5	1671	26.8
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	111	50.5	778	51.2	896	51.6	1322	48.0	3107	49.9
<10%	19	8.6	105	6.9	124	7.1	98	3.6	346	5.6
<15%	8	3.6	54	3.6	65	3.7	44	1.6	171	2.7
<25%	5	2.3	70	4.6	72	4.1	53	1.9	200	3.2
<50%	13	5.9	84	5.5	78	4.5	60	2.2	235	3.8
≥50%	18	8.2	110	7.2	148	8.5	115	4.2	391	6.3
Not recorded	46	20.9	318	20.9	352	20.3	1060	38.5	1776	28.5
Defaulted (initial 2 months)										
<5%	156	70.9	1071	70.5	1252	72.2	1638	59.5	4117	66.1
<10%	5	2.3	30	2.0	27	1.6	18	0.7	80	1.3
<15%	2	0.9	19	1.3	19	1.1	11	0.4	51	0.8
<25%	1	0.5	25	1.6	23	1.3	14	0.5	63	1.0
<50%	3	1.4	18	1.2	18	1.0	12	0.4	51	0.8
≥50%	2	0.9	13	0.9	11	0.6	20	0.7	46	0.7
Not recorded	51	23.2	343	22.6	385	22.2	1039	37.8	1818	29.2
Defaulted (subsequent 4 months)										
<5%	150	68.2	978	64.4	1177	67.8	1544	56.1	3849	61.8
<10%	9	4.1	53	3.5	47	2.7	29	1.1	138	2.2
<15%	1	0.5	24	1.6	28	1.6	18	0.7	71	1.1
<25%	2	0.9	39	2.6	29	1.7	12	0.4	82	1.3
<50%	4	1.8	25	1.6	23	1.3	8	0.3	60	1.0
≥50%	2	0.9	27	1.8	18	1.0	14	0.5	61	1.0
Not recorded	52	23.6	373	24.6	413	23.8	1127	41.0	1965	31.6

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 07

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 6 months										
Cured/ treatment completed	91	41.4	526	34.6	439	25.3	443	16.1	1499	24.1
Still on treatment	89	40.5	679	44.7	988	56.9	1275	46.3	3031	48.7
Died	0	0.0	3	0.2	13	0.7	161	5.9	177	2.8
Transferred	1	0.5	70	4.6	36	2.1	30	1.1	137	2.2
Defaulted	3	1.4	43	2.8	42	2.4	64	2.3	152	2.4
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.1	5	0.1
Not recorded	36	16.4	198	13.0	215	12.4	776	28.2	1225	19.7
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Among those cured/ treatment completed										
Bacteriological conversion	59	64.8	292	55.5	241	54.9	283	63.9	875	58.4
Radiological improvement	87	95.6	468	89.0	354	80.6	327	73.8	1236	82.5
Other clinical improvement	15	16.5	113	21.5	99	22.6	79	17.8	306	20.4
No evidence of response	1	1.1	17	3.2	27	6.2	27	6.1	72	4.8
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	5	5.6	44	6.5	126	12.8	165	12.9	340	11.2
Extrapulmonary disease	34	38.2	290	42.7	242	24.5	209	16.4	775	25.6
Extensive disease	17	19.1	98	14.4	160	16.2	171	13.4	446	14.7
Interrupted treatment	24	27.0	154	22.7	237	24.0	378	29.6	793	26.2
Drug resistance	3	3.4	33	4.9	43	4.4	41	3.2	120	4.0
Poor response	6	6.7	48	7.1	70	7.1	65	5.1	189	6.2
Others	16	18.0	122	18.0	310	31.4	544	42.7	992	32.7
Among those died - causes of death:										
TB-related cause	0	-	0	0.0	1	7.7	14	8.7	15	8.5
Not TB-related	0	-	2	66.7	11	84.6	100	62.1	113	63.8
Unknown	0	-	1	33.3	1	7.7	47	29.2	49	27.7
Among those transferred, new sources of care:										
GP	0	0.0	7	10.0	9	25.0	1	3.3	17	12.4
Chest Clinic	0	0.0	0	0.0	2	5.6	0	0.0	2	1.5
Hospital	1	100.0	5	7.1	4	11.1	20	66.7	30	21.9
Outside HK	0	0.0	56	80.0	19	52.8	7	23.3	82	59.9
Not recorded	0	0.0	2	2.9	2	5.6	2	6.7	6	4.4
Among those defaulted										
Never found	2	66.7	29	67.4	24	57.1	34	53.1	89	58.6
Retreated after default	1	33.3	6	14.0	6	14.3	3	4.7	16	10.5
Treatment stopped by doctor	0	0.0	2	4.7	6	14.3	11	17.2	19	12.5
Not recorded	0	0.0	6	14.0	6	14.3	16	25.0	28	18.4

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 08

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 12 months										
Cured/ treatment completed	169	76.8	1113	73.3	1257	72.4	1466	53.3	4005	64.3
Still on treatment	9	4.1	73	4.8	152	8.8	196	7.1	430	6.9
Died	0	0.0	7	0.5	28	1.6	232	8.4	267	4.3
Transferred	3	1.4	74	4.9	34	2.0	31	1.1	142	2.3
Defaulted	5	2.3	63	4.1	61	3.5	66	2.4	195	3.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.1	5	0.1
Not recorded	34	15.5	189	12.4	201	11.6	758	27.5	1182	19.0
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Among those cured/ treatment completed										
Bacteriological conversion	105	62.1	582	52.3	727	57.8	986	67.3	2400	59.9
Radiological improvement	147	87.0	879	79.0	967	76.9	1119	76.3	3112	77.7
Other clinical improvement	67	39.6	449	40.3	439	34.9	406	27.7	1361	34.0
No evidence of response	1	0.6	29	2.6	50	4.0	63	4.3	143	3.6
After treatment completed:										
No relapse	152	89.9	918	82.5	1095	87.1	1269	86.6	3434	85.7
Loss to follow up	10	5.9	139	12.5	69	5.5	59	4.0	277	6.9
Died	0	0.0	1	0.1	6	0.5	20	1.4	27	0.7
TB-related	*0*		*0*		*0*		*2*		*2*	
Not TB-related	*0*		*0*		*4*		*12*		*16*	
Unknown	*0*		*1*		*2*		*5*		*8*	
Relapse	0	0.0	1	0.1	0	0.0	3	0.2	4	0.1
Bacteriological	*0*		*1*		*0*		*2*		*3*	
Histological	*0*		*0*		*0*		*0*		*0*	
Clinico-radiological	*0*		*1*		*0*		*1*		*2*	
Not recorded	7	4.1	54	4.9	87	6.9	115	7.8	263	6.6
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	0	0.0	4	5.5	8	5.3	10	5.1	22	5.1
Extrapulmonary disease	4	44.4	22	30.1	31	20.4	27	13.8	84	19.5
Extensive disease	1	11.1	4	5.5	10	6.6	14	7.1	29	6.7
Interrupted treatment	4	44.4	25	34.2	84	55.3	130	66.3	243	56.5
Drug resistance	0	0.0	14	19.2	20	13.2	18	9.2	52	12.1
Poor response	5	55.6	15	20.5	13	8.6	11	5.6	44	10.2
Others	1	11.1	26	35.6	63	41.4	84	42.9	174	40.5
Among those died - causes of death:										
TB-related cause	0	-	0	0.0	1	3.6	16	6.9	17	6.4
Not TB-related	0	-	4	57.1	24	85.7	157	67.7	185	69.3
Unknown	0	-	3	42.9	3	10.7	59	25.4	65	24.3
Among those transferred, new sources of care:										
GP	0	0.0	3	4.1	6	17.6	1	3.2	10	7.0
Chest Clinic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hospital	1	33.3	4	5.4	7	20.6	15	48.4	27	19.0
Outside HK	2	66.7	59	79.7	17	50.0	11	35.5	89	62.7
Not recorded	0	0.0	8	10.8	4	11.8	4	12.9	16	11.3
Among those defaulted										
Never found	2	40.0	52	82.5	36	59.0	31	47.0	121	62.1
Retreated after default	1	20.0	2	3.2	6	9.8	6	9.1	15	7.7
Treatment stopped by doctor	1	20.0	2	3.2	6	9.8	13	19.7	22	11.3
Not recorded	1	20.0	7	11.1	13	21.3	16	24.2	37	19.0

Annex 1 (b) - (i) ES/NS (cases ever or never seen at chest clinics) - 09

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 24 months										
Cured/ treatment completed	180	81.8	1185	78.0	1405	81.0	1658	60.2	4428	71.1
Still on treatment	0	0.0	3	0.2	4	0.2	2	0.1	9	0.1
Died	0	0.0	7	0.5	31	1.8	247	9.0	285	4.6
Transferred	2	0.9	70	4.6	37	2.1	25	0.9	134	2.2
Defaulted	5	2.3	63	4.1	54	3.1	58	2.1	180	2.9
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.1	5	0.1
Not recorded	33	15.0	191	12.6	202	11.6	759	27.6	1185	19.0
Total	220	100.0	1519	100.0	1735	100.0	2752	100.0	6226	100.0
Among those cured/ treatment completed										
Bacteriological conversion	113	62.8	644	54.3	848	60.4	1169	70.5	2774	62.6
Radiological improvement	157	87.2	944	79.7	1110	79.0	1323	79.8	3534	79.8
Other clinical improvement	87	48.3	564	47.6	568	40.4	562	33.9	1781	40.2
No evidence of response	2	1.1	27	2.3	46	3.3	59	3.6	134	3.0
After treatment completed:										
No relapse	145	80.6	846	71.4	1129	80.4	1301	78.5	3421	77.3
Loss to follow up	27	15.0	268	22.6	182	13.0	173	10.4	650	14.7
Died	0	0.0	2	0.2	14	1.0	91	5.5	107	2.4
TB-related	*0*		*0*		*1*		*5*		*6*	
Not TB-related	*0*		*0*		*10*		*65*		*75*	
Unknown	*0*		*2*		*3*		*20*		*25*	
Relapse	4	2.2	9	0.8	9	0.6	11	0.7	33	0.7
Bacteriological	*2*		*2*		*5*		*6*		*15*	
Histological	*0*		*4*		*3*		*1*		*8*	
Clinico-radiological	*2*		*3*		*1*		*2*		*8*	
Clinical only	*0*		*0*		*0*		*2*		*2*	
Not recorded	4	2.2	60	5.1	71	5.1	82	4.9	217	4.9
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	0	-	0	-	0	-	0	-	0	0.0
Extrapulmonary disease	0	-	1	-	0	-	0	-	1	11.1
Extensive disease	0	-	1	-	1	-	0	-	2	22.2
Interrupted treatment	0	-	0	-	0	-	1	-	1	11.1
Drug resistance	0	-	1	-	1	-	0	-	2	22.2
Poor response	0	-	1	-	1	-	0	-	2	22.2
Others	0	-	0	-	2	-	1	-	3	33.3
Among those died - causes of death:										
TB-related cause	0	-	0	0.0	1	3.2	16	6.5	17	6.0
Not TB-related	0	-	4	57.1	27	87.1	170	68.8	201	70.5
Unknown	0	-	3	42.9	3	9.7	61	24.7	67	23.5
Among those transferred, new sources of care:										
GP	0	0.0	5	7.1	3	8.1	0	0.0	8	6.0
Chest Clinic	0	0.0	1	1.4	0	0.0	0	0.0	1	0.7
Hospital	1	50.0	4	5.7	10	27.0	8	32.0	23	17.2
Outside HK	1	50.0	53	75.7	16	43.2	10	40.0	80	59.7
Not recorded	0	0.0	7	10.0	8	21.6	7	28.0	22	16.4
Among those defaulted										
Never found	2	40.0	46	73.0	35	64.8	34	58.6	117	65.0
Retreated after default	2	40.0	4	6.3	7	13.0	5	8.6	18	10.0
Treatment stopped by doctor	0	0.0	5	7.9	3	5.6	7	12.1	15	8.3
Not recorded	1	20.0	8	12.7	9	16.7	12	20.7	30	16.7

