ANNUAL REPORT 2010

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

Tuberculosis (TB) is still a major infectious disease worldwide. According to World Health Organization, there were, globally, 8.8 million new TB cases, 1.1 million deaths from TB among HIV-negative people and an additional 0.35 million deaths from HIV-associated TB in 2010. 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. 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. Globally, almost half a million cases of multidrug-resistant TB (MDR-TB) with bacillary resistance to at least isoniazid and rifampicin are estimated to emerge every year. Among them, around 40,000 are extensively drug-resistant TB (XDR-TB), defined as MDR-TB with additional resistance to fluoroquinolones and one or more of the three injectable drugs -- kanamycin, amikacin and capreomycin. 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.

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 74.1 per 100,000 in 2009. Fluctuations did occur from time to time, possibly related to changes in attendance and/ or notification patterns. In 2010, the TB notification declined further to 72.5 per 100,000. With ageing of the population, 40.3% 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. Despite a smaller elderly population among the males, 46.3% of male TB patients in 2010 were aged 65 or above, while the corresponding figure for females was 29.7%. Multiple factors probably underlined such disparity, but smoking likely accounted for a substantial portion of the difference, as suggested by a previous study.

With the effective implementation of DOTS and DOTS-plus in Hong Kong, the overall TB situation and drug resistance problem have been brought under progressive control. However, ageing of the TB epidemic and the global emergence of MDR- and XDR-TB are posing increasing difficulties in the control of TB locally, especially in view of frequent population movement and high rates of drug-resistant TB in some of our

neighbouring areas. New initiatives are therefore called for to address these new challenges.

In 2008, a new Prevention and Control of Disease Ordinance (CAP 599) was introduced to provide for the control and prevention of diseases, and to apply relevant measures of the International Health Regulations promulgated by the World Health Organization. Under the Prevention and Control of Disease Regulation (CAP 599A) of that Ordinance, XDR-TB was included as one of the specified diseases. As a result, statutory provision has been made for a health officer to prohibit, by order in writing, an XDR-TB patient from leaving Hong Kong. In 2010, orders continued to be made to prohibit all known cases of XDR-TB patients from leaving Hong Kong. A few XDR-TB patients were intercepted at the border and sent to an infectious hospital or other designated places for assessment.

Collaborative efforts have also been made in the development of new diagnostic tools and drugs/ regimens to meet these new challenges. New interferon-gamma release assays (IGRAs) are being compared with the traditional tuberculin skin test (TST) 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. In this regard, one of the two commercially available IGRAs has been shown to perform better than TST in predicting active TB among patients with silicosis in a local study[1], even though the predictive power is necessarily limited by the moderate annual risk of developing disease. As these new assays are not affected by previous BCG vaccination, they may also play an adjunctive role in the diagnosis of active TB among children or in areas with a low background prevalence of latent TB infection. In another local study[2], the other commercially available IGRA was shown to have only a very limited role in facilitating the diagnosis of active TB among clinical suspects with negative sputum smears, mainly in alerting the clinicians of possible alternative diagnoses in case of a negative IGRA result. 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. In line with our previous involvement in the milestone Hong Kong Chest Service/ British Medical Research Council TB trials that helped to establish the standard 6-month short-course regimen, the Hong Kong Tuberculosis Service joined the Tuberculosis Trial Consortium (TBTC) in 2009 as one of the new study sites for the development and evaluation of new TB treatment regimens. In 2010, a clinical trial on the use of weekly rifapentine and isoniazid for three months in the treatment of latent TB infection (TBTC study 26) was rolled out in Hong Kong. Further plans were being made for the initiation of other studies, including a phase II trial on the use of higher doses of rifapentine in the intensive phase regimen for the treatment of active TB (TBTC study 29x). 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.

A number of scientific papers were published by the TB&CS in collaboration with other investigators from different sectors in 2010.[1-14] 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, 89,142 patients attended the TB&CS as compared to 88,860 in 2009, and the total attendance was 752,381 in comparison with 755,875 in 2009. Among the 89,142 patients, 22,588 patients were new attendants, of whom 19.7% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (12.5%), active tuberculosis of other forms (2.4%), inactive tuberculosis (6.0%), bronchitis not specified as acute or chronic (13.6%), acute respiratory infection (5.8%), pneumonia (6.7%), malignant neoplasm of trachea and bronchus (1.7%), bronchiectasis (1.3%), asthma (0.6%) and emphysema (0.1%). Among all the attendance, 3,330 hospital admissions were arranged.

During the preparation of this Annual Report, the population figures of the years 2007, 2008 and 2009 have been updated based on the data from the 2011 Population Census. Thus, the respective notification and death rates for 2007, 2008 and 2009 are updated and are shown in Annexes 7(a) to 7(d), 8(a) to 8(d), and 9(a) to 9(d) respectively.

Part 1: Tuberculosis

The number of tuberculosis notifications in 2010 was 5,093, making a notification rate of 72.5 per 100,000 population. The corresponding figures in 2009 were 5,193 and 74.5 respectively.

The number of tuberculosis deaths was 191 in 2010 as compared with 204 in 2009. The corresponding tuberculosis mortality rates were 2.6 and 2.9 per 100,000 population in 2010 and 2009.

Tuberculosis stayed outside the top ten causes of death in 2010. Tuberculosis deaths accounted for 0.4% of the total registered deaths in Hong Kong. The average age of

tuberculosis deaths was 73.1.

In 2010, 99.3% 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. On the other hand, unlinked anonymous screening (UAS) was no longer considered necessary and surveillance of HIV among TB patients mainly depends on voluntary HIV testing.

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. In 2008, the Pneumoconiosis (Compensation) Ordinance was amended to cover compensation for mesothelioma and became the Pneumoconiosis and Mesothelioma (Compensation) Ordinance.

A new set of reference values for spirometry were published for the local population in 2006. A calibration study was subsequently performed in the Pneumoconiosis Clinic, comparing the new reference values with those published in 1982 among normal construction and quarry workers as well as silicosis patients. The new set of reference values was shown to reflect the lung function status of normal heavy manual workers better than the older set. Because of such finding, the new set of reference values was adopted for

compensation assessment since 2009.

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 7,719 in 2010 compared with 8,187 in 2009. In 2010, 152 new cases of pneumoconiosis or mesothelioma were registered in the TB&CS, and 74 new cases (including 61 cases of silicosis, 1 cases of asbestosis and 12 cases of mesothelioma) were confirmed by the Pneumoconiosis Medical Board. Up to the end of 2010, a total of 4,530 patients had been compensated.

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11. van Zyl Smit RN, Pai M, Yew WW, Leung CC, Zumla A, Bateman ED, Dheda K. Global lung health: the colliding epidemics of tuberculosis, tobacco smoking, HIV and COPD. Eur Respir J. 2010;35:27-33.
12. Chang KC, Leung CC, Yew WW, Lau TY, Leung WM, Tam CM, Lam HC, Tse PS, Wong MY, Lee SN, Wat KI, Ma YH. Newer fluoroquinolones for treating respiratory infection: do they mask tuberculosis? Eur Respir J. 2010;35:606-13.
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14. Mak WW, Cheung F, Woo J, Lee D, Li P, Chan KS, Tam CM. A comparative study of the stigma associated with infectious diseases (SARS, AIDS, TB). Hong Kong Med J. 2009;15 Suppl 8:34-7.

Part 1

TUBERCULOSIS

Part 1 - Tuberculosis: Contents

APPENDIX 1

TB Notifications & Death Rate of Tuberculosis (All Forms)
1947 - 2010

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	108.16	311	4.6	23.35	4.28
2002	6602	(0)	186	97.89	267	4.0	24.73	4.04
2003	6024	(0)	177	89.50	275	4.1	21.91	4.57
2004	6226	(0)	110	91.78	286	4.2	21.77	4.59
2005	6160	(0)	77	90.41	271	4.0	22.73	4.40
2006	5766	(0)	58	84.09	294	4.3	19.61	5.10
2007	5463	(0)	56	78.99	231	3.3	23.65	4.23
2008	5635	(0)	67	80.99	229	3.3	24.61	4.06
2009	5193	(0)	68	74.48	204	2.9	25.46	3.93
2010	5093	(0)	80	72.51	191	2.7	26.66	3.75

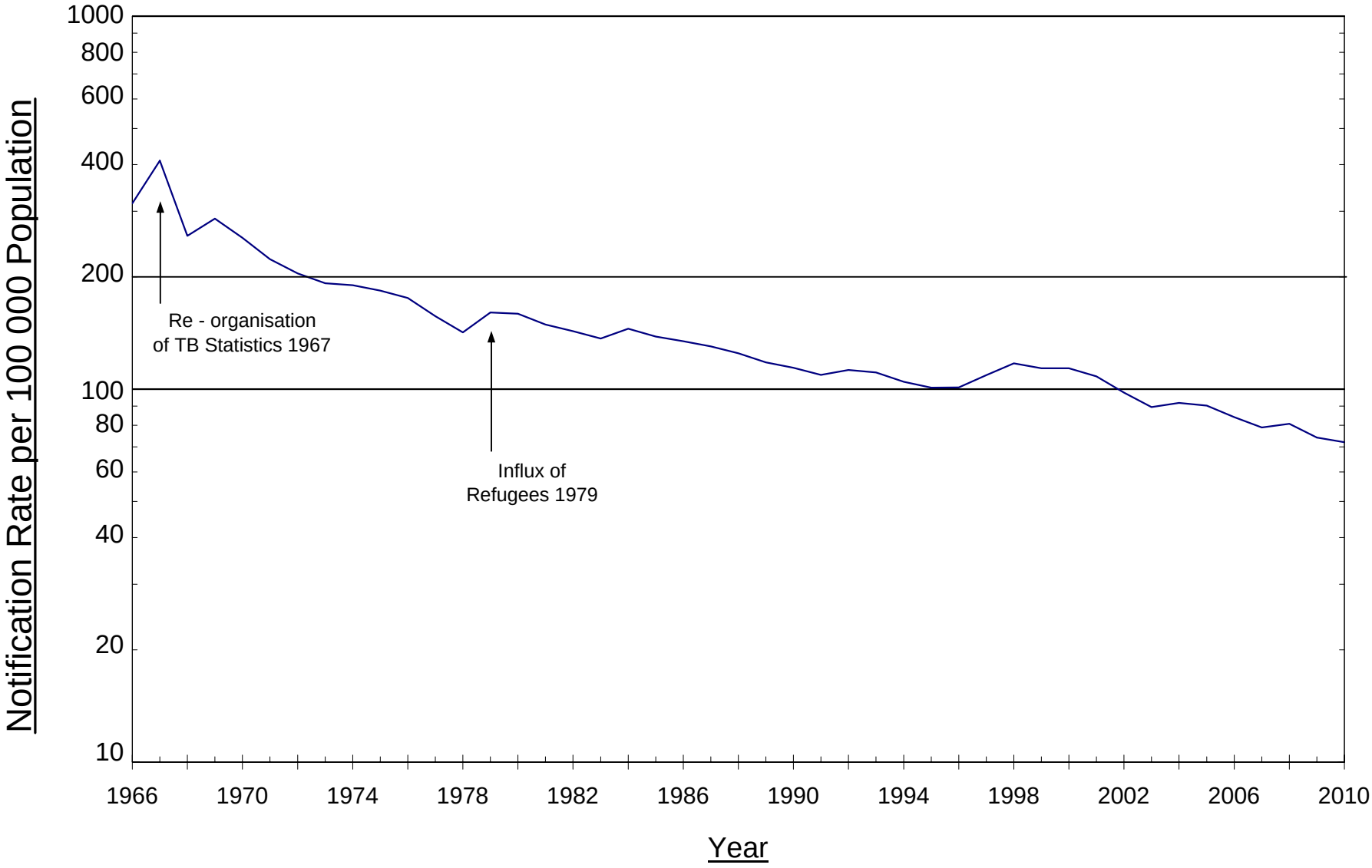
* Figures in brackets denote the number of Vietnamese refugees included.

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

NB The rates from the year 2007 onwards have been updated based on the updated population figures from the 2011 Population Census.

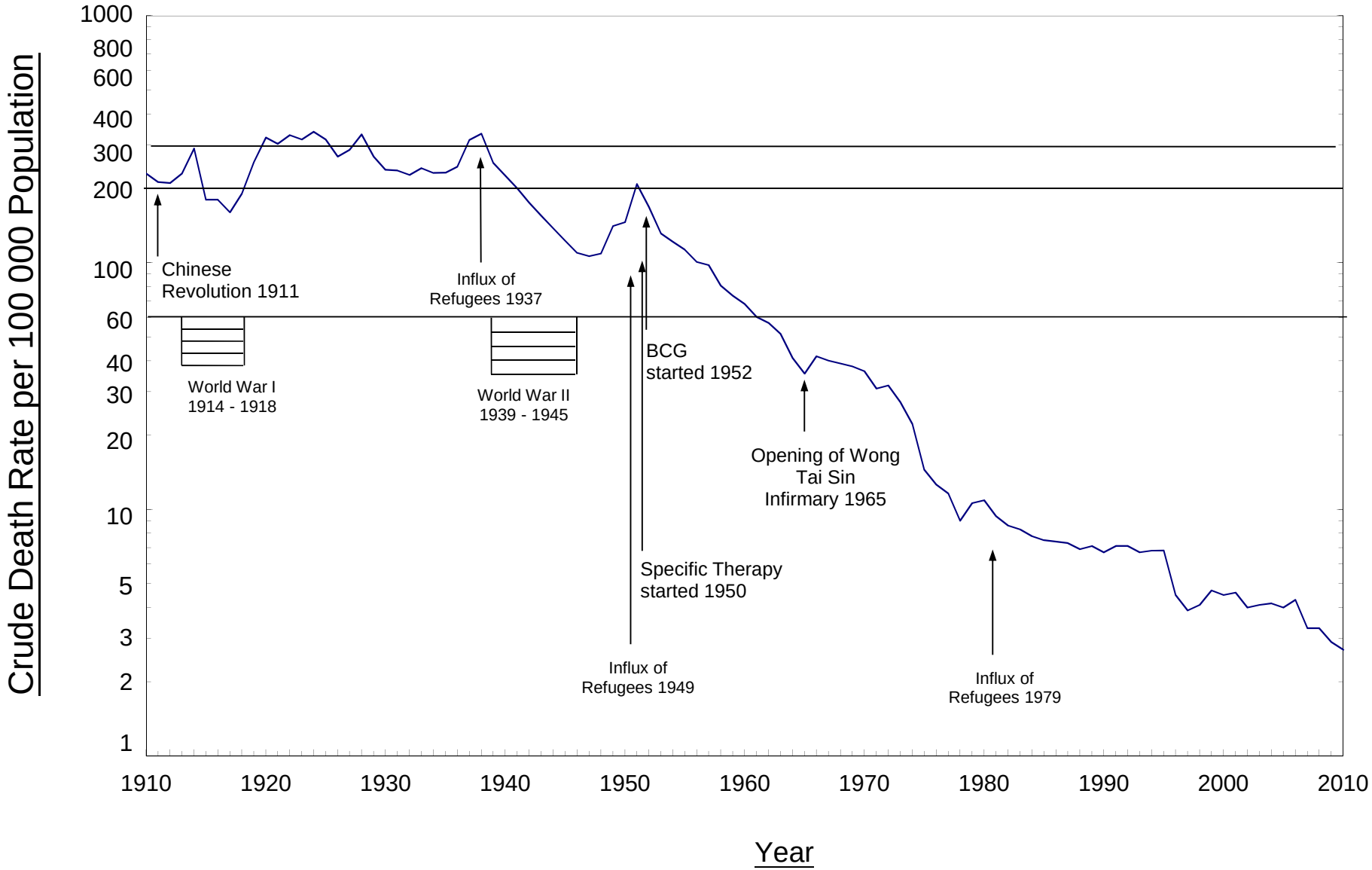
APPENDIX 2

TB Notification Rate (All Forms) 1966-2010



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-2010



APPENDIX 4 (a)

Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2010

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	2	2	3.22	2.64	2.94
1	0	0	0			
2	2	1	3			
3	2	0	2			
4	0	0	0			
5-9	1	2	3	0.76	1.64	1.18
10-14	16	18	34	8.82	10.50	9.63
15-19	73	62	135	33.14	29.85	31.54
20-24	95	125	220	43.20	53.93	48.70
25-29	136	158	294	59.05	51.87	54.96
30-34	120	157	277	53.74	49.70	51.37
35-39	145	175	320	60.75	52.71	56.07
40-44	147	128	275	58.80	38.80	47.42
45-49	219	137	356	71.17	38.28	53.49
50-54	261	135	396	84.82	42.49	63.32
55-59	273	114	387	112.02	46.08	78.80
60-64	243	95	338	129.12	50.86	90.13
65-69	263	64	327	220.45	59.59	144.24
70-74	295	89	384	252.78	76.13	164.38
75-79	349	115	464	362.41	107.28	228.01
80-84	299	128	427	519.10	160.80	311.22
85 & over	291	158	449	769.84	198.24	382.13
Total	**3230**	**1863**	**5093**	**98.05**	**49.95**	**72.51**

Appendix 4 (b)

Pulmonary TB Notifications by Age & Sex 2010**

Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
Under 1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0
2	2	1	3	0	0	0	0	0	0
3	1	0	1	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5-9	1	2	3	0	0	0	0	0	0
10-14	15	14	29	8	5	13	2	2	4
15-19	70	53	123	43	34	77	23	15	38
20-24	82	110	192	54	66	120	32	38	70
25-29	112	124	236	82	87	169	42	61	103
30-34	100	108	208	63	73	136	49	45	94
35-39	127	129	256	85	81	166	55	43	98
40-44	118	90	208	86	59	145	53	39	92
45-49	195	92	287	147	54	201	92	38	130
50-54	236	89	325	173	57	230	106	33	139
55-59	252	75	327	178	60	238	100	40	140
60-64	212	64	276	156	44	200	97	23	120
65-69	229	47	276	171	30	201	91	18	109
70-74	267	75	342	210	51	261	105	29	134
75-79	304	90	394	263	72	335	127	29	156
80-84	268	94	362	223	73	296	92	33	125
85 & over	260	132	392	213	102	315	82	37	119
Total	**2851**	**1389**	**4240**	**2155**	**948**	**3103**	**1148**	**523**	**1671**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 4(c)

Rate of Pulmonary TB Notifications by Age & Sex 2010**

(Rate per 100,000 Population)

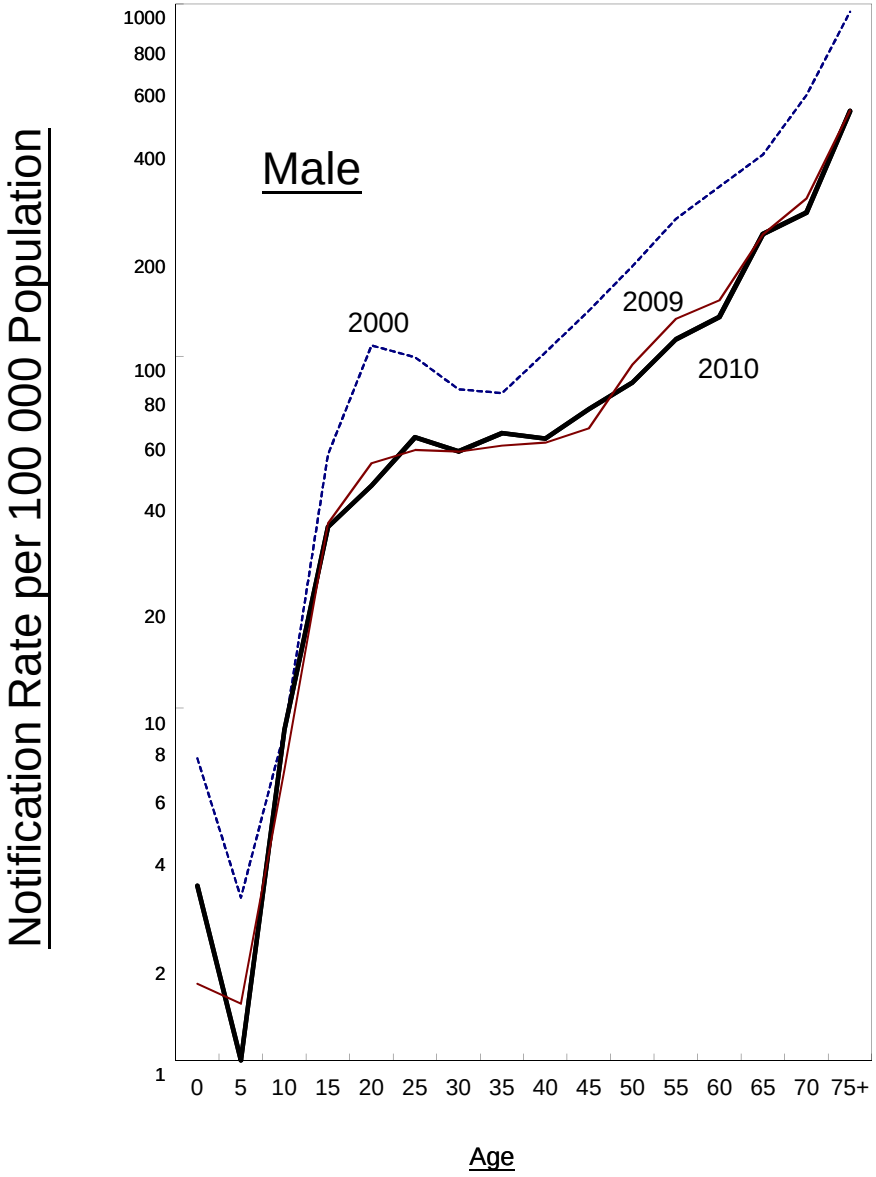
Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0-4	2.4	0.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.8	1.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
10-14	8.3	8.2	8.2	4.4	2.9	3.7	1.1	1.2	1.1
15-19	31.8	25.5	28.7	19.5	16.4	18.0	10.4	7.2	8.9
20-24	37.3	47.5	42.5	24.6	28.5	26.6	14.6	16.4	15.5
25-29	48.6	40.7	44.1	35.6	28.6	31.6	18.2	20.0	19.3
30-34	44.8	34.2	38.6	28.2	23.1	25.2	21.9	14.2	17.4
35-39	53.2	38.9	44.9	35.6	24.4	29.1	23.0	13.0	17.2
40-44	47.2	27.3	35.9	34.4	17.9	25.0	21.2	11.8	15.9
45-49	63.4	25.7	43.1	47.8	15.1	30.2	29.9	10.6	19.5
50-54	76.7	28.0	52.0	56.2	17.9	36.8	34.4	10.4	22.2
55-59	103.4	30.3	66.6	73.0	24.3	48.5	41.0	16.2	28.5
60-64	112.6	34.3	73.6	82.9	23.6	53.3	51.5	12.3	32.0
65-69	192.0	43.8	121.7	143.3	27.9	88.7	76.3	16.8	48.1
70-74	228.8	64.2	146.4	179.9	43.6	111.7	90.0	24.8	57.4
75-79	315.7	84.0	193.6	273.1	67.2	164.6	131.9	27.1	76.7
80-84	465.3	118.1	263.8	387.2	91.7	215.7	159.7	41.5	91.1
85 & over	687.8	165.6	333.6	563.5	128.0	268.1	216.9	46.4	101.3
Total	**86.5**	**37.2**	**60.4**	**65.4**	**25.4**	**44.2**	**34.8**	**14.0**	**23.8**