Annex 1 (b) - (ii) ES (cases ever seen at chest clinics) - 01

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Female	104	55.9	707	53.7	447	29.2	548	27.8	1806	36.1
Male	82	44.1	609	46.3	1083	70.8	1421	72.2	3195	63.9
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
First presentation										
Private doctor	32	17.2	327	24.8	235	15.4	134	6.8	728	14.6
Private hospital	4	2.2	22	1.7	24	1.6	13	0.7	63	1.3
GOPC	7	3.8	45	3.4	76	5.0	78	4.0	206	4.1
Chest Clinic	33	17.7	187	14.2	271	17.7	323	16.4	814	16.3
Other DH Clinic	4	2.2	25	1.9	21	1.4	27	1.4	77	1.5
HA Clinic	5	2.7	45	3.4	64	4.2	70	3.6	184	3.7
HA Hospital	95	51.1	590	44.8	765	50.0	1228	62.4	2678	53.5
Mainland	2	1.1	16	1.2	12	0.8	11	0.6	41	0.8
Overseas	1	0.5	2	0.2	4	0.3	2	0.1	9	0.2
Not recorded	3	1.6	57	4.3	58	3.8	83	4.2	201	4.0
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
Symptomatic on presentation										
Y	161	86.6	1108	84.2	1306	85.4	1653	84.0	4228	84.5
N	21	11.3	151	11.5	166	10.8	233	11.8	571	11.4
Not recorded	4	2.2	57	4.3	58	3.8	83	4.2	202	4.0
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
Chest symptoms	122	-	770	-	948	-	1251	-	3091	-
Systemic symptoms	26	-	170	-	215	-	325	-	736	-
Other site-specific symptoms	28	-	276	-	268	-	241	-	813	-
Reason for presentation										
Symptom	156	83.9	1071	81.4	1250	81.7	1559	79.2	4036	80.7
Contact screening	17	9.1	38	2.9	41	2.7	32	1.6	128	2.6
Pre-employment	2	1.1	47	3.6	18	1.2	1	0.1	68	1.4
Pre-emigration	0	0.0	3	0.2	2	0.1	2	0.1	7	0.1
Other body check	2	1.1	66	5.0	74	4.8	83	4.2	225	4.5
Incidental to other illness	5	2.7	27	2.1	73	4.8	189	9.6	294	5.9
Others	0	0.0	4	0.3	3	0.2	9	0.5	16	0.3
Not recorded	4	2.2	60	4.6	69	4.5	94	4.8	227	4.5
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
Disease Classification										
Pulmonary TB only	137	73.7	881	66.9	1129	73.8	1540	78.2	3687	73.7
Extrapulmonary TB only	19	10.2	206	15.7	212	13.9	147	7.5	584	11.7
Both	30	16.1	229	17.4	189	12.4	282	14.3	730	14.6
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
6-month short course treatment										
Yes	67	36.0	411	31.2	329	21.5	245	12.4	1052	21.0
2HRZE+4HR	63	33.9	377	28.6	301	19.7	202	10.3	943	18.9
2HRZS+4HR	0	0.0	9	0.7	13	0.8	23	1.2	45	0.9
Other standard regimen based on HRZES										
Yes	91	48.9	701	53.3	875	57.2	1117	56.7	2784	55.7

Annex 1 (b) - (ii) ES (cases ever seen at chest clinics) - 02

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Treatment supervision										
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)										
>90%	148	79.6	929	70.6	1134	74.1	1534	77.9	3745	74.9
>75%	14	7.5	160	12.2	134	8.8	102	5.2	410	8.2
>50%	7	3.8	89	6.8	89	5.8	78	4.0	263	5.3
>25%	8	4.3	30	2.3	62	4.1	49	2.5	149	3.0
≤25%	4	2.2	47	3.6	40	2.6	91	4.6	182	3.6
Not recorded	5	2.7	61	4.6	71	4.6	115	5.8	252	5.0
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	113	60.8	728	55.3	894	58.4	1323	67.2	3058	61.1
>75%	17	9.1	194	14.7	191	12.5	136	6.9	538	10.8
>50%	22	11.8	119	9.0	119	7.8	87	4.4	347	6.9
>25%	18	9.7	82	6.2	107	7.0	55	2.8	262	5.2
≤25%	9	4.8	87	6.6	103	6.7	141	7.2	340	6.8
Not recorded	7	3.8	106	8.1	116	7.6	227	11.5	456	9.1
Under supervision by relatives (initial 2 months)										
>90%	3	1.6	3	0.2	9	0.6	22	1.1	37	0.7
>75%	1	0.5	7	0.5	5	0.3	6	0.3	19	0.4
>50%	0	0.0	7	0.5	3	0.2	9	0.5	19	0.4
>25%	0	0.0	5	0.4	4	0.3	5	0.3	14	0.3
≤25%	139	74.7	996	75.7	1107	72.4	1453	73.8	3695	73.9
Not recorded	43	23.1	298	22.6	402	26.3	474	24.1	1217	24.3
Under supervision by relatives (subsequent 4 months)										
>90%	2	1.1	2	0.2	12	0.8	28	1.4	44	0.9
>75%	2	1.1	14	1.1	12	0.8	12	0.6	40	0.8
>50%	5	2.7	12	0.9	10	0.7	6	0.3	33	0.7
>25%	3	1.6	8	0.6	5	0.3	5	0.3	21	0.4
≤25%	129	69.4	949	72.1	1059	69.2	1372	69.7	3509	70.2
Not recorded	45	24.2	331	25.2	432	28.2	546	27.7	1354	27.1
Supplied for unsupervised treatment (initial 2 months)										
<5%	141	75.8	948	72.0	1108	72.4	1519	77.1	3716	74.3
<10%	8	4.3	50	3.8	61	4.0	55	2.8	174	3.5
<15%	6	3.2	61	4.6	48	3.1	32	1.6	147	2.9
<25%	2	1.1	60	4.6	55	3.6	44	2.2	161	3.2
<50%	9	4.8	54	4.1	61	4.0	51	2.6	175	3.5
≥50%	4	2.2	36	2.7	58	3.8	63	3.2	161	3.2
Not recorded	16	8.6	107	8.1	139	9.1	205	10.4	467	9.3
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	110	59.1	773	58.7	895	58.5	1314	66.7	3092	61.8
<10%	19	10.2	105	8.0	124	8.1	97	4.9	345	6.9
<15%	8	4.3	54	4.1	65	4.2	44	2.2	171	3.4
<25%	5	2.7	70	5.3	72	4.7	53	2.7	200	4.0
<50%	13	7.0	84	6.4	78	5.1	59	3.0	234	4.7
≥50%	18	9.7	108	8.2	148	9.7	114	5.8	388	7.8
Not recorded	13	7.0	122	9.3	148	9.7	288	14.6	571	11.4
Defaulted (initial 2 months)										
<5%	155	83.3	1065	80.9	1251	81.8	1629	82.7	4100	82.0
<10%	5	2.7	30	2.3	27	1.8	18	0.9	80	1.6
<15%	2	1.1	19	1.4	19	1.2	11	0.6	51	1.0
<25%	1	0.5	25	1.9	23	1.5	14	0.7	63	1.3
<50%	3	1.6	18	1.4	18	1.2	12	0.6	51	1.0
≥50%	2	1.1	13	1.0	11	0.7	20	1.0	46	0.9
Not recorded	18	9.7	146	11.1	181	11.8	265	13.5	610	12.2
Defaulted (subsequent 4 months)										
<5%	149	80.1	973	73.9	1176	76.9	1536	78.0	3834	76.7
<10%	9	4.8	53	4.0	47	3.1	28	1.4	137	2.7
<15%	1	0.5	24	1.8	28	1.8	17	0.9	70	1.4
<25%	2	1.1	39	3.0	29	1.9	12	0.6	82	1.6
<50%	4	2.2	25	1.9	23	1.5	8	0.4	60	1.2
≥50%	2	1.1	27	2.1	18	1.2	14	0.7	61	1.2
Not recorded	19	10.2	175	13.3	209	13.7	354	18.0	757	15.1

Annex 1 (b) - (ii) ES (cases ever seen at chest clinics) - 03

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 6 months										
Cured/ treatment completed	90	48.4	520	39.5	433	28.3	437	22.2	1480	29.6
Still on treatment	89	47.8	669	50.8	984	64.3	1262	64.1	3004	60.1
Died	0	0.0	3	0.2	13	0.8	144	7.3	160	3.2
Transferred	1	0.5	66	5.0	34	2.2	29	1.5	130	2.6
Defaulted	3	1.6	43	3.3	42	2.7	64	3.3	152	3.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.2	5	0.1
Not recorded	3	1.6	15	1.1	22	1.4	30	1.5	70	1.4
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
Outcome at 12 months										
Cured/ treatment completed	168	90.3	1101	83.7	1248	81.6	1451	73.7	3968	79.3
Still on treatment	9	4.8	70	5.3	152	9.9	194	9.9	425	8.5
Died	0	0.0	7	0.5	28	1.8	213	10.8	248	5.0
Transferred	3	1.6	70	5.3	32	2.1	30	1.5	135	2.7
Defaulted	5	2.7	63	4.8	61	4.0	66	3.4	195	3.9
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.2	5	0.1
Not recorded	1	0.5	5	0.4	7	0.5	12	0.6	25	0.5
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0
Outcome at 24 months										
Cured/ treatment completed	179	96.2	1171	89.0	1396	91.2	1639	83.2	4385	87.7
Still on treatment	0	0.0	2	0.2	4	0.3	2	0.1	8	0.2
Died	0	0.0	7	0.5	31	2.0	228	11.6	266	5.3
Transferred	2	1.1	66	5.0	35	2.3	24	1.2	127	2.5
Defaulted	5	2.7	63	4.8	54	3.5	57	2.9	179	3.6
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.1	3	0.2	5	0.1
Not recorded	0	0.0	7	0.5	8	0.5	16	0.8	31	0.6
Total	186	100.0	1316	100.0	1530	100.0	1969	100.0	5001	100.0

Annex 1 (b) - (iii) NS (cases never seen at chest clinics) - 01

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Female	20	58.8	116	57.1	80	39.0	216	27.6	432	35.3
Male	14	41.2	87	42.9	125	61.0	567	72.4	793	64.7
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
First presentation										
Private doctor	1	2.9	11	5.4	3	1.5	12	1.5	27	2.2
Private hospital	0	0.0	1	0.5	1	0.5	4	0.5	6	0.5
GOPC	0	0.0	1	0.5	1	0.5	1	0.1	3	0.2
Chest Clinic	0	0.0	3	1.5	5	2.4	15	1.9	23	1.9
Other DH Clinic	0	0.0	12	5.9	6	2.9	2	0.3	20	1.6
HA Clinic	0	0.0	2	1.0	1	0.5	17	2.2	20	1.6
HA Hospital	4	11.8	41	20.2	49	23.9	311	39.7	405	33.1
Mainland	0	0.0	3	1.5	0	0.0	2	0.3	5	0.4
Overseas	0	0.0	1	0.5	0	0.0	2	0.3	3	0.2
Not recorded	29	85.3	128	63.1	139	67.8	417	53.3	713	58.2
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
Symptomatic on presentation										
Y	4	11.8	65	32.0	53	25.9	326	41.6	448	36.6
N	0	0.0	11	5.4	13	6.3	39	5.0	63	5.1
Not recorded	30	88.2	127	62.6	139	67.8	418	53.4	714	58.3
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
Chest symptoms	2	-	44	-	34	-	248	-	328	-
Systemic symptoms	1	-	9	-	9	-	50	-	69	-
Other site-specific symptoms	1	-	8	-	8	-	26	-	43	-
Reason for presentation										
Symptom	4	11.8	62	30.5	49	23.9	305	39.0	420	34.3
Contact screening	0	0.0	0	0.0	1	0.5	2	0.3	3	0.2
Pre-employment	0	0.0	1	0.5	1	0.5	0	0.0	2	0.2
Pre-emigration	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other body check	0	0.0	8	3.9	8	3.9	8	1.0	24	2.0
Incidental to other illness	1	2.9	2	1.0	5	2.4	32	4.1	40	3.3
Others	0	0.0	0	0.0	1	0.5	6	0.8	7	0.6
Not recorded	29	85.3	130	64.0	140	68.3	430	54.9	729	59.5
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
Disease Classification										
Pulmonary TB only	19	55.9	148	72.9	156	76.1	671	85.7	994	81.1
Extrapulmonary TB only	13	38.2	32	15.8	38	18.5	68	8.7	151	12.3
Both	2	5.9	23	11.3	11	5.4	44	5.6	80	6.5
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
6-month short course treatment										
Yes	0	0.0	4	2.0	4	2.0	6	0.8	14	1.1
2HRZE+4HR	0	0.0	4	2.0	4	2.0	3	0.4	11	0.9
2HRZS+4HR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other standard regimen based on HRZES										
Yes	1	2.9	8	3.9	7	3.4	7	0.9	23	1.9