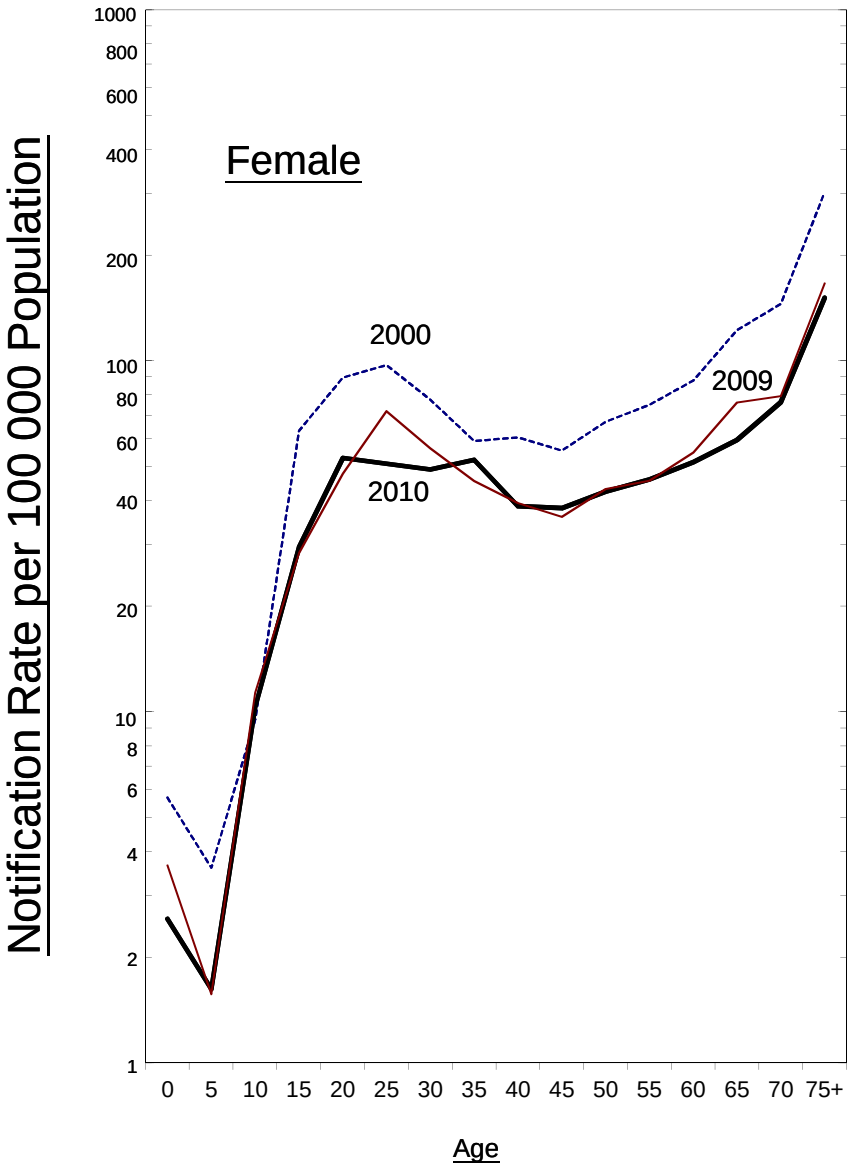
** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

APPENDIX 5

TB Notification Rate by Age & Sex 2000, 2009 & 2010





Appendix 6

Notifications of Tuberculosis by Type by Age & Sex 2010

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	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1	-	1	1	-	1	-	-	-	-	-	-	-	1	1
3	-	-	-	-	-	-	-	-	-	1	-	1	1	-	1
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9	-	2	2	-	-	-	-	-	-	-	-	-	1	-	1
10-14	13	11	24	1	-	1	-	-	-	-	-	-	2	7	9
15-19	57	41	98	-	-	-	-	1	1	1	2	3	15	18	33
20-24	66	82	148	2	3	5	1	2	3	1	-	1	25	38	63
25-29	97	97	194	-	1	1	3	1	4	1	1	2	35	58	93
30-34	74	84	158	2	1	3	1	2	3	4	4	8	39	66	105
35-39	97	104	201	1	4	5	1	-	1	1	6	7	45	61	106
40-44	92	72	164	2	-	2	3	2	5	-	1	1	50	53	103
45-49	154	77	231	4	1	5	4	2	6	3	2	5	54	55	109
50-54	191	76	267	4	1	5	4	2	6	4	3	7	58	53	111
55-59	212	60	272	3	1	4	1	3	4	7	6	13	50	44	94
60-64	191	48	239	-	4	4	4	1	5	2	4	6	46	38	84
65-69	198	41	239	4	2	6	-	2	2	-	2	2	61	17	78
70-74	227	59	286	3	1	4	1	2	3	5	1	6	59	26	85
75-79	254	68	322	3	6	9	2	1	3	5	4	9	85	36	121
80-84	225	73	298	1	1	2	3	1	4	3	5	8	67	48	115
85 & over	210	103	313	5	4	9	1	-	1	3	4	7	72	47	119
Total	2359	1098	3457	36	30	66 (a)	29	22	51 (b)	41	46	87 (c)	765	667	1432 (d)*

* Including

TB lymph node	433
TB urogenital system	61
TB peritonitis, intestines, mesenteric, appendicitis	108
TB pleuritis, pleural effusion	722
TB laryngitis	11
TB skin	47
TB other sites	49
Unspecified	1

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

(a) All miliary TB cases has coexisting pulmonary TB; also include 21 cases with coexisting TB of other extrapulmonary sites (among which 2 are meninges/CNS and 3 are bones & joints).

(b) Including 8 cases with coexisting pulmonary TB; also include 0 cases with coexisting TB of other extrapulmonary sites.

(c) Including 12 cases with coexisting pulmonary TB; also include 5 case with coexisting TB of other extrapulmonary sites.

(d) Including 697 cases with coexisting pulmonary TB.

\# Pulmonary TB only, without extrapulmonary site involvement

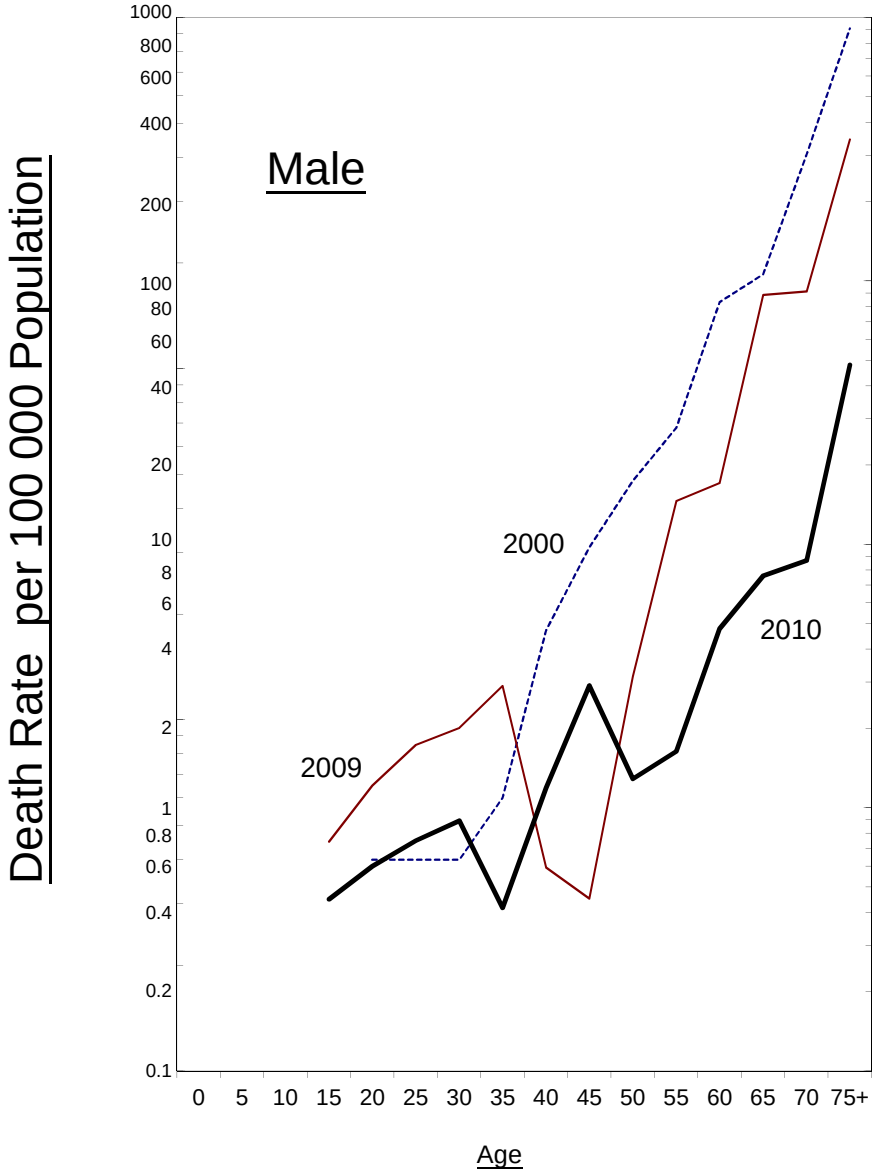
APPENDIX 7

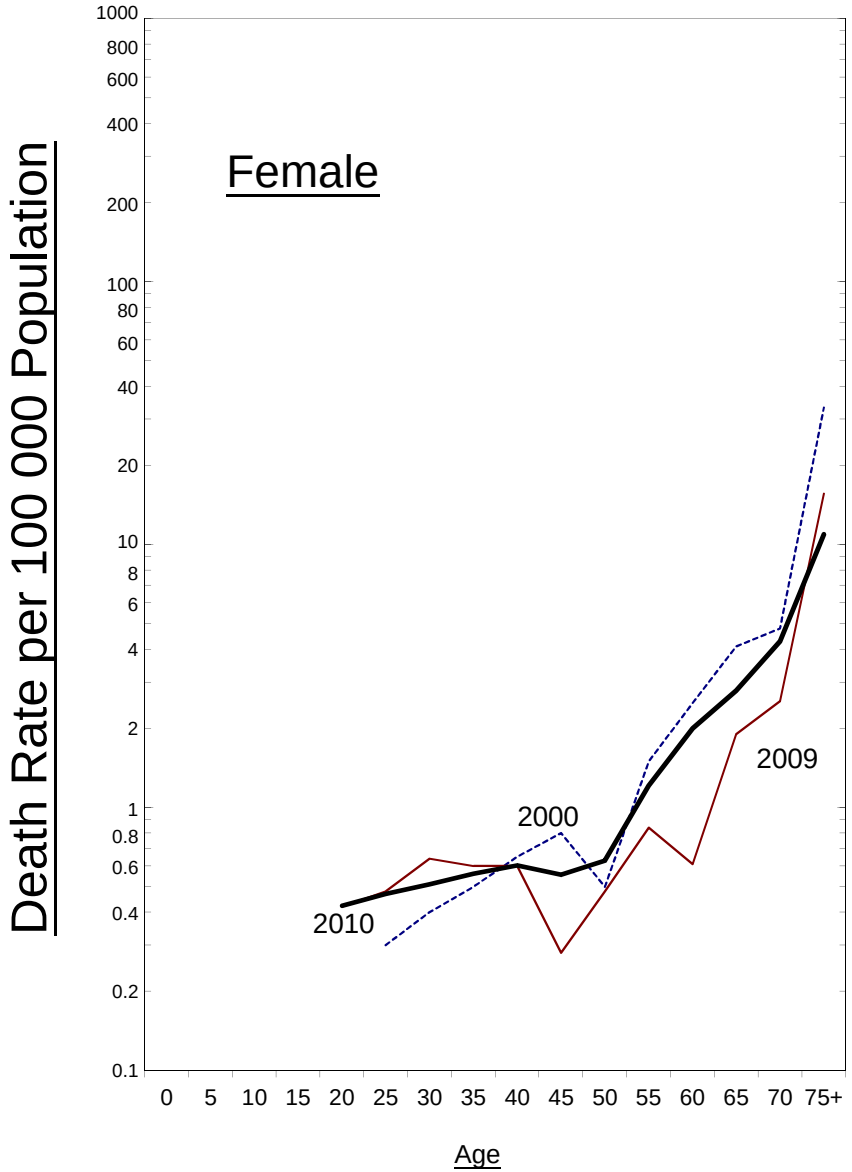
TB Death (All Forms) & Death Rate by Age & Sex 2010

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	1	0	1	0.45	0.00	0.23
20-24	0	1	1	0.00	0.43	0.22
25-29	0	0	0	0.00	0.00	0.00
30-34	2	0	2	0.90	0.00	0.37
35-39	1	0	1	0.42	0.00	0.18
40-44	3	2	5	1.20	0.61	0.86
45-49	9	2	11	2.92	0.56	1.65
50-54	4	2	6	1.30	0.63	0.96
55-59	4	3	7	1.64	1.21	1.43
60-64	9	0	9	4.78	0.00	2.40
65-69	9	3	12	7.54	2.79	5.29
70-74	10	5	15	8.57	4.28	6.42
75-79	25	4	29	25.96	3.73	14.25
80-84	22	10	32	38.19	12.56	23.32
85 & over	44	15	59	116.40	18.82	50.21
Unknown	0	1	1			
Total	**143**	**48**	**191**	4.34	1.29	2.72

APPENDIX 8

TB Mortality Rate by Age & Sex 2000, 2009 & 2010





Appendix 9

TB Deaths by Type by Age & Sex 2010

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	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-
35-39	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
40-44	2	2	4	1	-	1	-	-	-	-	-	-	-	-	-
45-49	7	2	9	1	-	1	1	-	1	-	-	-	-	-	-
50-54	3	-	3	1	1	2	-	-	-	-	-	-	-	1	1
55-59	2	1	3	1	1	2	-	-	-	-	-	-	1	1	2
60-64	8	-	8	1	-	1	-	-	-	-	-	-	-	-	-
65-69	4	1	5	2	-	2	2	1	3	-	-	-	1	1	2
70-74	8	4	12	2	1	3	-	-	-	-	-	-	-	-	-
75-79	21	3	24	2	-	2	-	-	-	-	-	-	2	1	3
80-84	18	5	23	1	1	2	1	-	1	-	-	-	2	4	6
85 & over	42	14	56	2	-	2	-	-	-	-	-	-	-	1	1
Unknown	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Total	119	33	152	14	4	18	4	2	6	0	0	0	6	9	15 *

* Breakdown of Deaths from other forms of TB:-

	Number
Tuberculous of genitourinary system	1
Tuberculosis of intestines, peritoneum & mesenteric glands	5
Late effects of Tuberculosis	9
Total	15

\# Pulmonary TB only, without extrapulmonary site involvement.

APPENDIX 10

1950 - 2010

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
2008	0.00	0.00	0.00	0.6	74.5
2009	0.00	0.00	0.00	0.5	73.7
2010	0.00	0.00	0.00	0.4	73.1

APPENDIX 11

Top Ten Causes of Death 2010

Rank	Causes of Death	Detailed List No.	2010		
		ICD 10th Revision	Male	Female	Total
	All Causes		23821	18868	42699 (10)
1	Malignant neoplasms	C00-C97	7831	5245	13076
2	Diseases of heart	I00-I09, I11 I13, I20-I51	3479	3157	6636
3	Pneumonia	J12-J18	3078	2736	5814
4	Cerebrovascular diseases	I60-I69	1695	1728	3423
5	External causes of morbidity and mortality #	V01-Y89	1207	657	1864
6	Chronic lower respiratory diseases *	J40-J47	1530	563	2093
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	763	730	1493
8	Septicaemia	A40-A41	411	415	826
9	Dementia	F01-F03	302	465	767
10	Diabetes mellitus	E10-E14	226	296	522
	Tuberculosis (including late effects of tuberculosis)		143	48	191
	All other causes	Residues of all causes	3156	2828	5984 (10)

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
2000 - 2010

Origin	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
East Kowloon Chest Clinic	192	173	144	123	121	132	86	121	129	100	99
Kowloon Chest Clinic	477	413	420	432	330	287	231	220	184	171	165
Sai Ying Pun Chest Clinic (a)	196	194	142	133	148	112	92	108	86	69	80
Shaukiwan Chest Clinic	169	158	148	122	138	111	104	128	105	80	72
Shaukiwan Pneumoconiosis	25	23	27	12	29	10	15	13	13	16	6
Shek Kip Mei Chest Clinic	232	208	180	162	157	140	96	111	127	92	87
South Kwai Chung Chest Clinic	342	339	279	300	261	282	224	187	200	158	166
Tai Po Chest Clinic	88	84	96	111	112	101	92	79	81	63	71
Wanchai Chest Clinic	375	384	279	264	223	214	191	169	168	170	143
Yan Oi Chest Clinic	425	396	355	320	290	263	238	165	179	172	152
Yaumatei Chest Clinic	339	373	271	233	203	249	204	151	137	139	131
Yuen Chau Kok Chest Clinic	308	288	223	226	181	148	136	122	116	124	131
Yung Fung Shee Chest Clinic	222	213	218	197	178	174	148	120	147	118	131
Castle Peak Hospital (Chest Clinic)					5	3	3	4	5	0	0
Cheung Chau Chest Clinic				2	2	3	1	1	2	1	1
Sai Kung Chest Clinic	4	4	11	7	7	4	9	5	9	1	3
Sheung Shui Chest Clinic	103	81	96	59	54	64	61	53	45	42	63
Tung Chung Chest Clinic	26	24	35	22	16	11	15	12	9	7	11
Yuen Long Chest Clinic	111	96	103	75	80	93	69	64	67	73	80
Sub-total	3634	3451	3027	2800	2535	2401	2015	1833	1809	1596	1592
Grantham Hospital	358	259	249	252	257	165	176	215	209	214	180
Haven of Hope Hospital	141	116	147	119	137	127	124	124	87	103	65
Kowloon Hospital	443	322	237	220	205	113	142	108	120	84	108
Ruttonjee Hospital	326	305	236	223	263	256	264	218	165	183	170
Wong Tai Sin Hospital	352	330	263	166	189	184	140	90	104	82	105
Other Govt. Institutions (b)	43	113	107	84	87	84	60	66	78	54	64
Other H.A. Hospitals	2081	2176	2133	1937	2301	2543	2538	2530	2648	2472	2425
Private Practitioners	121	125	130	159	136	156	164	90	83	57	101
Private Hospitals	79	65	73	64	116	131	143	189	332	348	283
Total	7578	7262	6602	6024	6226	6160	5766	5463	5635	5193	5093
% of cases from Chest Clinics among the total	48.0	47.5	45.8	46.5	40.7	39.0	34.9	33.6	32.1	30.7	31.3
% from Chest Hospitals (c)	21.4	18.3	17.1	16.3	16.9	13.7	14.7	13.8	12.2	12.8	12.3
% from Other Public Hospitals	28.0	31.5	33.9	33.5	38.4	42.6	45.1	47.5	48.4	48.6	48.9
% from Private Sector	2.6	2.6	3.1	3.7	4.0	4.7	5.3	5.1	7.4	7.8	7.5

Notes : (a) Including notifications from Cheung Chau Chest Clinic (1997-2002)
(b) Sources are from Public Mortuaries, Prison Hospitals, & Army Hospitals.
(c) 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" 2010

Name of Hospital	No. of TB Notification
Alice Ho Miu Ling Nethersole Hospital	84
Caritas Medical Centre	129
Hong Kong Buddhist Hospital	8
Kwong Wah Hospital	160
North District Hospital	158
Our Lady of Maryknoll Hospital	8
Pamela Youde Nethersole Eastern Hospital	139
Pok Oi Hospital	50
Prince of Wales Hospital	228
Princess Margaret Hospital	223
Queen Elizabeth Hospital	278
Queen Mary Hospital	126
Shatin Hospital	15
Tai Po Hospital	10
Tseung Kwan O Hospital	93
Tuen Mun Hospital	238
Tung Wah Eastern Hospital	15
Tung Wah Group of Hospitals - Fung Yiu King Hospital	4
Tung Wah Hospital	9
United Christian Hospital	306
Yan Chai Hospital	144
Total	**2425**

Appendix 13

Tuberculosis Notifications & Notification Rates

by District Council District 2010

District Council District	Notification	Notification Rate (per 100,000 pop.)
Hong Kong Island	866	67.2
Central & Western	149	57.4
Wanchai	105	65.7
Eastern	375	63.5
Southern	237	85.3
Kowloon	1838	88.5
Kowloon City	294	79.5
Kwun Tong	562	91.8
Sham Shui Po	362	97.7
Wong Tai Sin	379	90.3
Yau Tsim Mong	241	78.9
NT (East)	1103	61.3
Islands	76	50.1
Northern	224	72.8
Sai Kung/Tseung Kwan O	204	48.0
Shatin	409	65.9
Tai Po	190	64.8
NT (West)	1247	67.1
Kwai Tsing	412	80.5
Tsuen Wan	173	58.8
Tuen Mun	309	62.5
Yuen Long	353	63.2
Marine	0	
Unknown	6	
Others	33	
Total	**5093**	**72.5**