Annex 1 (b) - (iii) NS (cases never seen at chest clinics) - 02

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Treatment supervision										
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)										
>90%	1	2.9	16	7.9	8	3.9	16	2.0	41	3.3
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
≤25%	0	0.0	2	1.0	0	0.0	1	0.1	3	0.2
Not recorded	33	97.1	185	91.1	197	96.1	765	97.7	1180	96.3
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	1	2.9	15	7.4	8	3.9	14	1.8	38	3.1
>75%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
≤25%	0	0.0	2	1.0	0	0.0	1	0.1	3	0.2
Not recorded	33	97.1	186	91.6	197	96.1	766	97.8	1182	96.5
Under supervision by relatives (initial 2 months)										
>90%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	1	2.9	6	3.0	1	0.5	6	0.8	14	1.1
Not recorded	33	97.1	197	97.0	204	99.5	777	99.2	1211	98.9
Under supervision by relatives (subsequent 4 months)										
>90%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	1	2.9	5	2.5	1	0.5	7	0.9	14	1.1
Not recorded	33	97.1	198	97.5	204	99.5	776	99.1	1211	98.9
Supplied for unsupervised treatment (initial 2 months)										
<5%	1	2.9	6	3.0	1	0.5	8	1.0	16	1.3
<10%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≥50%	0	0.0	2	1.0	0	0.0	2	0.3	4	0.3
Not recorded	33	97.1	195	96.1	204	99.5	772	98.6	1204	98.3
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	1	2.9	5	2.5	1	0.5	8	1.0	15	1.2
<10%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<50%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
≥50%	0	0.0	2	1.0	0	0.0	1	0.1	3	0.2
Not recorded	33	97.1	196	96.6	204	99.5	772	98.6	1205	98.4
Defaulted (initial 2 months)										
<5%	1	2.9	6	3.0	1	0.5	9	1.1	17	1.4
<10%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≥50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	33	97.1	197	97.0	204	99.5	774	98.9	1208	98.6
Defaulted (subsequent 4 months)										
<5%	1	2.9	5	2.5	1	0.5	8	1.0	15	1.2
<10%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
<15%	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
<25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≥50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	33	97.1	198	97.5	204	99.5	773	98.7	1208	98.6

Annex 1 (b) - (iii) NS (cases never seen at chest clinics) - 03

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Outcome at 6 months										
Cured/ treatment completed	1	2.9	6	3.0	6	2.9	6	0.8	19	1.6
Still on treatment	0	0.0	10	4.9	4	2.0	13	1.7	27	2.2
Died	0	0.0	0	0.0	0	0.0	17	2.2	17	1.4
Transferred	0	0.0	4	2.0	2	1.0	1	0.1	7	0.6
Defaulted	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	33	97.1	183	90.1	193	94.1	746	95.3	1155	94.3
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
Outcome at 12 months										
Cured/ treatment completed	1	2.9	12	5.9	9	4.4	15	1.9	37	3.0
Still on treatment	0	0.0	3	1.5	0	0.0	2	0.3	5	0.4
Died	0	0.0	0	0.0	0	0.0	19	2.4	19	1.6
Transferred	0	0.0	4	2.0	2	1.0	1	0.1	7	0.6
Defaulted	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	33	97.1	184	90.6	194	94.6	746	95.3	1157	94.4
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0
Outcome at 24 months										
Cured/ treatment completed	1	2.9	14	6.9	9	4.4	19	2.4	43	3.5
Still on treatment	0	0.0	1	0.5	0	0.0	0	0.0	1	0.1
Died	0	0.0	0	0.0	0	0.0	19	2.4	19	1.6
Transferred	0	0.0	4	2.0	2	1.0	1	0.1	7	0.6
Defaulted	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	33	97.1	184	90.6	194	94.6	743	94.9	1154	94.2
Total	34	100.0	203	100.0	205	100.0	783	100.0	1225	100.0

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 01

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Ever seen at chest clinics						
Yes	1502	83.1	3098	80.2	26	92.9
No	305	16.9	765	19.8	2	7.1
Total	1807	100.0	3863	100.0	28	100.0
Age group						
0 to 19	68	3.8	139	3.6	0	0.0
Female	43		78		0	
Male	25		61		0	
20 to 39	399	22.1	818	21.2	7	25.0
Female	211		430		2	
Male	188		388		5	
40 to 59	538	29.8	1003	26.0	13	46.4
Female	122		240		1	
Male	416		763		12	
60+	802	44.4	1903	49.3	8	28.6
Female	145		429		5	
Male	657		1474		3	
Total	1807	100.0	3863	100.0	28	100.0
Female	521	28.8	1177	30.5	8	28.6
Male	1286	71.2	2686	69.5	20	71.4
Marital status						
Single	394	21.8	789	20.4	5	17.9
Married	1085	60.0	2253	58.3	17	60.7
Separated	15	0.8	29	0.8	1	3.6
Divorce	49	2.7	83	2.1	0	0.0
Widowed	30	1.7	83	2.1	1	3.6
Not recorded	234	12.9	626	16.2	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
Smoking status						
Never	610	33.8	1364	35.3	10	35.7
Ex-smoker	499	27.6	1004	26.0	6	21.4
Current smoker	421	23.3	773	20.0	7	25.0
Not recorded	277	15.3	722	18.7	5	17.9
Total	1807	100.0	3863	100.0	28	100.0
Institution-related						
Yes	237	13.1	611	15.8	6	21.4
No	1385	76.6	2786	72.1	18	64.3
Not recorded	185	10.2	466	12.1	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
Institution						
Client	147	-	363	-	5	-
Staff	20	-	48	-	0	-
Institution type						
Old age home	101	-	254	-	1	-
School	81	-	232	-	0	-
Hospital	14	-	31	-	1	-
Handicapped	7	-	19	-	0	-
Prison	18	-	31	-	4	-
Others	8	-	23	-	0	-

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 02

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Living situation						
Street-sleeper	5	0.3	9	0.2	0	0.0
Cubicle bed space	7	0.4	14	0.4	2	7.1
Institution	104	5.8	263	6.8	5	17.9
Work quarter	11	0.6	22	0.6	0	0.0
Alone (not above)	198	11.0	401	10.4	3	10.7
With friends	51	2.8	80	2.1	0	0.0
With family	1217	67.3	2494	64.6	14	50.0
Not recorded	214	11.8	580	15.0	4	14.3
Residential status						
Permanent resident	1509	83.5	3116	80.7	19	67.9
Chinese immigrant	34	1.9	76	2.0	2	7.1
Imported worker	41	2.3	71	1.8	0	0.0
Tourist - 2 way permit Chinese	6	0.3	15	0.4	1	3.6
Other tourist	1	0.1	3	0.1	0	0.0
Vietnamese	4	0.2	8	0.2	2	7.1
Illegal immigrants	3	0.2	5	0.1	0	0.0
Not recorded	209	11.6	569	14.7	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
Place of birth						
Hong Kong	668	37.0	1280	33.1	4	14.3
Mainland China	802	44.4	1729	44.8	17	60.7
Others	112	6.2	220	5.7	3	10.7
Not recorded	225	12.5	634	16.4	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
Ethnicity						
Chinese	1520	84.1	3171	82.1	22	78.6
Other Asian	72	4.0	118	3.1	2	7.1
Caucasian	7	0.4	13	0.3	0	0.0
Others	2	0.1	5	0.1	0	0.0
Not recorded	206	11.4	556	14.4	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
Previous BCG history						
Yes	453	25.1	916	23.7	2	7.1
No	419	23.2	895	23.2	7	25.0
Unknown	935	51.7	2052	53.1	19	67.9
Total	1807	100.0	3863	100.0	28	100.0
BCG scar						
Yes	452	-	902	-	3	-
No	1007	-	2107	-	19	-
Employment status						
Full-time	461	25.5	916	23.7	2	7.1
Part-time	56	3.1	103	2.7	1	3.6
Retired	555	30.7	1232	31.9	5	17.9
Unemployed	295	16.3	539	14.0	13	46.4
Housewife	158	8.7	352	9.1	3	10.7
Student	61	3.4	137	3.5	0	0.0
Not recorded	221	12.2	584	15.1	4	14.3
Total	1807	100.0	3863	100.0	28	100.0

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 03

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Occupation						
Blue collar	281	15.6	568	14.7	1	3.6
White collar	149	8.2	292	7.6	1	3.6
Medical	4	0.2	7	0.2	0	0.0
Nursing	7	0.4	13	0.3	0	0.0
Paramedical	3	0.2	3	0.1	0	0.0
Supporting health staff	3	0.2	7	0.2	0	0.0
Not applicable	1089	60.3	2289	59.3	22	78.6
Not recorded	271	15.0	684	17.7	4	14.3
Total	1807	100.0	3863	100.0	28	100.0
First presentation						
Private doctor	227	12.6	424	11.0	2	7.1
Private hospital	18	1.0	31	0.8	0	0.0
GOPC	85	4.7	150	3.9	0	0.0
Chest Clinic	188	10.4	484	12.5	4	14.3
Other DH Clinic	18	1.0	52	1.3	5	17.9
HA Clinic	46	2.5	100	2.6	0	0.0
HA Hospital	1029	56.9	2088	54.1	11	39.3
Mainland	9	0.5	20	0.5	1	3.6
Overseas	3	0.2	3	0.1	0	0.0
Not recorded	184	10.2	511	13.2	5	17.9
Total	1807	100.0	3863	100.0	28	100.0
Symptomatic on presentation						
Y	1539	85.2	3022	78.2	21	75.0
N	83	4.6	330	8.5	2	7.1
Not recorded	185	10.2	511	13.2	5	17.9
Total	1807	100.0	3863	100.0	28	100.0
Chest symptoms	1313	-	2530	-	15	-
Systemic symptoms	312	-	562	-	4	-
Other site-specific symptoms	85	-	222	-	1	-
Reason for presentation						
Symptom	1483	82.1	2875	74.4	19	67.9
Contact screening	5	0.3	55	1.4	0	0.0
Pre-employment	3	0.2	33	0.9	0	0.0
Pre-emigration	1	0.1	3	0.1	0	0.0
Other body check	24	1.3	118	3.1	3	10.7
Incidental to other illness	88	4.9	224	5.8	1	3.6
Others	6	0.3	14	0.4	0	0.0
Not recorded	197	10.9	541	14.0	5	17.9
Total	1807	100.0	3863	100.0	28	100.0