APPENDIX 14

Establishment & Strength of TB & Chest Service

As at 31.12.2010

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	22
Senior Nursing Officer	1	1
Nursing Officer	15	12
Registered Nurse	71	75
Enrolled Nurse	80	80
Senior Dispenser	9	9
Dispenser	2	3
Executive Officer I	1	1
Statistical Officer II	3	3
Personal Secretary I	1	1
Clerical Officer	16	14
Assistant Clerical Officer	20	22
Clerical Assistant	54	52
Office Assistant	11	10
Workman II	46	44
General Worker	3	3
Senior Radiographer	3	3
Radiographer I	7	7
Radiographer II	21	20
Radiographic Technician	5	5
Darkroom Technician	11	10

APPENDIX 15

Total Attendances at Chest Clinics

2000 - 2010

Clinic/Hospital	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
East Kowloon Chest Clinic	64102	64820	60729	56132	58535	61835	56737	63191	59670	56566	58167
Kowloon Chest Clinic	119624	106321	98403	97223	86502	77337	73627	67093	62017	56658	56523
Sai Ying Pun Chest Clinic	57916	53854	51808	45437	46974	45159	42034	42770	40126	36036	34502
Shaukiwan Chest Clinic	53011	57215	57968	47541	50828	50699	49667	48207	50618	45028	41263
Shaukiwan Pneumoconiosis	11023	10889	9120	8008	8098	9144	8866	8359	8501	8187	7719
Shek Kip Mei Chest Clinic	70941	71134	65572	60461	60382	60789	57848	58679	52161	54933	49216
South Kwai Chung Chest Clinic	99012	90448	85221	78998	75487	80015	79455	78238	81441	82044	81923
Tai Po Chest Clinic (Full Time)	-	-	7866	33518	30879	35347	35728	34769	33297	35492	36215
Tung Chung (Full Time)	4601	6241	6129	6807	1928	-	-	-	-	-	-
Wanchai Chest Clinic	84960	79212	70500	62322	60406	57906	58545	56790	50465	50461	49609
Yan Oi Chest Clinic	79188	72982	66905	66084	70168	72078	72144	70643	66058	63411	67564
Yaumatei Chest Clinic	111959	114499	95700	71378	70294	80708	72180	69549	68587	70439	68633
Yuen Chau Kok Chest Clinic	66192	65190	64748	60339	56322	59328	57680	55454	57211	60481	58027
Yung Fung Shee Chest Clinic	73255	73663	77078	77516	71269	78279	72570	73944	71767	74196	80444
Castle Peak Hospital	868	1010	416	372	373	317	241	240	192	146	149
Cheung Chau Chest Clinic	2611	1640	2404	1944	2032	2066	1589	2318	1411	869	1206
Sai Kung Chest Clinic	2141	1945	2119	2372	2495	2382	2542	2280	1885	1745	2277
Sheung Shui Chest Clinic	22383	24271	24273	22933	23211	22601	21765	22333	21909	22468	22303
Tai Po Chest Clinic (Part Time)	24688	25636	17761	-	-	-	-	-	-	-	-
Tung Chung (Part Time)	-	-	-	-	2802	5173	4447	4086	4263	5137	4433
Yuen Long Chest Clinic	27603	27208	29393	28702	31054	33056	29344	27960	29979	29935	30729
Hei Ling Chau ATC	3726	2474	2302	2352	1670	585	472	282	290	344	303
Lai Chi Kok Reception Centre	-	-	-	-	723	479	356	519	412	379	303
Shek Pik Prison Hospital	241	291	277	203	211	141	157	188	232	201	186
Stanley Prison Hospital	10468	10532	11977	8829	7459	527	603	665	796	719	687
Total	**990513**	**961475**	**908669**	**839471**	**820102**	**835951**	**798597**	**788557**	**763288**	**755875**	**752381**

Appendix 16

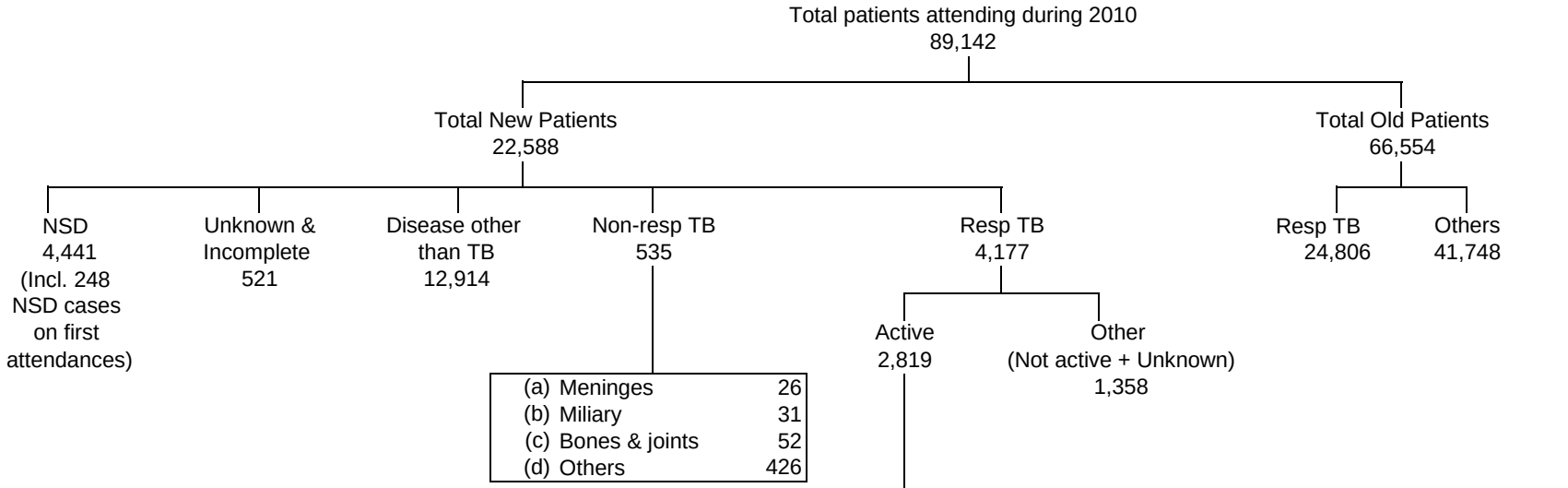
No. of Doctor Sessions, Cases Seen by Doctor and Patient/ Doctor Session 2010

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
Full Time Clinics			
East Kowloon	546	14895	27
Kowloon	863	20807	24
Pneumoconiosis	498	7443	15
Sai Ying Pun	550	12800	23
Shaukeiwan	498	12534	25
Shek Kip Mei	545	13561	25
South Kwai Chung	996	26636	27
Tai Po	498	9105	18
Wanchai	982	18430	19
Yan Oi	807	21663	27
Yaumatei	913	17450	19
Yuen Chau Kok	759	17293	23
Yung Fung Shee	647	16370	25
Sub-total	**9102**	**208987**	**23**
Part Time Clinics			
Castle Peak	24	134	6
Cheung Chau	25	377	15
Sai Kung	51	776	15
Sheung Shui	298	6152	21
Tung Chung	150	1751	12
Yuen Long	397	7633	19
Sub-total	**945**	**16823**	**18**
Institutions Correctional Ser Dept			
Hei Ling Chau	13	303	23
Lai Chi Kok Reception Center	51	237	5
Shek Pik	13	186	14
Stanley Prison	26	687	26
Sub-total	**103**	**1413**	**14**
Total	**10150**	**227223**	**22**

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

APPENDIX 17

Flow Chart of Patients Attending Chest Clinics 2010 *



Bacteriology	Extent	Number
Negative	1	524
	2	54
	3	13
Positive	1	1101
	2	632
	3	289
Incomplete	1	169
	2	28
	3	9

Bacteriology	Cavity	Number
Negative	Yes	36
	No	555
Positive	Yes	623
	No	1399
Incomplete	Yes	19
	No	187

Previous History of TB	Previous Treatment of TB	Number
No	No	2350
Yes	No	320
Yes	Yes	142
Unknown	Unknown	7

* A total of 89142 patients attended, comprising 66554 old cases and 22588 new cases. Among old cases, 24806 had respiratory TB. Among new cases, 4177 had respiratory TB with 2819 being active, 535 had non-respiratory TB, 12914 had diseases other than TB, 521 had unknown and incomplete diagnoses, and 4441 had NSD (no specific diagnosis). Of the 535 new cases with non-respiratory TB, 26 had TB affecting meninges, 31 had miliary TB, 52 had TB affecting bones and joints, and 426 had TB affecting other sites.

Among the 2819 new cases with active respiratory TB, 2350 had neither previous history of TB nor previous treatment of TB, 320 had previous history of TB but no previous treatment, 142 had previous history of TB with treatment, and 7 had unknown status. In terms of bacteriology (negative, positive, or incomplete) and cavity, 36 were negative with cavity, 555 were negative without cavity, 623 were positive with cavity, 1399 were positive without cavity, 19 were incomplete with cavity, and 187 were incomplete without cavity. In terms of bacteriology and extent of disease (1, 2, or 3), 524 were negative with extent 1, 54 were negative with extent 2, 13 were negative with extent 3, 1101 were positive with extent 1, 632 were positive with extent 2, 289 were positive with extent 3, 169 were incomplete with extent 1, 28 were complete with extent 2, and 9 were incomplete with extent 3.

APPENDIX 18

Classification of Patients of First Attendance with New Case Card Completed By Clinics According to International Classification of Diseases Code 2010

Code	Classification	Total
010	Primary Tuberculosis Infection	7
011	Pulmonary Tuberculosis	2589
012	Other Respiratory Tuberculosis	224
013	Tuberculosis of Meninges	26
014	Tuberculosis of Intestines	60
015	Tuberculosis of Bones & Joints	52
016	Tuberculosis of Genito-urinary System	35
017	Tuberculosis of Other Organs	331
018	Miliary Tuberculosis	31
137	Late effects of Tuberculosis	1358
160-165	Malignant Neoplasm of Respiratory System	366
212	Benign Neoplasm of Respiratory System	0
460-466	Acute Respiratory Infection	1256
470-478	Other Diseases of Upper Resp Tract	87
480-486	Pneumonia	1462
487	Influenza	1
490-491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	2953
492	Emphysema	26
493	Asthma	140
494	Bronchiectasis	292
495-496	Others	209
501	Asbestosis	0
502	Silicosis	0
505	Pneumoconiosis, unspecified	0
506-508	Others	2
510	Empyema	5
511	Pleurisy	82
512	Pneumothorax	29
513-519	Other Diseases of Respiratory System	362
786	Unknown	2639
V71	N.S.D.	1436
	Diseases Other than TB & Resp System	5641
Total		21701

Appendix 19 (a)

Extent of Active Resporary TB in First Attenders at Chest Clinics 2008-2010

Extent *	2008		2009		2010	
	No.	%	No.	%	No.	%
1. Minimal	1923	64.1	1953	65.6	1794	63.6
2. Moderate	705	23.5	697	23.4	714	25.3
3. Extensive	373	12.4	327	11.0	311	11.0
Total	3001	100.0	2977	100.0	2819	100.0
No. of first attenders	24012		21592		22588	
% of active TB	12.5		13.8		12.5	

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

Percentage on Sputum Results of Active TB in First Attenders at Chest Clinics 2010

	Number	%
Smear +	1219	43.2
Smear - Culture +	704	25.0
Smear - Culture -	581	20.6
Incomplete	315	11.2
Total	2819	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 2010 (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	2.17	8.70	10.87	6.52	4.35	2.17	2.17	13.04	46
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
	Overall	0.00	2.13	8.51	10.64	6.38	4.26	2.13	2.13	12.77	47
20 - 39	New cases	0.67	2.36	7.07	8.08	7.07	2.69	1.68	2.36	11.45	297
	Previously treated cases	4.76	14.29	19.05	23.81	9.52	9.52	9.52	14.29	28.57	21
	Overall	0.94	3.14	7.86	9.12	7.23	3.14	2.20	3.14	12.58	318
40 - 59	New cases	0.00	0.83	4.41	7.16	7.16	2.20	0.28	0.55	9.64	363
	Previously treated cases	4.76	4.76	16.67	23.81	16.67	7.14	4.76	4.76	28.57	42
	Overall	0.49	1.23	5.68	8.89	8.15	2.72	0.74	0.99	11.60	405
60 up	New cases	0.00	0.00	2.69	7.85	7.64	1.45	0.00	0.00	9.09	484
	Previously treated cases	1.85	0.93	8.33	12.04	7.41	4.63	1.85	0.93	13.89	108
	Overall	0.34	0.17	3.72	8.61	7.60	2.03	0.34	0.17	9.97	592
All	New cases	0.17	0.92	4.54	7.82	7.31	2.10	0.59	0.84	10.00	1190
	Previously treated cases	2.91	3.49	11.63	16.28	9.88	5.81	3.49	3.49	19.19	172
	Overall	0.51	1.25	5.43	8.88	7.64	2.57	0.95	1.17	11.16	1362

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) with date of starting treatment druing the period January to June 2010:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1190	100	172	100	1362	100
Susceptible to all 4 drugs	1071	90.00	139	80.81	1210	88.84
Any resistance	119	10.00	33	19.19	152	11.16
H	54	4.54	20	11.63	74	5.43
R	11	0.92	6	3.49	17	1.25
E	2	0.17	5	2.91	7	0.51
S	93	7.82	28	16.28	121	8.88
Monoresistance	87	7.31	17	9.88	104	7.64
H	23	1.93	4	2.33	27	1.98
R	0	0.00	0	0.00	0	0.00
E	0	0.00	0	0.00	0	0.00
S	64	5.38	13	7.56	77	5.65
Multidrug resistance	10	0.84	6	3.49	16	1.17
H+R	3	0.25	1	0.58	4	0.29
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	5	0.42	1	0.58	6	0.44
H+R+E+S	2	0.17	4	2.33	6	0.44
Other patterns	22	1.85	10	5.81	32	2.35
H+E	0	0.00	0	0.00	0	0.00
H+S	21	1.76	9	5.23	30	2.20
H+E+S	0	0.00	1	0.58	1	0.07
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	1071	90.00	139	80.81	1210	88.84
1 drug	87	7.31	17	9.88	104	7.64
2 drugs	25	2.10	10	5.81	35	2.57
3 drugs	5	0.42	2	1.16	7	0.51
4 drugs	2	0.17	4	2.33	6	0.44

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to December 2009 (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	0.00	2.91	9.71	10.68	0.97	0.00	0.00	11.65	103
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4
	Overall	0.00	0.00	2.80	9.35	10.28	0.93	0.00	0.00	11.21	107
20 - 39	New cases	0.80	2.56	5.93	10.42	10.10	1.76	1.76	2.24	13.62	624
	Previously treated cases	1.75	8.77	12.28	15.79	10.53	0.00	8.77	8.77	19.30	57
	Overall	0.88	3.08	6.46	10.87	10.13	1.62	2.35	2.79	14.10	681
40 - 59	New cases	0.13	0.39	4.32	8.51	8.12	2.23	0.26	0.26	10.60	764
	Previously treated cases	1.63	2.44	6.50	9.76	9.76	0.81	2.44	2.44	13.01	123
	Overall	0.34	0.68	4.62	8.68	8.34	2.03	0.56	0.56	10.94	887
60 up	New cases	0.08	0.42	3.30	6.35	7.70	1.10	0.08	0.17	8.88	1182
	Previously treated cases	0.00	0.66	5.75	7.30	9.07	1.99	0.22	0.44	11.28	452
	Overall	0.06	0.49	3.98	6.61	8.08	1.35	0.12	0.24	9.55	1634
All	New cases	0.26	0.90	4.19	8.04	8.49	1.57	0.52	0.67	10.59	2673
	Previously treated cases	0.47	1.73	6.45	8.49	9.28	1.57	1.42	1.57	12.26	636
	Overall	0.30	1.06	4.62	8.13	8.64	1.57	0.70	0.85	10.91	3309

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) with date of starting treatment druing the period January to December 2009:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2673	100	636	100	3309	100
Susceptible to all 4 drugs	2390	89.41	558	87.74	2948	89.09
Any resistance	283	10.59	78	12.26	361	10.91
H	112	4.19	41	6.45	153	4.62
R	24	0.90	11	1.73	35	1.06
E	7	0.26	3	0.47	10	0.30
S	215	8.04	54	8.49	269	8.13
Monoresistance	227	8.49	59	9.28	286	8.64
H	56	2.10	22	3.46	78	2.36
R	6	0.22	1	0.16	7	0.21
E	0	0.00	0	0.00	0	0.00
S	165	6.17	36	5.66	201	6.07
Multidrug resistance	18	0.67	10	1.57	28	0.85
H+R	4	0.15	1	0.16	5	0.15
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	9	0.34	6	0.94	15	0.45
H+R+E+S	5	0.19	3	0.47	8	0.24
Other patterns	38	1.42	9	1.42	47	1.42
H+E	2	0.07	0	0.00	2	0.06
H+S	36	1.35	9	1.42	45	1.36
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	0	0.00	0	0.00	0	0.00
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	2390	89.41	558	87.74	2948	89.09
1 drug	227	8.49	59	9.28	286	8.64
2 drugs	42	1.57	10	1.57	52	1.57
3 drugs	9	0.34	6	0.94	15	0.45
4 drugs	5	0.19	3	0.47	8	0.24

Appendix 19 (d1)

Trend of anti-TB drug resistance (1998-2010) (Data from Programme Forms)

New cases

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (Jan-Jun)
Ethambutol	1.24	1.11	0.54	0.96	0.65	0.42	0.34	0.54	0.35	0.12	0.45	0.26	0.17
Rifampicin	1.17	0.97	0.61	0.83	0.46	0.69	0.75	0.83	0.86	0.46	0.64	0.90	0.92
Isoniazid	6.78	6.22	5.21	5.02	4.71	4.64	3.65	4.16	4.13	3.79	4.33	4.19	4.54
Streptomycin	7.65	9.34	7.78	7.39	7.40	7.59	6.90	6.72	6.00	7.47	6.89	8.04	7.82
MDR-TB	1.06	0.75	0.47	0.55	0.34	0.46	0.48	0.51	0.55	0.31	0.30	0.67	0.84
Total % resistance	10.89	12.61	10.35	10.39	10.22	10.54	8.84	9.33	8.64	9.32	9.41	10.59	10.00

Previously treated cases

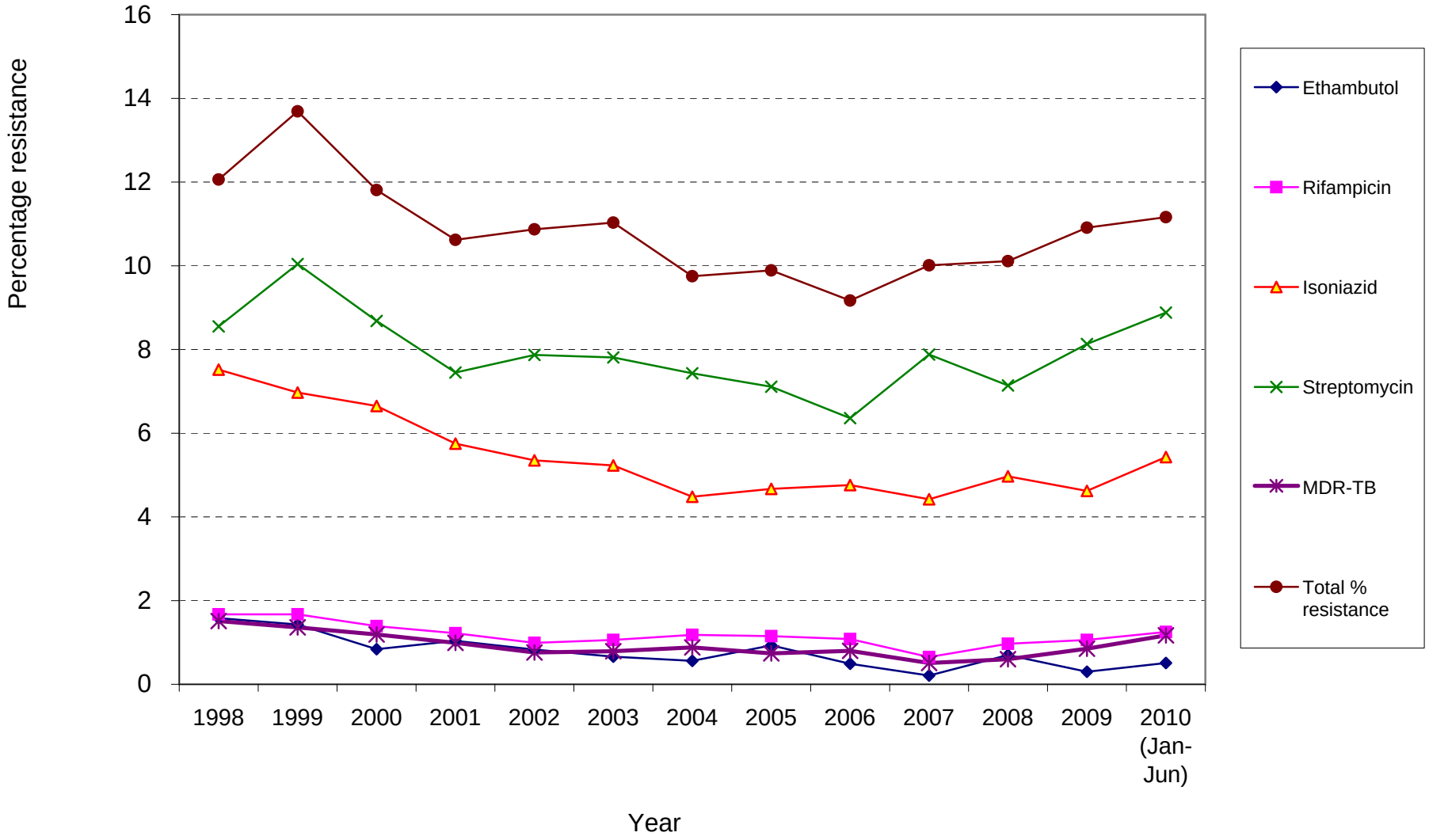
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	2.19	2.14	3.92	1.61	0.90	2.65	0.47	2.91
Rifampicin	4.61	6.09	5.98	3.71	4.59	3.41	4.29	3.64	2.90	2.10	3.53	1.73	3.49
Isoniazid	11.84	11.51	15.26	11.80	9.69	9.00	10.46	8.68	10.00	9.31	10.00	6.45	11.63
Streptomycin	13.82	14.45	13.81	10.96	10.97	9.25	11.26	10.08	9.35	11.11	9.12	8.49	16.28
MDR-TB	4.17	5.19	5.36	3.54	3.57	2.92	3.75	2.52	2.90	2.10	2.94	1.57	3.49
Total % resistance	18.86	20.32	20.41	16.36	16.58	14.11	16.35	14.29	13.55	15.32	15.59	12.26	19.19