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 04

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Contact with TB patients						
Yes	71	3.9	181	4.7	1	3.6
No	1532	84.8	3124	80.9	22	78.6
Not recorded	204	11.3	558	14.4	5	17.9
Total	1807	100.0	3863	100.0	28	100.0
Contact type						
Household	42	-	118	-	1	-
Work	8	-	15	-	0	-
Casual	10	-	19	-	0	-
Time of contact						
Within 2 year	20	-	57	-	0	-
Over 2 year	33	-	68	-	1	-
Previous chemoprophylaxis						
Yes	11	-	22	-	0	-
Reason for chemoprophylaxis						
Contact	0	-	3	-	0	-
Silicosis	1	-	1	-	0	-
HIV	1	-	3	-	0	-
Old scar on CXR	0	-	0	-	0	-
Others	1	-	4	-	0	-
Disease Classification						
Pulmonary TB only	1663	92.0	3423	88.6	26	92.9
Both pulm & extrapulm	144	8.0	440	11.4	2	7.1
Total	1807	100.0	3863	100.0	28	100.0
Case category						
New case	1572	87.0	3363	87.1	13	46.4
Relapse	221	12.2	469	12.1	11	39.3
Treatment after default	13	0.7	29	0.8	4	14.3
Failure of previous treatment	1	0.1	2	0.1	0	0.0
Total	1807	100.0	3863	100.0	28	100.0
Disease characteristics (pulmonary cases)						
Extent = 1	535	29.6	1498	38.8	13	46.4
Extent=1 & cavity=N	*410*	*22.7*	*1310*	*33.9*	*11*	*39.3*
Extent=1 & cavity=Y	*125*	*6.9*	*188*	*4.9*	*2*	*7.1*
Extent = 2	638	35.3	1076	27.9	5	17.9
Extent=2 & cavity=N	*427*	*23.6*	*797*	*20.6*	*3*	*10.7*
Extent=2 & cavity=Y	*211*	*11.7*	*279*	*7.2*	*2*	*7.1*
Extent=3	382	21.1	529	13.7	5	17.9
Extent=3 & cavity=N	*190*	*10.5*	*309*	*8.0*	*1*	*3.6*
Extent=3 & cavity=Y	*192*	*10.6*	*220*	*5.7*	*4*	*14.3*
Extent=not specified	252	13.9	760	19.7	5	17.9
Extent=ns & cavity=N	*249*	*13.8*	*756*	*19.6*	*5*	*17.9*
Extent=ns & cavity=Y	*3*	*0.2*	*4*	*0.1*	*0*	*0.0*
Cavity=N	1276	70.6	3172	82.1	20	71.4
Cavity=Y	531	29.4	691	17.9	8	28.6
6-month short course treatment						
Yes	199	11.0	606	15.7	0	0.0
2HRZE+4HR	174	9.6	537	13.9	0	0.0
2HRZS+4HR	8	0.4	31	0.8	0	0.0
Other standard regimen based on HRZES						
Yes	941	52.1	1747	45.2	3	10.7

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 05

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Treatment supervision						
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)						
>90%	1214	67.2	2411	62.4	24	85.7
>75%	119	6.6	237	6.1	1	3.6
>50%	58	3.2	142	3.7	0	0.0
>25%	32	1.8	83	2.1	1	3.6
≤25%	42	2.3	109	2.8	0	0.0
Not recorded	342	18.9	881	22.8	2	7.1
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)						
>90%	960	53.1	1964	50.8	17	60.7
>75%	178	9.9	332	8.6	4	14.3
>50%	94	5.2	205	5.3	0	0.0
>25%	77	4.3	160	4.1	0	0.0
≤25%	94	5.2	199	5.2	1	3.6
Not recorded	404	22.4	1003	26.0	6	21.4
Under supervision by relatives (initial 2 months)						
>90%	9	0.5	21	0.5	0	0.0
>75%	4	0.2	10	0.3	0	0.0
>50%	3	0.2	10	0.3	0	0.0
>25%	2	0.1	4	0.1	0	0.0
≤25%	1133	62.7	2306	59.7	18	64.3
Not recorded	656	36.3	1512	39.1	10	35.7
Under supervision by relatives (subsequent 4 months)						
>90%	7	0.4	22	0.6	1	3.6
>75%	8	0.4	21	0.5	0	0.0
>50%	9	0.5	20	0.5	0	0.0
>25%	5	0.3	12	0.3	0	0.0
≤25%	1077	59.6	2196	56.8	14	50.0
Not recorded	701	38.8	1592	41.2	13	46.4
Supplied for unsupervised treatment (initial 2 months)						
<5%	1166	64.5	2351	60.9	24	85.7
<10%	54	3.0	108	2.8	0	0.0
<15%	37	2.0	80	2.1	0	0.0
<25%	47	2.6	94	2.4	0	0.0
<50%	42	2.3	94	2.4	0	0.0
≥50%	33	1.8	91	2.4	0	0.0
Not recorded	428	23.7	1045	27.1	4	14.3
Supplied for unsupervised treatment (subsequent 4 months)						
<5%	956	52.9	1960	50.7	17	60.7
<10%	109	6.0	213	5.5	1	3.6
<15%	58	3.2	107	2.8	1	3.6
<25%	57	3.2	124	3.2	2	7.1
<50%	60	3.3	135	3.5	0	0.0
≥50%	119	6.6	231	6.0	0	0.0
Not recorded	448	24.8	1093	28.3	7	25.0
Defaulted (initial 2 months)						
<5%	1245	68.9	2556	66.2	22	78.6
<10%	23	1.3	47	1.2	0	0.0
<15%	13	0.7	27	0.7	0	0.0
<25%	22	1.2	44	1.1	0	0.0
<50%	13	0.7	29	0.8	1	3.6
≥50%	11	0.6	31	0.8	0	0.0
Not recorded	480	26.6	1129	29.2	5	17.9
Defaulted (subsequent 4 months)						
<5%	1154	63.9	2380	61.6	17	60.7
<10%	47	2.6	95	2.5	2	7.1
<15%	22	1.2	42	1.1	0	0.0
<25%	22	1.2	49	1.3	0	0.0
<50%	23	1.3	49	1.3	0	0.0
≥50%	18	1.0	36	0.9	0	0.0
Not recorded	521	28.8	1212	31.4	9	32.1

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 06

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Outcome at 6 months						
Cured/ treatment completed	345	19.1	913	23.6	1	3.6
Still on treatment	1023	56.6	1883	48.7	21	75.0
Died	63	3.5	133	3.4	1	3.6
Transferred	32	1.8	74	1.9	5	17.9
Defaulted	39	2.2	93	2.4	0	0.0
Failure	0	0.0	0	0.0	0	0.0
Not recorded	305	16.9	767	19.9	0	0.0
Total	1807	100.0	3863	100.0	28	100.0
Outcome at 12 months						
Cured/ treatment completed	1187	65.7	2447	63.3	1	3.6
Still on treatment	146	8.1	289	7.5	18	64.3
Died	92	5.1	193	5.0	4	14.3
Transferred	37	2.0	79	2.0	3	10.7
Defaulted	52	2.9	116	3.0	2	7.1
Failure	0	0.0	0	0.0	0	0.0
Not recorded	293	16.2	739	19.1	0	0.0
Total	1807	100.0	3863	100.0	28	100.0

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 07

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Outcome at 24 months						
Cured/ treatment completed	1316	72.8	2727	70.6	14	50.0
Still on treatment	6	0.3	6	0.2	0	0.0
Died	97	5.4	203	5.3	5	17.9
Transferred	35	1.9	71	1.8	4	14.3
Defaulted	57	3.2	115	3.0	4	14.3
Failure	0	0.0	0	0.0	0	0.0
Not recorded	296	16.4	741	19.2	1	3.6
Total	1807	100.0	3863	100.0	28	100.0
Among those cured/ treatment completed						
Bacteriological conversion	1290	98.0	2557	93.8	13	92.9
Radiological improvement	1262	95.9	2507	91.9	13	92.9
Other clinical improvement	408	31.0	846	31.0	4	28.6
No evidence of response	3	0.2	7	0.3	0	0.0
After treatment completed:						
No relapse	1010	76.7	2133	78.2	13	92.9
Loss to follow up	207	15.7	384	14.1	1	7.1
Died	31	2.4	80	2.9	0	0.0
TB-related	*1*		*4*		*0*	
Not TB-related	*22*		*59*		*0*	
Unknown	*7*		*16*		*0*	
Relapse	13	1.0	21	0.8	0	0.0
Bacteriological	*8*		*12*		*0*	
Histological	*4*		*2*		*0*	
Clinico-radiological	*1*		*7*		*0*	
Not recorded	55	4.2	109	4.0	0	0.0
Among those still on treatment						
Reasons for still on treatment:						
Retreatment case	0	-	0	-	0	-
Extrapulmonary disease	0	-	0	-	0	-
Extensive disease	2	-	2	-	0	-
Interrupted treatment	1	-	1	-	0	-
Drug resistance	2	-	2	-	0	-
Poor response	2	-	2	-	0	-
Others	3	-	3	-	0	-
Among those died - causes of death:						
TB-related cause	4	4.1	11	5.4	1	20.0
Not TB-related	68	70.1	141	69.5	2	40.0
Unknown	25	25.8	51	25.1	2	40.0
Among those transferred, new sources of care:						
GP	4	11.4	5	7.0	0	0.0
Chest Clinic	0	0.0	1	1.4	0	0.0
Hospital	5	14.3	10	14.1	0	0.0
Outside HK	20	57.1	43	60.6	4	100.0
Not recorded	6	17.1	12	16.9	0	0.0
Among those defaulted						
Never found	41	71.9	76	66.1	4	100.0
Retreated after default	6	10.5	13	11.3	0	0.0
Treatment stopped by doctor	4	7.0	8	7.0	0	0.0
Not recorded	6	10.5	18	15.7	0	0.0

Annex 1 (c) - ES/NS (cases ever or never seen at chest clinics) - 08

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%
Drug susceptibility pattern						
Streptomycin - R	110	7.8	220	7.7	19	67.9
Streptomycin - S	1296	92.2	2626	92.3	9	32.1
Isoniazid - R	70	5.0	132	4.6	28	100.0
Isoniazid - S	1337	95.0	2715	95.4	0	0.0
Rifampicin - R	21	1.5	37	1.3	28	100.0
Rifampicin - S	1385	98.5	2809	98.7	0	0.0
Ethambutol - R	14	1.0	16	0.6	10	37.0
Ethambutol - S	1392	99.0	2829	99.4	17	63.0
Pyrazinamide - R	10	25.0	12	16.2	7	33.3
Pyrazinamide - S	30	75.0	62	83.8	14	66.7
Ofloxacin - R	5	11.6	6	6.3	4	15.4
Ofloxacin - S	38	88.4	89	93.7	22	84.6
Smear conversion rates						
1. Smear at 2 month = N (a)	911				12	
2. Smear at 2 month = P (b)	116				6	
2. Sm 2m (P); Sm 3m (N) (c)	68				0	
2. Sm 2m (P); Sm 3m (P) (d)	27				4	
2. Sm 2m (P); Sm 3m (U) (e)	21				2	
3. Smear at 2 month = U (f)	780				10	
3. Sm 2m (U); Sm 3m (N) (g)	259				4	
3. Sm 2m (U); Sm 3m (P) (h)	9				0	
3. Sm 2m (U); Sm 3m (U) (i)	512				6	
Overall percentage of smear conversion at 2m = (a)/ [(a)+(b)]	88.7		-		66.7	
Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	97.2		-		80.0	
Culture conversion rates						
1. Culture at 2 month = N (a)			1569		7	
2. Culture at 2 month = P (b)			277		10	
2. Cu 2m (P); Cu 3m (N) (c)			131		1	
2. Cu 2m (P); Cu 3m (P) (d)			38		5	
2. Cu 2m (P); Cu 3m (U) (e)			108		4	
3. Culture at 2 month = U (f)			2017		11	
3. Cu 2m (U); Cu 3m (N) (g)			538		3	
3. Cu 2m (U); Cu 3m (P) (h)			20		0	
3. Cu 2m (U); Cu 3m (U) (i)			1459		8	
Overall percentage of culture conversion at 2m = (a)/ [(a)+(b)]	-		85.0		41.2	
Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	-		97.5		68.8	