Overall

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (Jan-Jun)
Ethambutol	1.58	1.43	0.84	1.04	0.83	0.66	0.56	0.93	0.49	0.21	0.70	0.30	0.51
Rifampicin	1.67	1.67	1.39	1.22	0.99	1.06	1.18	1.15	1.08	0.65	0.97	1.06	1.25
Isoniazid	7.52	6.97	6.65	5.75	5.35	5.23	4.48	4.67	4.76	4.42	4.97	4.62	5.43
Streptomycin	8.55	10.04	8.68	7.45	7.87	7.81	7.43	7.11	6.36	7.88	7.14	8.13	8.88
MDR-TB	1.51	1.36	1.19	0.99	0.76	0.79	0.88	0.74	0.80	0.51	0.60	0.85	1.17
Total % resistance	12.06	13.69	11.81	10.62	10.87	11.03	9.75	9.89	9.17	10.01	10.11	10.91	11.16

Appendix 19 (d2)

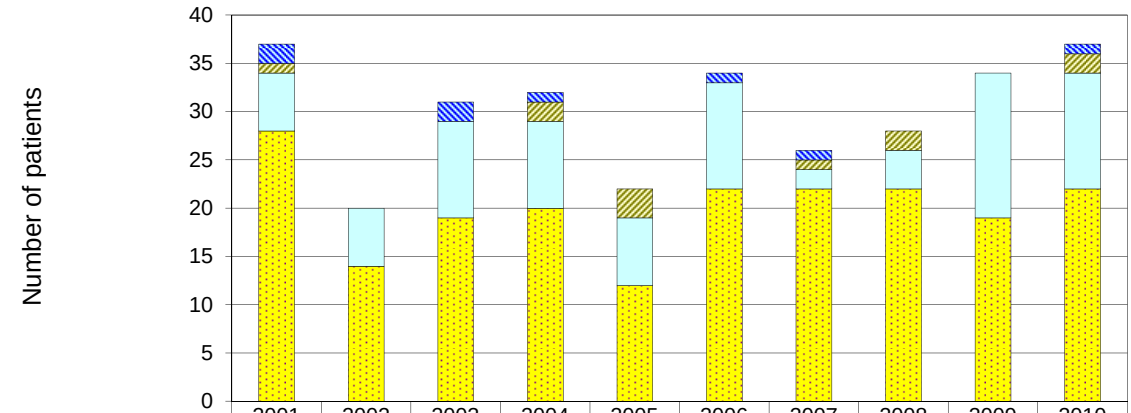
Trend of anti-TB drug resistance (1998-2010) (Overall) (Data from Programme Forms)



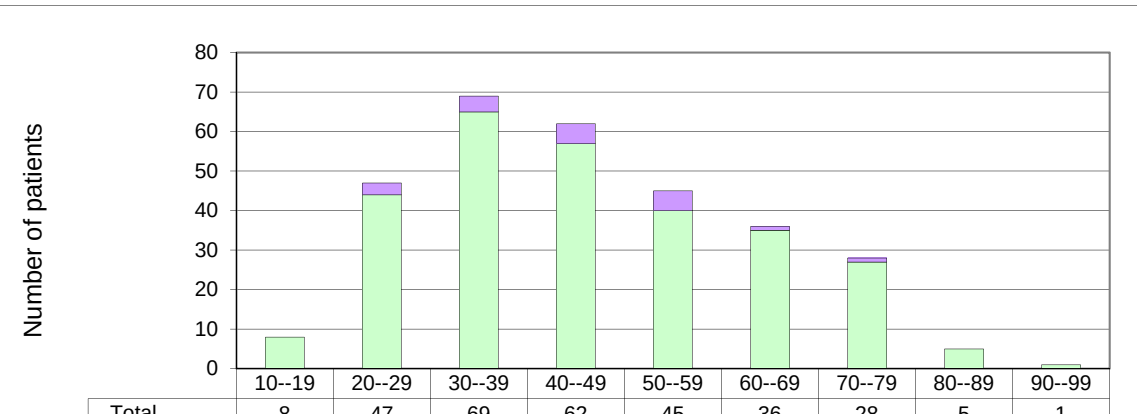
Appendix 19 (e)

MDR-TB and XDR-TB by Sex and Year (Upper Graph) and by Age (Lower Graph) (2001-2010)

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.



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	37	20	31	32	22	34	26	28	34	37
XDR-TB female	2	0	2	1	0	1	1	0	0	1
XDR-TB male	1	0	0	2	3	0	1	2	0	2
non-XDR-TB female	6	6	10	9	7	11	2	4	15	12
non-XDR-TB male	28	14	19	20	12	22	22	22	19	22



	10--19	20--29	30--39	40--49	50--59	60--69	70--79	80--89	90--99
Total	8	47	69	62	45	36	28	5	1
XDR-TB	0	3	4	5	5	1	1	0	0
non-XDR-TB	8	44	65	57	40	35	27	5	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 the 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 2010

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	192	117	6	6	118	62	15	32	184	87.1	41	9	0	8	2	4	0	4	0	13	1	5.6	188	8	58	0
Kowloon	250	161	7	9	159	66	13	67	215	83.4	52	33	0	15	2	14	0	12	1	1	11	3.8	216	1	44	0
South Kwai Chung	269	197	14	8	168	70	11	71	257	88.2	66	23	0	21	1	11	2	6	0	4	1	1.3	252	4	74	3
Sai Ying Pun	94	77	10	4	77	55	4	37	85	87.8	61	15	0	7	0	5	1	3	0	0	2	1.4	97	9	30	0
Shaukeiwan	148	99	8	4	83	56	5	52	137	93.1	27	29	0	6	1	4	3	3	0	0	0	0.0	131	0	42	0
Shek Kip Mei	117	120	5	6	91	54	9	42	154	85.2	35	16	0	13	1	6	6	9	0	1	4	2.2	97	0	82	0
Tai Po	151	85	4	6	82	19	2	37	116	83.6	3	9	0	12	2	6	1	4	0	1	5	3.3	149	0	0	0
Wanchai	140	142	11	16	102	60	9	87	129	84.0	38	11	0	3	1	29	0	3	0	5	0	1.9	156	0	23	0
Yan Oi	168	167	4	7	154	92	17	66	231	88.4	66	19	0	19	0	7	3	1	2	3	7	3.6	151	3	89	0
Yaumatei	189	133	7	8	134	52	8	49	163	81.2	42	20	0	8	4	20	4	7	2	7	1	3.8	188	5	12	9
Yuen Chau Kok	143	144	22	19	126	31	15	90	174	92.6	22	11	4	10	1	5	0	3	1	0	1	0.7	148	1	32	0
Yung Fung Shee	257	167	9	16	154	64	14	99	209	87.3	42	15	0	21	1	6	0	10	5	0	2	2.0	243	2	69	3
Sub-total	2118	1609	107	109	1448	681	122	729	2054	86.8	495	210	4	143	16	117	20	65	11	35	35	2.5	2016	33	555	15
Hosp Discharge Clinic																										
East Kowloon	0	0	0	0	0	0	0	0	1	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	-1	0	0	0
Part Time Clinics																										
Castle Peak	0	7	0	0	0	0	0	0	1	100.0	2	1	0	0	0	0	0	0	0	0	0	0.0	3	0	0	0
Cheung Chau	5	0	0	0	0	1	0	1	3	80.0	0	0	0	1	0	0	0	0	0	0	0	0.0	1	2	1	0
Sai Kung	10	5	1	1	7	4	0	3	9	80.0	3	2	0	0	0	2	0	1	0	0	0	0.0	8	0	0	0
Sheung Shui	127	82	5	3	70	23	7	32	105	90.1	25	13	0	6	3	2	2	1	0	0	3	2.0	111	0	88	2
Tung Chung	17	14	0	0	16	9	1	4	14	81.8	4	2	0	1	1	2	0	0	0	0	0	0.0	27	0	0	0
Yuen Long	147	105	7	4	83	28	4	31	116	84.0	21	11	0	9	3	7	1	3	0	1	5	3.4	162	0	90	0
Sub-total	306	213	13	8	176	65	12	71	248	86.2	55	29	0	17	7	13	3	5	0	1	8	2.4	312	2	179	2
Institutions Correctional Services Dept																										
Hei Ling Chau	4	4	8	0	0	0	1	3	2	83.3	4	2	0	0	0	1	0	0	0	0	0	0.0	3	0	0	0
Stanley Prison	13	10	1	0	0	0	13	8	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	3	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	17	14	9	0	0	0	14	11	2	92.857	4	2	0	0	0	1	0	0	0	0	0	0.0	6	0	0	0
Total	2441	1836	129	117	1624	746	148	811	2305	86.8	554	241	4	160	23	131	23	70	11	36	43	2.5	2333	35	734	17