Annex 1 (d) - ES/NS (cases ever or never seen at chest clinics) - 01

Group	New pulmonary smear +ve		ReRx pulmonary smear +ve	
	N	%	N	%
Ever seen at chest clinics				
Yes	1314	83.6	188	80.0
No	258	16.4	47	20.0
Total	1572	100.0	235	100.0
Age group				
0 to 19	67	4.3	1	0.4
Female	43		0	
Male	24		1	
20 to 39	379	24.1	20	8.5
Female	208		3	
Male	171		17	
40 to 59	470	29.9	68	28.9
Female	107		15	
Male	363		53	
60+	656	41.7	146	62.1
Female	124		21	
Male	532		125	
Total	1572	100.0	235	100.0
Female	482	30.7	39	16.6
Male	1090	69.3	196	83.4
Disease Classification				
Pulmonary TB only	1440	91.6	223	94.9
Both pulmon and extrapulm	132	8.4	12	5.1
Total	1572	100.0	235	100.0
6-month short course treatment				
Yes	194	12.3	5	2.1
2HRZE+4HR	170	10.8	4	1.7
2HRZS+4HR	8	0.5	0	0.0
Other standard regimen based on HRZES				
Yes	818	52.0	123	52.3
Outcome at 6 months				
Cured/ treatment completed	335	21.3	10	4.3
Still on treatment	861	54.8	162	68.9
Died	52	3.3	11	4.7
Transferred	30	1.9	2	0.9
Defaulted	32	2.0	7	3.0
Failure	0	0.0	0	0.0
Not recorded	262	16.7	43	18.3
Total	1572	100.0	235	100.0
Outcome at 12 months				
Cured/ treatment completed	1056	67.2	131	55.7
Still on treatment	116	7.4	30	12.8
Died	77	4.9	15	6.4
Transferred	36	2.3	1	0.4
Defaulted	43	2.7	9	3.8
Failure	0	0.0	0	0.0
Not recorded	244	15.5	49	20.9
Total	1572	100.0	235	100.0

Annex 1 (d) - ES/NS (cases ever or never seen at chest clinics) - 02

Group	New pulmonary smear +ve		ReRx pulmonary smear +ve	
	N	%	N	%
Outcome at 24 months				
Cured/ treatment completed	1158	73.7	158	67.2
Still on treatment	5	0.3	1	0.4
Died	81	5.2	16	6.8
Transferred	33	2.1	2	0.9
Defaulted	45	2.9	12	5.1
Failure	0	0.0	0	0.0
Not recorded	250	15.9	46	19.6
Total	1572	100.0	235	100.0
Among those cured/ treatment completed				
Bacteriological conversion	1140	98.4	150	94.9
Radiological improvement	1123	71.4	139	59.1
Other clinical improvement	365	23.2	43	18.3
No evidence of response	2	0.1	1	0.4
After treatment completed:				
No relapse	894	56.9	116	49.4
Loss to follow up	183	11.6	24	10.2
Died	25	1.6	6	2.6
TB-related	*0*		*1*	
Not TB-related	*17*		*5*	
Unknown	*7*		*0*	
Relapse	9	0.6	4	1.7
Bacteriological	*6*		*2*	
Histological	*0*		*0*	
Clinico-radiological	*3*		*2*	
Not recorded	47	3.0	8	3.4
Among those still on treatment				
Reasons for still on treatment:				
Retreatment case	0	-	0	-
Extrapulmonary disease	0	-	0	-
Extensive disease	1	-	1	-
Interrupted treatment	1	-	0	-
Drug resistance	2	-	0	-
Poor response	1	-	1	-
Others	2	-	1	-
Among those died - causes of death:				
TB-related cause	3	3.7	1	6.3
Not TB-related	57	70.4	11	68.8
Unknown	21	25.9	4	25.0
Among those transferred, new sources of care:				
GP	3	9.1	1	50.0
Chest Clinic	0	0.0	0	0.0
Hospital	5	15.2	0	0.0
Outside HK	19	57.6	1	50.0
Not recorded	6	18.2	0	0.0
Among those defaulted				
Never found	30	66.7	11	91.7
Retreated after default	6	13.3	0	0.0
Treatment stopped by doctor	3	6.7	1	8.3
Not recorded	6	13.3	0	0.0

Annex 1 (e) - Treatment defaulters - 01

Ever seen at chest clinics	N	%
Yes	179	99.4
No	1	0.6
Total	180	100.0

Age group

0 to 19	5	2.8
Female	1	
Male	4	
20 to 39	63	35.0
Female	20	
Male	43	
40 to 59	54	30.0
Female	8	
Male	46	
60+	58	32.2
Female	11	
Male	47	
Total	180	100.0
Female	40	22.2
Male	140	77.8

Marital status

Single	61	33.9
Married	94	52.2
Separated	0	0.0
Divorce	9	5.0
Widowed	3	1.7
Not recorded	13	7.2
Total	180	100.0

Smoking status

Never	38	21.1
Ex-smoker	43	23.9
Current smoker	81	45.0
Not recorded	18	10.0
Total	180	100.0

Institution-related

Yes	12	6.7
No	157	87.2
Not recorded	11	6.1
Total	180	100.0

Institution

Client	6	-
Staff	1	-

Institution type

Old age home	0	-
School	4	-
Hospital	0	-
Handicapped	0	-
Prison	7	-
Others	0	-

Annex 1 (e) - Treatment defaulters - 02

Living situation	N	%
Street-sleeper	1	0.6
Cubicle bed space	2	1.1
Institution	5	2.8
Work quarter	2	1.1
Alone (not above)	50	27.8
With friends	8	4.4
With family	94	52.2
Not recorded	18	10.0

Residential status		
Permanent resident	148	82.2
Chinese immigrant	6	3.3
Imported worker	9	5.0
Tourist - 2 way permit Chinese	0	0.0
Other tourist	0	0.0
Vietnamese	2	1.1
Illegal immigrants	1	0.6
Not recorded	14	7.8
Total	180	100.0

Place of birth		
Hong Kong	77	42.8
Mainland China	70	38.9
Others	21	11.7
Not recorded	12	6.7
Total	180	100.0

Ethnicity		
Chinese	149	82.8
Other Asian	18	10.0
Caucasian	0	0.0
Others	1	0.6
Not recorded	12	6.7
Total	180	100.0

Employment status		
Full-time	53	29.4
Part-time	9	5.0
Retired	44	24.4
Unemployed	52	28.9
Housewife	10	5.6
Student	0	0.0
Not recorded	12	6.7
Total	180	100.0

Occupation		
Blue collar	37	20.6
White collar	13	7.2
Medical	0	0.0
Nursing	0	0.0
Paramedical	0	0.0
Supporting health staff	0	0.0
Not applicable	113	62.8
Not recorded	17	9.4
Total	180	100.0

Annex 1 (e) - Treatment defaulters - 03

First presentation	N	%
Private doctor	16	8.9
Private hospital	1	0.6
GOPC	6	3.3
Chest Clinic	42	23.3
Other DH Clinic	9	5.0
HA Clinic	7	3.9
HA Hospital	87	48.3
Mainland	2	1.1
Overseas	0	0.0
Not recorded	10	5.6
Total	180	100.0

Symptomatic on presentation

Y	132	73.3
N	38	21.1
Not recorded	10	5.6
Total	180	100.0

Chest symptoms	107	-
Systemic symptoms	17	-
Other site-specific symptoms	23	-

Reason for presentation

Symptom	124	68.9
Contact screening	7	3.9
Pre-employment	7	3.9
Pre-emigration	0	0.0
Other body check	16	8.9
Incidental to other illness	13	7.2
Others	2	1.1
Not recorded	11	6.1
Total	180	100.0

Contact with TB patients

Yes	12	6.7
No	158	87.8
Not recorded	10	5.6
Total	180	100.0

Contact type

Household	7	-
Work	1	-
Casual	1	-

Time of contact

Within 2 year	6	-
Over 2 year	3	-

Annex 1 (e) - Treatment defaulters - 04

Previous chemoprophylaxis	N	%
Yes	2	-

Reason for chemoprophylaxis

Contact	0	-
Silicosis	0	-
HIV	0	-
Old scar on CXR	0	-
Others	0	-

Disease Classification

Pulmonary TB only	145	80.6
Extrapulmonary TB only	11	6.1
Both	24	13.3
Total	180	100.0

Case category

New case	144	80.0
Relapse	23	12.8
Treatment after default	12	6.7
Failure of previous treatment	1	0.6
Total	180	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	60	35.5
Pretreatment culture +ve	115	68.0
Extent = 1	85	50.3
Extent=1 & cavity=N	*75*	*44.4*
Extent=1 & cavity=Y	*10*	5.9
Extent = 2	45	26.6
Extent=2 & cavity=N	*35*	*20.7*
Extent=2 & cavity=Y	*10*	*5.9*
Extent=3	23	13.6
Extent=3 & cavity=N	*13*	*7.7*
Extent=3 & cavity=Y	*10*	*5.9*
Extent=not specified	16	9.5
Extent=ns & cavity=N	*16*	*9.5*
Extent=ns & cavity=Y	*0*	*0.0*
Cavity=N	139	82.2
Cavity=Y	30	17.8

6-month short course treatment

Yes	9	5.0
2HRZE+4HR	5	2.8
2HRZS+4HR	0	0.0

Other standard regimen based on HRZES

Yes	66	36.7

Among those defaulted

Never found	117	65.0
Retreated after default	18	10.0
Treatment stopped by doctor	15	8.3
Not recorded	30	16.7

Annex 1 (e) - Treatment defaulters - 05

Treatment supervision	N	%
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)		
>90%	48	26.7
>75%	25	13.9
>50%	22	12.2
>25%	19	10.6
≤25%	26	14.4
Not recorded	40	22.2
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)		
>90%	19	10.6
>75%	10	5.6
>50%	16	8.9
>25%	16	8.9
≤25%	32	17.8
Not recorded	87	48.3
Under supervision by relatives (initial 2 months)		
>90%	1	0.6
>75%	1	0.6
>50%	0	0.0
>25%	0	0.0
≤25%	89	49.4
Not recorded	89	49.4
Under supervision by relatives (subsequent 4 months)		
>90%	0	0.0
>75%	1	0.6
>50%	1	0.6
>25%	2	1.1
≤25%	66	36.7
Not recorded	110	61.1
Supplied for unsupervised treatment (initial 2 months)		
<5%	98	54.4
<10%	8	4.4
<15%	6	3.3
<25%	2	1.1
<50%	7	3.9
≥50%	4	2.2
Not recorded	55	30.6
Supplied for unsupervised treatment (subsequent 4 months)		
<5%	63	35.0
<10%	11	6.1
<15%	1	0.6
<25%	3	1.7
<50%	8	4.4
≥50%	4	2.2
Not recorded	90	50.0
Defaulted (initial 2 months)		
<5%	61	33.9
<10%	8	4.4
<15%	7	3.9
<25%	12	6.7
<50%	22	12.2
≥50%	23	12.8
Not recorded	47	26.1
Defaulted (subsequent 4 months)		
<5%	26	14.4
<10%	6	3.3
<15%	3	1.7
<25%	8	4.4
<50%	16	8.9
≥50%	32	17.8
Not recorded	89	49.4

Annex 1 (f) Sources completing Programme Forms

Sources completing Programme Forms	PFA	PFB1	PFB2	PFC	PFD
Chest Clinics	3397	4960	4951	4966	4839
Hospital Authority	1660	55	39	25	18
Private Practitioners/ Private Hospitals	4	0	0	0	0
Correctional Services and Others	46	23	22	11	6
Not Recorded	1119	1188	1214	1224	1363
Total	6226	6226	6226	6226	6226

Breakdown for Hospital Authority:

Alice Ho Miu Ling Nethersole Hospital	0	1	0	0	0
Caritas Medical Centre	1	0	0	0	0
Castle Peak Hospital	8	7	7	6	3
Duchess of Kent Children Hospital	0	0	0	0	0
Fung Yiu King Hospital	0	0	0	0	0
Grantham Hospital	248	1	0	0	0
Haven of Hope Hospital	118	3	3	2	2
Kowloon Hospital	161	0	0	0	0
Kwong Wah Hospital	76	0	0	1	0
North District Hospital	93	1	1	1	1
Nam Long Hospital	0	0	0	0	0
Our Lady of Maryknoll Hospital	9	0	0	0	0
Pamela Youde Nethersole Eastern Hospital	1	0	0	0	0
Pok Oi Hospital	5	0	0	0	0
Prince of Wales Hospital	78	0	0	0	0
Princess Margaret Hospital	123	0	0	0	0
Queen Elizabeth Hospital	155	22	9	5	5
Queen Mary Hospital	21	12	12	3	1
Ruttonjee Hospital	0	0	0	0	0
Shatin Hospital	0	0	0	0	0
Tai Po Hospital	13	1	1	1	1
Tseung Kwan O Hosital	56	0	0	0	0
Tuen Mun Hospital	200	3	3	3	3
Tung Wah Eastern Hospital	1	0	0	0	0
Tung Wah Hospital	2	0	0	0	0
United Christian Hospital	136	3	2	2	1
Wong Tai Sin Hospital	155	1	1	1	1
Wong Chuk Hang Hospital	0	0	0	0	0
Yan Chai Hospital	0	0	0	0	0
Total	1660	55	39	25	18

HKID/ Passport/ Birth certificate no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Clinic/ Hospital no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name: _ DOS: _ _/_ _/_ _ _ _

PFA - To be completed at around DOS (for TB patients) *[DOS = date of starting treatment (or, if patient defaulted>2 months before starting anti-TB treatment, put down the date of diagnosis)]*

Part (A) Basic information

TB notified: N / Y : Date: _ _ / _ _ / _ _ _ _ Sex: .M / .F Age: _ _ years Date of birth : _ _ / _ _ / _ _ _ _

Marital status: 1.single/ 2.married/ 3.separated/ 4.divorce/ 5.widowed Smoking status: 1.never/ 2.ex-smoker/ 3.current smokers

Institution-related: N / Y : 1.Client / 2.Staff Type: 1.Old age home/ 2.School/ 3. Hospital/ 4.Handicapped/ 5.Prison/ 6.Others

Name of institution: _____

Living situation: 1.street-sleeper/ 2.cubicle bed space/ 3.institution/ 4.work quarter/ 5.alone (but not 1. to 4.)/ 6.with friends/ 7.with family

Resident status: 1.PermanentResident/ 2.ChineseNewImmigrant(inHK<7yr)/ 3.ImportedWorker/ 4.Tourist-2wayPermitChinese/ 5.OtherTourist/ 6.Vietnamese/ 7.IllegalImmigrants

Place of birth: 1.Hong Kong / 2.Mainland/ 3.Others _____

Ethnicity: 1.Chinese/ 2.Other Asian/ 3.Caucasian/ 4.Other _____

Previous BCG history: N / Y / Unknown BCG scar: N / Y

Employment status (including self-employment) at DOS: 1.Full-time/ 2.Part-time/ 3.Retired/ 4.Unemployed/ 5.Housewife/ 6.Student

Occupation (current or last): 1.Blue collar/ 2.White collar/ 3.Medical/ 4.Nursing/ 5.Paramedical/ 6.Supporting health staff/ 7.Not applicable

Job title: _____

Part (B) Information on this episode of TB:

First presentation to: 1. Private doctor / 2.Private Hospital / 3.GOPC / 4.Chest Clinic / 5.Other DH Clinic / 6 .HA Clinic / 7. HA Hospital / 8. Mainland / 9.Overseas

Symptomatic on presentation: N / Y: 1.Chest symptoms / 2.Systemic Symptoms / 3.Other site-specific symptoms

Reason for presentation: 1. Symptom / 2.Contact Screening / 3. Pre-employment / 4.Pre-emigration/ 5.Other body check / 6. Incidental to other illness / 7. Others: _____

Contact with TB patients: N / Y: 1.Household / 2.Work / 3.Casual
1. within 2 year / 2. over 2 year

Previous chemoprophylaxis: N / Y : reason: 1. Contact / 2. Silicosis / 3. HIV / 4. Old scar on CXR / 5. Others _____

Drugs & duration: _____

Part (C) Case category (choose 1 item only):

1. New case (<1m previous Rx)
2. Relapse case.
3. Treatment after default.
4. Failure of previous treatment.

Date of last treatment (mm/yyyy): _ _ / _ _ _ _ Duration of last treatment: _ _ months

5. Others, specify: _____

Part (D) Disease classification: (please circle ≥1 item)

1. Pulmonary tuberculosis
   Extent of disease: 1minimal (total area< RUL)/ 2moderate (> RUL)/ 3advanced (> 1 lung) Cavity: N / Y

Extra-pulmonary tuberculosis:

2. Pleura
3. Lymph node
4. Meninges
5. Miliary
6. Abdomen
7. Bone and joint (other than spine)
8. Spine
9. Genito-urinary tract
10. Naso/oro-pharynx
11. Larynx
12. Pericardium
13. Skin
14. Other site(1), specify _____
15. Other site(2), specify _____
16. Other site(3), specify _____

Completed by: _____ (name) Tel: _____ Fax: _____

Institution: 1.Chest Clinic/ 2.Chest Hospital/ 3.General Hospital/ 4.Private Practice. ; Name (and ward) of institution: _____

(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)
(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

HKID/ Passport/ Birth certificate no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Clinic/ Hospital no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name: _ DOS: _ _/_ _/_ _ _ _

PFB1 – To be completed at 6 month from DOS (for TB patients)

Part (E) Mode of TB diagnosis: 1. Bacteriological/ 2.Histological/ 3.Clinical-radiological/ 4.Clinical only (choose 1 item, priority from left to right)

Bacteriological examination for MTB: P (positive), N (negative) , U (not done), NTM (Non-tuberculous Mycobacteria)

	Sputum			**Other type of specimen:** 1.gastric aspirate/ 2.pleural fluid/ 3.bronchial washing/ 4.urine/ 5.biopsy or others, specify: _____		
	Pre-treatment	2 months	3 months	Pre-treatment	2 months	3 months
Smear	P / N / U	P / N / U	P / N / U	P / N / U	P / N / U	P / N / U
Culture	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM

- Histological result from (site) _____: 1 Typical (with caseation) / 2.Granulomatous inflammation / 3.other
  Ziehl-Neelzen staining: P / N / U
- **If pre-treatment culture is positive for MTB, is the ST favourable? (i.e., sensitive to HRES)**: N / Y / U (ST not done)

If unfavourable ST, please mark S (sensitive) or R (resistant) for all ST done:

Isoniazid (H)	: S / R	Pyrazinamide	: S / R	Cycloserine	: S / R
Rifampicin (R)	: S / R	Ofloxacin	: S / R	Other (1) _____	: S / R
Ethambutol (E)	: S / R	Ethionamide	: S / R	Other (2) _____	: S / R
Streptomycin (S)	: S / R	Kanamycin	: S / R		

Part (F) Risk factors for TB: N / Y (If Y, please circle whichever applicable)

1. Diabetes mellitus
2. Lung cancer
3. Other malignancies
4. On cytotoxic drugs
5. On steroid
6. Chronic renal failure
7. HIV
8. Silicosis
9. Alcoholism
10. Drug abuser
11. Gastrectomy
12. General debilitation (e.g., due to old age, immobility, stroke, etc.)
13. Other(1), specify_____
14. Other(2), specify_____
15. Other(3), specify_____

Part (G) Factors affecting treatment choices: N / Y (If Y, please circle whichever applicable)

1. Hepatitis-B carrier
2. Chronic active hepatitis
3. Impaired renal function
4. Chronic renal failure (require dialysis, etc.)
5. Impaired vision
6. Impaired hearing
7. Known drug reaction
8. Known drug resistance
9. Gout
10. Idiopathic thrombocytopenic purpura
11. Other(1), specify_____
12. Other(2), specify_____
13. Other(3), specify_____

Part (H) Other co-morbidities: N / Y : 1. _____ 2. _____ 3. _____

Part (I) Treatment regimen:

6-month short course treatment: N / Y: 1. [2HRZE+4HR] / 2. [2HRZS+4HR]

If neither of the above 2 regimens, please complete the following two questions:

Other standard regimens based on HRZES (at least HRZ in initial and HR in continuation phase): N / Y

Drugs that have been used (for at least over 1 month): 1 Isoniazid (H) / 2 Rifampicin (R) / 3 Ethambutol (E) / 4 Streptomycin (S) / 5 Pyrazinamide (Z) / 6 Ofloxacin / 7 Levofloxacin / 8 Ethionamide / 9 Prothionamide / 10 Kanamycin / 11 Cycloserine / 12 PAS /

12 Other(1) _____ / 13 Other(2) _____ / 14 Other (3) _____

Completed by: _____ (name) Tel: _____ Fax: _____

Institution: 1.Chest Clinic/ 2.Chest Hospital/ 3.General Hospital/ 4.Private Practice. ; Name (and ward) of institution: _____

(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)
(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

HKID/ Passport/ Birth certificate no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Clinic/ Hospital no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name: _ DOS: _ _/_ _/_ _ _ _

PFB2 – To be completed at 6 month from DOS (for TB patients)

Part (J) Treatment side effects: N / Y (If Y, please circle)

1.GI upset/ 2.skin rash/ 3.visual/ 4.transient rise of liver enzyme/ 5. hepatitis/ 6.vestibular/ 7.arthropathy/ 8.fever-chill/ 9.dizziness/ 10.thrombocytopenia/ 11.leucopenia/ 12.flush face/ 13.other(1) _____ / 14.other(2) _____ /15.other(3) _____

Treatment temporarily withheld for side effects: N / Y

Desensitisation or drug trial required: N / Y

Change in dosage or frequency required: N / Y

Change of drugs required: N / Y

Part (K) Treatment Supervision:

Proportion of doses:	Initial 2 month	Subsequent 4 months (up to 6 month from DOS)
Under DOT at chest clinic, hospital, CNS or other health staff	>90% >75% >50% >25% ≤25%	>90% >75% >50% >25% ≤25%
Under supervison by relatives	>90% >75% >50% >25% ≤25%	>90% >75% >50% >25% ≤25%
Supplied for unsupervised treatment	<5% <10% <15% < 25% <50% ≥50%	<5% <10% <15% < 25% <50% ≥50%
Defaulted	<5% <10% <15% < 25% <50% ≥50%	<5% <10% <15% < 25% <50% ≥50%

Part (L) Outcome at 6 months (please √, circle and/ or fill in the spaces provided as appropriate)

(1) Cured/ treatment completed □ Date treatment stopped (mm/yyyy): ____/_____

Status at completion:

- Bacteriological conversion □
- Radiological improvement □
- Other clinical improvement □
- No available evidence of response □

(2) Treatment incomplete □

- Still on treatment, reason: 1.retreatment/ 2.extrapulm./ 3.extensive/ 4.interrupted treatment/ 5.drug resistance/ 6.poor response/ 7.others, specify: _____
- Died □ Cause: 1.TB-related/ 2.Not TB-related/ 3.Unknown Date of death (mm/yyyy): ____/_____

(3) Transferred □ to: 1.GP/ 2.Chest Clinic/ 3.Hospital/ 4.Outside HK Details: _____

Last treatment date (mm/yyyy): ____/_____

(4) Defaulted (defaulted treatment for a continuous period > 2m) □

- Never found □ Last visit date (mm/yyyy): ____/_____
- Retreated after default □ Date treatment re-started (mm/yyyy): ____/_____
- Treatment stopped by doctor □ Last treatment date (mm/yyyy): ____/_____

(5) Failure (persistent positive bacteriology and treatment stopped) □

(6) Wrong/ revised diagnosis □ Last treatment date (mm/yyyy): ____/_____

- New diagnosis: _____

(7) Others □ , specify: _____

Completed by: _____ (name) Tel: _____ Fax: _____

Institution: 1.Chest Clinic/ 2.Chest Hospital/ 3.General Hospital/ 4.Private Practice; Name (and ward) of institution: _____

(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)
(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

HKID/ Passport/ Birth certificate no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Clinic/ Hospital no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name: _ DOS: _ _/_ _/_ _ _ _

PFC – To be completed at 12 month from DOS (for TB patients)

Part (M) Bacteriological examination for MTB: P (positive), N (negative) , U (not done), NTM (Non-tuberculous Mycobacteria)

	Sputum		**Other type of specimen:** 1.gastric aspirate/ 2.pleural fluid/ 3.bronchial washing/ 4.urine/ 5.biopsy or others, specify: _____	
	5-6 months	7-12 months	5-6 months	7-12 months
Smear	P / N / U	P / N / U	P / N / U	P / N / U
Culture	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM	P / N / U / NTM

Part (N) Outcome at 12 months (please √, circle and/ or fill in the spaces provided as appropriate)

(1) Cured/ treatment completed □ Date treatment completed (mm/yyyy): ____/_____

(a) Status at completion:

- Bacteriological conversion □
- Radiological improvement □
- Other clinical improvement □
- No available evidence of response □

(b) After treatment completed:

No relapse □

Loss to follow-up □ Last visit date (mm/yyyy): ____/_____

Died □ Cause: 1.TB-related/ 2.Not TB-related/ 3.Unknown Date of death (mm/yyyy): ____/_____

Relapse □ Date relapse (mm/yyyy): ____/_____

- 1.Bacteriological / 2.Histological / 3.Clinical-radiological (choose 1 item, priority from left to right)

(2) Treatment incomplete (including death while on treatment) □

- Still on treatment, reason: 1.retreatment/ 2.extrapulm./ 3.extensive/ 4.interrupted treatment/ 5.drug resistance/ 6.poor response/ 7.others, specify: _____
- Died □ Cause: 1.TB-related/ 2.Not TB-related/ 3.Unknown Date of death (mm/yyyy): ____/_____

(3) Transferred □ to: 1.GP/ 2..Chest Clinic/ 3.Hospital/ 4.Outside HK Details: _____

Last treatment date (mm/yyyy): ____/_____

(4) Defaulted (defaulted treatment for a continuous period > 2m) □

- Never found □ Last visit date (mm/yyyy): ____/_____
- Retreated after default □ Date treatment re-started (mm/yyyy): ____/_____
- Treatment stopped by doctor □ Last treatment date (mm/yyyy): ____/_____

(5) Failure (persistent positive bacteriology and treatment stopped) □

(6) Wrong/ revised diagnosis □ Last treatment date (mm/yyyy): ____/_____

- New diagnosis: _____

(7) Others □ , specify: _____

Completed by: _____ (name) Tel: _____ Fax: _____

Institution: 1.Chest Clinic/ 2.Chest Hospital/ 3.General Hospital/ 4.Private Practice; Name (and ward) of institution: _____

(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)

(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

HKID/ Passport/ Birth certificate no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Clinic/ Hospital no.: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Name: _ DOS: _ _/_ _/_ _ _ _

PFD – To be completed at 24 month from DOS (for TB patients)

Part (O) Outcome at 24 months (please √, circle and/ or fill in the spaces provided as appropriate)

(1) Cured/ treatment completed □ Date treatment completed (mm/yyyy): ____/_____

(a) Status at completion:

- Bacteriological conversion □
- Radiological improvement □
- Other clinical improvement □
- No available evidence of response □

(b) After treatment completed:

No relapse □

Loss to follow-up □ Last visit date (mm/yyyy): ____/_____

Died □ Cause: 1.TB-related/ 2.Not TB-related/ 3.Unknown Date of death (mm/yyyy): ____/_____

Relapse □ Date relapse (mm/yyyy): ____/_____

- 1.Bacteriological / 2.Histological / 3.Clinical-radiological / 4.Clinical only (choose 1 item, priority from left to right)

(2) Treatment incomplete (including death while on treatment) □

- Still on treatment, reason: 1.retreatment/ 2.extrapulm./ 3.extensive/ 4.interrupted treatment/ 5.drug resistance/ 6.poor response/ 7.others, specify: _____
- Died □ Cause: 1.TB-related/ 2.Not TB-related/ 3.Unknown Date of death (mm/yyyy): ____/_____

(3) Transferred □ to: 1.GP/ 2.Chest Clinic/ 3.Hospital/ 4.Outside HK Details: _____

Last treatment date (mm/yyyy): ____/_____

(4) Defaulted (defaulted treatment for a continuous period > 2m) □

- Never found □ Last visit date (mm/yyyy): ____/_____
- Retreated after default □ Date treatment re-started (mm/yyyy): ____/_____
- Treatment stopped by doctor □ Last treatment date (mm/yyyy): ____/_____

(5) Failure (persistent positive bacteriology and treatment stopped) □

(6) Wrong/ revised diagnosis □ Last treatment date (mm/yyyy): ____/_____

- New diagnosis: _____

(7) Others □, specify: _____

Completed by: _____ (name) Tel: _____ Fax: _____

Institution: 1.Chest Clinic/ 2.Chest Hospital/ 3.General Hospital/ 4.Private Practice; Name (and ward) of institution: _____

(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)

(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

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	2003	2004	2005	2006	2007
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	66	27	14	8	14
	≤2 year	15	19	11	4	12
	≤3 year	15	13	11	10	8
	≤4 year	16	11	7	8	9
	≤5 year	24	9	9	10	7
	≤6 year	22	11	13	7	3
	≤7 year	19	20	12	11	3
	Total	177	110	77	58	56
Overall notified TB cases		6024	6226	6160	5766	5463

The above table shows the number of all notified TB cases in Hong Kong from 2003 to 2007 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 2003 to 2007 are 89.5, 91.8, 90.4, 84.1 and 78.9 respectively.

From Annex 2 (b), the overall estimated rates (per 100,000) among the new immigrants from 2003 to 2007 are 47.7, 30.7, 21.5, 16.2 and 16.8 respectively. The rates are lower than those of the general Hong Kong population. Although Mainland China has been classified by the World Health Organization 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 (2003-2007)

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

	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006	2007	2007	2007
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	12	12	24	4	12	16	3	6	9	6	4	10	2	6	8
20-39	23	77	100	8	56	64	4	38	42	5	25	30	6	26	32
40-59	8	21	29	8	12	20	5	14	19	4	10	14	5	9	14
60+	12	12	24	5	5	10	3	4	7	2	2	4	0	2	2
Total	55	122	177	25	85	110	15	62	77	17	41	58	13	43	56

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

	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006	2007	2007	2007
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	15.4	15.8	15.6	5.3	16.3	10.8	4.4	9.0	6.7	9.0	6.2	7.6	3.2	10.1	6.6
20-39	96.8	59.5	65.3	34.9	42.5	41.4	16.0	26.0	24.5	19.0	17.1	17.4	24.3	18.7	19.6
40-59	96.3	51.7	59.3	94.2	36.8	48.7	50.4	47.6	48.3	31.5	34.4	33.5	37.4	33.9	35.1
60+	447.4	97.4	159.9	198.3	42.8	70.3	121.4	40.9	57.1	79.6	21.9	34.4	0.0	32.1	23.6
Total	48.8	47.2	47.7	22.9	34.1	30.7	14.2	24.6	21.5	15.7	16.5	16.2	12.7	18.6	16.8

Annex 2 (c)

TB Notification and Rates (All Cases) By Age & Sex (2003-2007)

All TB cases by age and sex

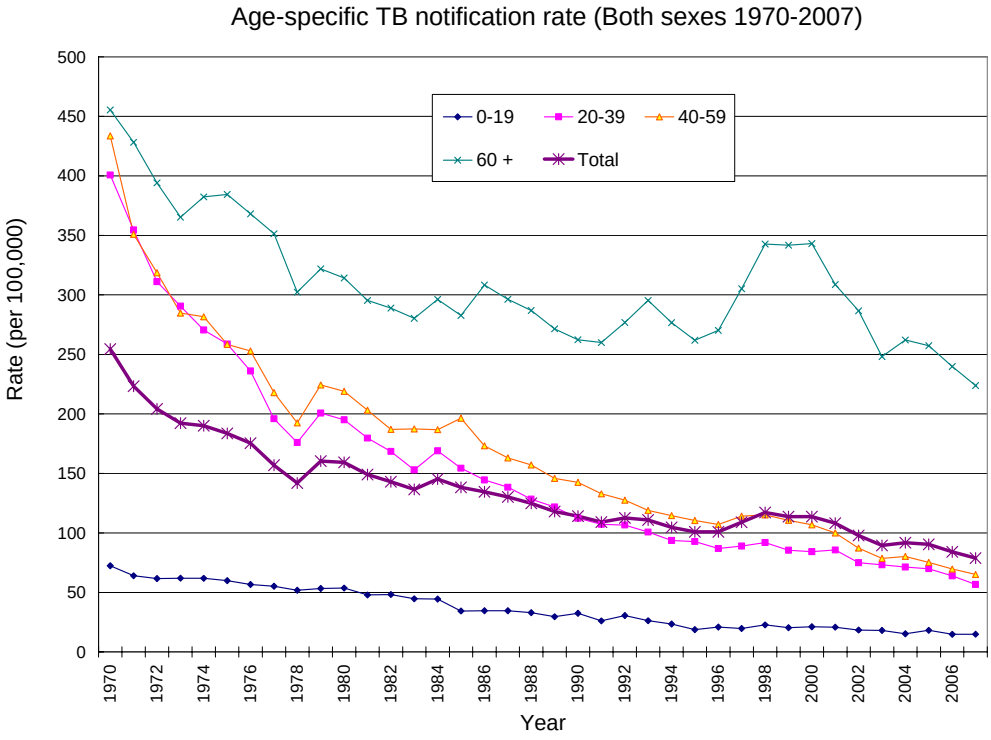
	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006	2007	2007	2007
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	139	126	265	96	124	220	137	118	255	106	97	203	108	96	204
20-39	744	832	1576	696	823	1519	690	782	1472	616	728	1344	520	674	1194
40-59	1150	484	1634	1208	527	1735	1105	575	1680	1077	513	1590	1014	491	1505
60+	1895	654	2549	1988	764	2752	2041	712	2753	1960	669	2629	1853	707	2560
Total	3928	2096	6024	3988	2238	6226	3973	2187	6160	3759	2007	5766	3495	1968	5463

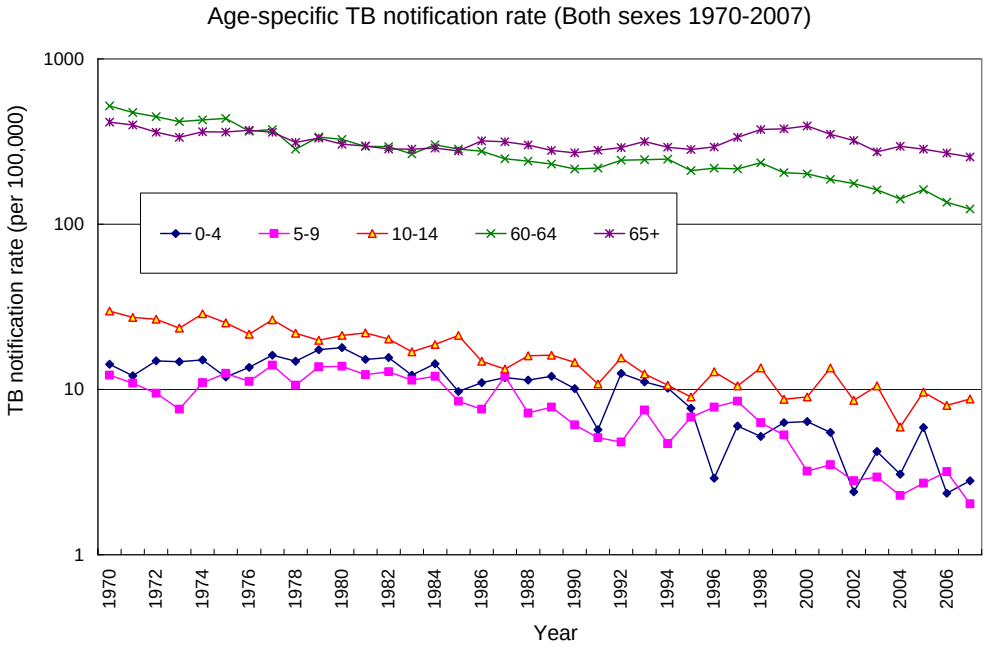
Rate of TB (all notified cases) (per 100,000)

	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006	2007	2007	2007
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	18.4	17.6	18.0	13.0	17.7	15.3	19.1	17.2	18.2	15.0	14.5	14.8	15.4	14.5	15.0
20-39	75.9	70.9	73.2	72.2	70.6	71.3	73.0	67.4	69.9	65.8	62.4	63.9	56.0	57.1	56.6
40-59	111.4	46.2	78.6	113.7	47.9	80.2	101.4	50.2	75.2	97.3	43.6	69.6	91.1	41.0	65.1
60+	385.6	122.1	248.2	396.3	139.4	262.1	400.3	127.2	257.3	376.3	116.3	239.9	341.1	117.8	223.9
Total	120.5	60.4	89.5	122.1	63.6	91.8	121.7	61.6	90.4	115.0	56.0	84.1	106.3	54.1	78.9

Annex 3

Trend of age-specific TB notification rates (1970-2007)





- 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.

Annex 4(a)

TB-HIV Registry

A total of 47 cases with TB-HIV co-infection were reported from various sources to the TB-HIV Registry in 2007. Thirty-seven (78.7%) were under the care of TB & Chest Service (TB&CS) and/or Special Preventive Programme (SPP), Public Health Services Branch, Department of Health (DH). Most of the remaining cases attended dual follow up at chest clinics and one of the hospitals under Hospital Authority (HA).

Table 1 shows the total number of TB-HIV cases reported to the TB-HIV Registry for the years 1996-2007.

Table 2 shows the data on TB as primary AIDS-defining illness in the Hong Kong HIV/AIDS reporting system for the years 1996-2007. Out of a total of 79 AIDS cases newly diagnosed in 2007, 32 (40.5%) had TB as a primary AIDS-defining illness, compared to 27 (37.0%) for *Pneumocystis jiroveci* pneumonia (previously named Pneumocystis carinii pneumonia). In other words, as in 2005, TB overtook *Pneumocystis jiroveci* pneumonia as the most common primary AIDS-defining illness in Hong Kong in 2007. The high burden of latent TB infection in Hong Kong, increased HIV test coverage and increased prophylaxis for *Pneumocystis jiroveci* pneumonia could have been contributory factors. DH will continue to monitor the trend and pattern of AIDS-defining illnesses in newly diagnosed AIDS patients locally.

Table 3 shows the distribution of ADI criteria among 228 cases reported from chest clinics and SPP for the years 1996-2007 with TB as the primary AIDS-defining illness. In Hong Kong, both pulmonary TB with a CD_4 count below 200/µl and extra-pulmonary TB are included in the AIDS case definition. The relative proportion of the two forms of TB as primary AIDS-defining illness has remained rather static in the past few years.

The pre-treatment drug sensitivity pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2007 is shown in Table 4. The rate of MDR-TB (4/250 or 1.6%) among the reported HIV cases was somewhat higher than that in the general population, but the absolute number of MDRTB associated with HIV infection was small. There is no XDR-TB cases detected among the reported TB-HIV cases. DH will continue to monitor prevalence of drug resistance in the context of HIV.

Table 5 shows the characteristics of 37 patients reported from chest clinics and SPP in 2007. The characteristics of these patients are similar to that of the 2006 cohort, namely, there are greater proportions of young males and non-Chinese Asians among TB-HIV co-infected patients as compared to non-HIV infected TB patients. CD_4 count was generally low at time of TB diagnosis. TB-HIV co-infected patients with pulmonary involvement tend to have more extensive disease and a positive bacteriology, and extra-pulmonary involvement is common.

Annex 4(b)

Table 1. Total number of TB-HIV cases reported to TB-HIV Registry (1996-2007)*

Year	Number of TB-HIV cases**
1996	22
1997	19
1998	22
1999	25
2000	24
2001	34
2002	21
2003	26
2004	34
2005	42
2006	44
2007	47
Total	360

* Including cases reported from chest clinics, SPP, HA hospitals and private centres.
** Some of the figures in the table for the previous years have been updated after taking out some mismatched cases and cases with a revised diagnosis.

Table 2. TB as AIDS-defining illness in Hong Kong HIV/AIDS reporting system (1996-2007)*

Year	Number of cases with TB as primary AIDS-defining illness	Total number of reported AIDS cases	% of reported AIDS cases with TB as primary AIDS-defining illness
Pre-1996	21	175	12.00%
1996	21	70	30.00%
1997	17	64	26.56%
1998	18	63	28.57%
1999	13	61	21.31%
2000	19	67	28.36%
2001	17	60	28.33%
2002	9	53	16.98%
2003	15	56	26.79%
2004	13	49	26.53%
2005	25	64	39.06%**
2006	26	73	35.62%
2007	32	79	40.51%**
Total	246	934	26.34%

* An expanded case definition was adopted in 1995 to include pulmonary TB cases with a CD4 count less than 200/µl.
** TB overtook *Pneumocystis jiroveci* pneumonia as the most common AIDS-defining illness.

Annex 4(c)

Table 3. Criteria for TB as AIDS-defining illness among 228 cases reported from chest clinics and SPP (1996-2007)*

Year	TB as AIDS-defining illness			Total
	Yes		No	
	Extra-pulmonary	Pulmonary and TB cervical lymph node with CD4 < 200 µl		
1996	1	7	1	9
1997	2	3	2	7
1998	6	3	3	1
1999	7	6	3	216
2000	3	4	5	12
2001	4	6	7	17
2002	4	9	2	15
2003	1	10	5	16
2004	5	7	11	23
2005	8	14	7	29
2006	9	19	7	35
2007	10	17	8	37**
Total	60	105	61	228

* Among 382 cases reported to the TB-HIV Registry from 1996 to 2007, 228 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 228 cases.
** Information on TB as AIDS-defining illness not available in two patients.

Table 4. Pre-treatment drug sensitivity pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry (1996-2007)*

Year	Susceptible to SHRE	Any resistance** (non-MDR/XDR)	MDR	XDR	Total number of culture positive cases
1996	7	1	0	0	8
1997	5	1	0	0	6
1998	13	1	0	0	14
1999	16	4	1	0	21
2000	13	2	0	0	15
2001	23	5	0	0	28
2002	11	3	1	0	15
2003	18	3***	0 (+1)***	0	21
2004	20	6	0	0	26
2005	29	5	0	0	34
2006	32	3	0	0	35
2007	20	6	1	0	27
Total	207	40	3 (+1)***	0	250

* Among 382 cases reported to the TB-HIV Registry from 1996 to 2007, 250 had a positive culture (sputum or other specimens). The table is compiled basing on data of these 250 cases.
** Any pattern of drug resistance except MDR (i.e. resistant to at least both H and R) and XDR (i.e resistance to any fluoroquinolones, and at least one of the injectable drugs, in addition to MDR).
*** One of these patients had extremely poor treatment adherence, developed acquired resistance during anti-TB treatment and became MDR-TB.

Annex 4(d)

Table 5: Chracteristics of 37 TB cases reported from chest clinics and SPP in 2007*

Age distribution	Number	Proportion
0 to 19	0	0.00%
20 to 39	13	35.14%
40 to 59	15	40.54%
60+	9	24.30%
Sex distribution		
Male	32	86.49%
Female	5	13.51%
Ethnicity		
Chinese	28	75.68%
Asians, non-Chinese	8	21.62%
Caucasians	0	0.00%
Others	1	2.70%
Case category		
New case	35	94.59%
Relapse	2	5.41%
Treatment after default	0	0.00%
Failure of previous treatment	0	0.00%
TB as primary AIDS defining illness		
Yes	27	72.97%
No	8	21.62%
Missing	2	5.41%
HIV stage		
A1	0	0.00%
A2	3	8.11%
A3	1	2.70%
B1	0	0.00%
B2	2	5.41%
B3	1	2.70%
C1	0	0.00%
C2	2	5.41%
C3	22	59.46%
Unknown	6	16.22%
CD4 count at time of co-infection (median, range)	62 (3-362)/µl	
Viral load at time of co-infection (median, range)	250000 (400-2300000) copies/ml	
Anti-retroviral therapy at time of co-infection		
Yes	3	8.11%
No	34	91.89%
Presence of extra-pulmonary TB		
Yes	23	62.16%
No	14	37.83%
Extent of Respiratory TB**		
Minimal	14	48.28%
Moderate	6	20.69%
Extensive	9	31.03%
Bacteriological status (pre-treatment)		
Smear + culture +	19	51.35%
Smear - culture +	11	29.73%
Smear + culture -	1	2.70%
Smear - culture -	6	16.22%
Drug resistance pattern (pre-treatment)***		
Susceptible to SHRE	23	76.67%
Resistant to at least any one drug of SHRE		
Any resistance (non-MDR)	6	20.00%
MDR	1	3.33%
XDR	0	0%

* Among 47 cases reported to HIV Registry in 2007, 37 were managed at chest clinics and/or SPP. The table is compiled basing on data of these 37 cases.
** 29 out of the 37 cases had lung parenchymal lesion on CXR.
*** 30 out of the 37 cases had a positive sputum or other specimen culture.

Annex 5

HBsAg Seroprevalence Survey
Among TB Patients Seen at Chest Clinics (2007)

In a sample survey conducted by the TB & Chest Service of the Department of Health in 2007 (2-month period from 1.3.2007 to 31.5.2007), the overall HBsAg seropositive rate among TB patients seen at chest clinics was 10.52%.

Sex/Age group	HBsAg status			HBsAg seropositive rate (%)*	Total
	Positive	Negative	Unknown		
Male					
0-19	0	27	2	0.00	29
20-39	12	127	7	8.63	146
40-59	46	213	5	17.76	264
≥60	38	305	9	11.08	352
Female					
0-19	1	29	0	3.33	30
20-39	8	140	5	5.41	153
40-59	14	101	3	12.17	118
≥60	6	121	4	4.72	131
Total	125	1063	35	10.52	1223

* *HBsAg seropositivity rate = number of HBsAg positive patients/ (number of HBsAg positive patients + number of HBsAg negative patients)*

HBsAg Seroprevalence Survey 2006-2007

Sex/Age group	HBsAg seropositive rate (%)	
	2006	2007
Male		
0-19	9.09	0.00
20-39	8.78	8.63
40-59	17.95	17.76
≥60	8.73	11.08
Female		
0-19	0.00	3.33
20-39	4.82	5.41
40-59	6.20	12.17
≥60	8.73	4.72
Total	9.79	10.52

Annex 6

Crude and Standardised Death Rate and Notification Rate 1981 - 2007
(per 100,000 population)

Year	Crude Death Rate	Standardised Death Rate *	Crude Notification Rate	Standardised Notification Rate *
1981	9.4	9.4	149.1	149.1
1982	8.6	8.4	140.3	142.1
1983	8.3	7.2	136.6	135.2
1984	7.8	7.9	145.3	142.7
1985	7.5	6.9	138.3	134.6
1986	7.4	6.6	134.5	134.6
1987	7.3	6.3	130.3	124.2
1988	6.9	5.8	124.8	122.1
1989	7.1	5.9	117.9	111.4
1990	6.7	5.7	114.1	107.7
1991	7.1	5.6	109.2	100.5
1992	7.1	5.5	112.6	107.9
1993	6.7	5.1	110.8	100.2
1994	6.8	5.0	104.7	88.9
1995	6.8	4.8	100.9	88.9
1996	4.5	3.1	101.0	88.7
1997	3.9	2.6	109.0	93.1
1998	4.1	2.8	117.3	98.6
1999	4.7	3.1	113.7	93.9
2000	4.5 `	2.8	113.7	93.4
2001	4.6	2.8	108.2	88.6
2002	4.0	2.4	97.9	78.9
2003	4.1	2.5	89.5	72.3
2004	4.2	2.4	91.8	71.1
2005	4.0	2.2	90.4	70.5
2006	4.3	2.4	84.1	63.3
2007	3.3	1.8	78.9	58.4

* Age and sex-standardisation, using the mid-1981 population as the standard population.

NB: The rates from the year 2001 onwards have been updated based on the updated population figure from the 2006 by-census.

Part 4

SUPPLEMENT

Part 4 – Supplement: Contents

Supplement

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="2">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: _____

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