Appendix 20 (b)
Treatment Return 2010

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	63	25	1	4	52	17	8	4	53	89.1	17	8	0	6	0	0	0	1	0	0	0	0.0	65	9	37	0
Kowloon	40	13	0	2	24	8	2	4	29	76.7	11	3	0	3	0	1	0	0	0	0	6	14.0	28	0	12	0
South Kwai Chung	77	36	2	2	55	22	5	3	50	74.6	22	5	0	8	0	4	0	2	0	2	2	5.6	91	0	19	0
Sai Ying Pun	36	1	3	0	37	11	0	0	23	95.8	10	1	0	0	0	0	0	0	0	0	1	4.2	53	1	10	0
Shaukeiwan	31	3	2	1	20	8	1	1	27	77.8	7	1	0	5	1	1	0	1	0	0	0	0.0	20	0	13	0
Shek Kip Mei	90	9	0	2	21	8	3	1	20	77.8	6	2	0	4	0	0	0	2	0	0	0	0.0	92	0	10	0
Tai Po	24	8	0	0	10	3	0	1	20	87.5	2	1	0	1	1	0	0	1	0	0	0	0.0	18	0	0	0
Wanchai	39	16	0	2	17	14	1	6	21	87.1	18	3	0	2	0	1	0	0	0	1	0	3.2	35	0	9	0
Yan Oi	107	7	4	2	27	11	3	1	11	80.0	8	2	0	3	0	0	0	0	0	0	0	0.0	130	0	9	0
Yaumatei	33	15	1	2	25	10	3	2	25	71.1	10	2	0	5	0	0	2	0	0	5	1	15.8	31	4	9	3
Yuen Chau Kok	40	14	4	4	27	0	3	2	17	82.6	4	5	2	4	0	0	0	0	0	0	0	0.0	52	1	19	0
Yung Fung Shee	24	26	2	1	43	18	5	7	26	84.6	11	4	0	5	0	1	0	0	0	0	0	0.0	55	0	40	0
Sub-total	604	173	19	22	358	130	34	32	322	81.4	126	37	2	46	2	8	2	7	0	8	10	4.1	670	15	187	3
Hosp Discharge Clinic																										
East Kowloon	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
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	1	0	1	0	1	1	0	0	0	0.0	0	1	0	0	1	0	0	0	0	0	0	0.0	2	0	6	0
Sai Kung	0	0	0	0	0	2	0	1	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	1	0	0	0
Sheung Shui	9	1	0	3	9	3	0	1	7	100.0	7	0	0	0	0	0	0	0	0	0	0	0.0	10	0	8	0
Tung Chung	1	1	0	0	5	0	0	0	1	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	6	0	0	0
Yuen Long	11	2	1	2	6	2	1	1	9	62.5	1	0	0	4	1	0	0	1	0	0	0	0.0	6	0	5	0
Sub-total	22	4	2	5	21	8	1	3	17	74.1	8	1	0	4	2	0	0	1	0	0	0	0.0	25	0	19	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	626	177	21	27	379	138	35	35	339	81.0	134	38	2	50	4	8	2	8	0	8	10	3.9	695	15	206	3

APPENDIX 20 (c)

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

Name of clinic/hospital	Service regimen / Other regimens *																								
	b/f	Brought in					Treatment completed				Transfer out to		Interrup. Rx temp.	Died	Drop out				Complete defaulter				Number still on Rx c/f	Unsup. Rx	Incomp. Super. Rx	No. Def. >2m, <3m
											hospi-tal	other cc			Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M, <3M	>3M	%				
							<6M	at 6M	>6M	%																
	A	B *	C *	D *	E *	F *	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
		H + I / A + B + C + D + E + F - G - K - L - M - Q - W											S + T + U / A + B + C + D + E + F - G - K - L - M - Q - 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.)

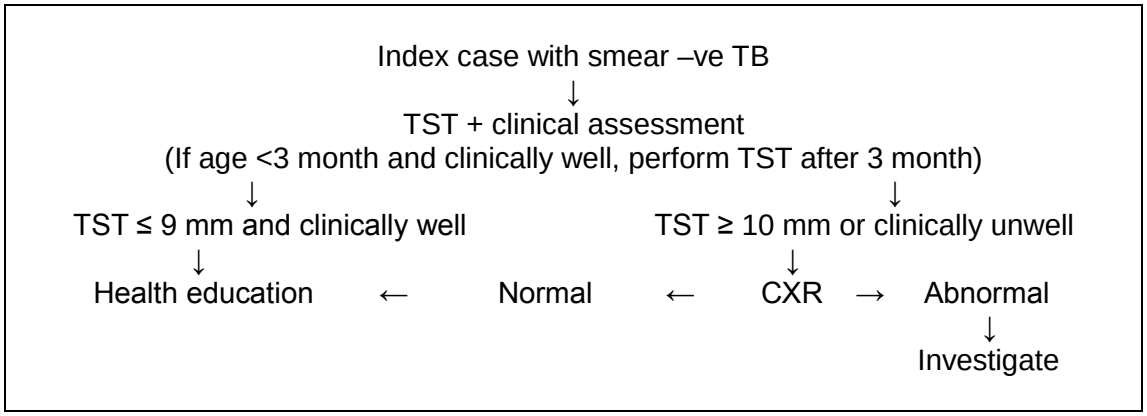
  This item needs to be counted only on the last working day of the month when completing the monthly treatment return.

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.

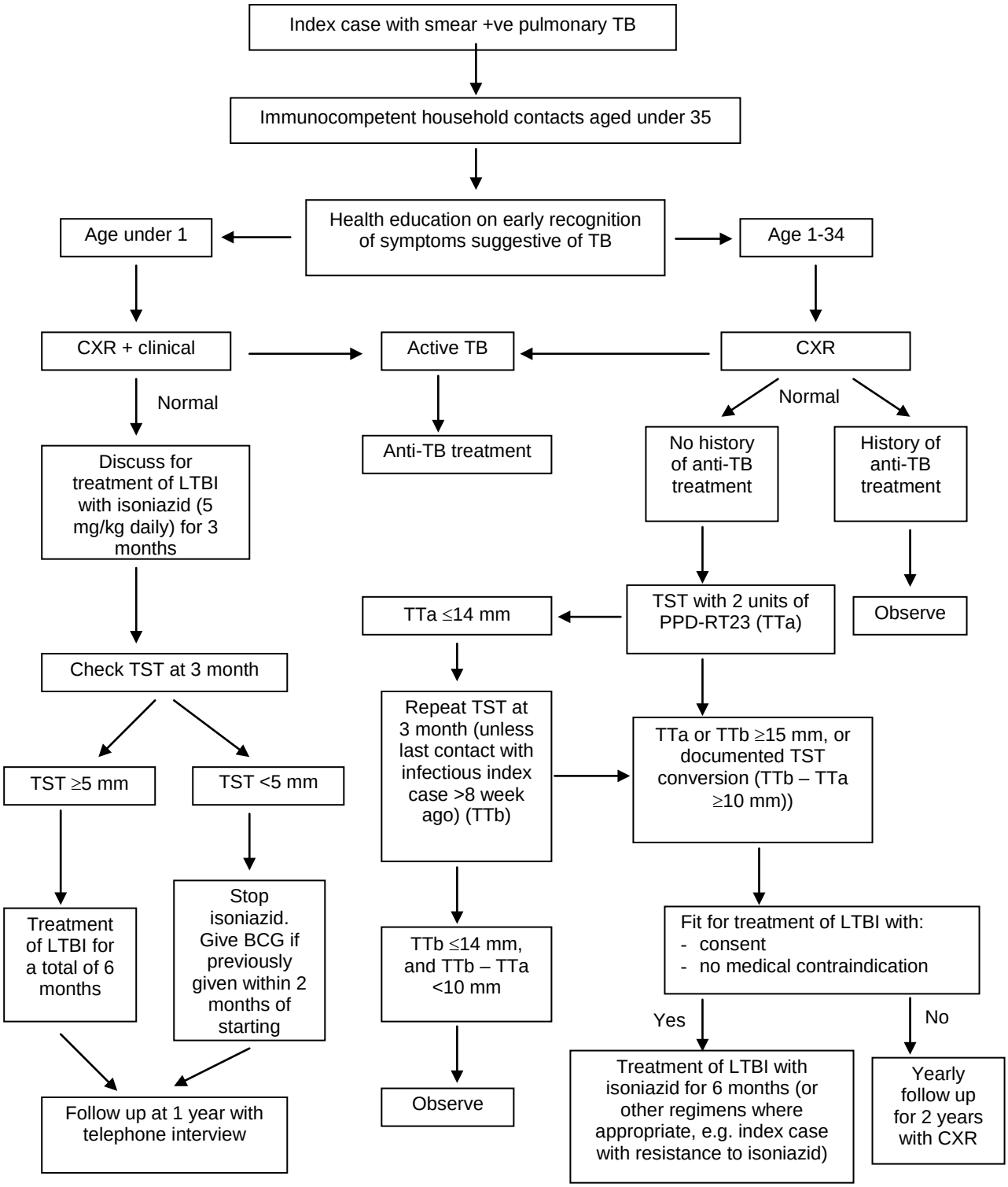
Flow chart for contact investigation of close contacts aged below 5 with smear negative index case *



* 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 2010

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	1508	3191	4699
No. of contacts listed	3842	8139	11981
Number of contacts x-rayed	3843 (100.00%)	8302 (100.00%)	12145 (100.00%)
Results			
(a) NSD & Unknown	3367 (87.61%)	7156 (86.20%)	10523 (86.64%)
(b) Disease other than TB	307 (7.99%)	730 (8.79%)	1037 (8.54%)
(c) Inactive respiratory TB	104 (2.71%)	218 (2.63%)	322 (2.65%)
(d) Active respiratory TB			
A (radiologically)	24 (0.62%)	74 (0.89%)	98 (0.81%)
B (bacteriogically)	9 (0.23%) > 37 (0.96%)	71 (0.86%) > 145 (1.75%)	80 (0.66%) > 182 (1.50%)
C (incomplete)	4 (0.10%)	0 (0.00%)	4 (0.03%)
(e) Non-respiratory TB	4 (0.10%)	3 (0.04%)	7 (0.06%)
(f) Result not yet known	24 (0.62%)	50 (0.60%)	74 (0.61%)

APPENDIX 22 (a)

Scheme for BCG Administration in Hong Kong, 2010

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 2010

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	4048	3992	98.6
	Queen Mary	4058	3952	97.4
Private Hospital	Canossa	2030	2005	98.8
	H.K. Adventist	1217	1186	97.5
	H.K. Sanatorium	2561	2541	99.2
	Matilda International	1238	1089	88.0
	St. Paul's	4384	4314	98.4
Total (HK Island)		19536	19079	97.7
Hospital under HA management	Kwong Wah	6023	5981	99.3
	Queen Elizabeth	6078	6191	101.9 *
	United Christian	5297	5279	99.7
Private Hospital	H.K. Baptist	12450	12188	97.9
	St. Teresa's	8722	8595	98.5
	Precious Blood Hospital	2164	2154	99.5
Total (Kowloon)		40734	40388	99.2
Hospital under HA management	Alice H.M.L. Nethersole	-	-	-
	Prince of Wales	6928	6973	100.6 *
	Princess Margaret	4988	5061	101.5 *
	Tuen Mun	5150	5114	99.3
Private Hospital	T.W. Adventist	3647	3603	98.8
	Shatin Int'l Medical Ctr Union	7589	7482	98.6
Total (NT Areas)		28302	28233	99.8
Mother & Child Health Centre		-	280	-
Grand Total		88572	87980	99.3

Note: * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 2009

Vaccination Method 2008	Percentage
Intradermal	100.0
Percutaneous	0.0

APPENDIX 23

TB Beds in Public Services, 2010

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	149
	Kowloon Hospital	114
	Ruttonjee Hospital	148
	Haven of Hope Hospital	94
	Wong Tai Sin Hospital	119
	Total (Hospital Authority)	624
Custody	Stanley Prison Hospital	20
Grand Total (2010)		644
Grand Total (2009)		650
Grand Total (2008)		656

APPENDIX 24

Annual Admissions to Hospitals from Government Chest Clinics

1999 - 2010

Year	Total Admissions
1999	5012
2000	5408
2001	5317
2002	5183
2003	4603
2004	4986
2005	4435
2006	4571
2007	4038
2008	3170
2009	3345
2010	3330

Admissions by Clinic	Year 2010
East Kowloon	239
Kowloon	209
Sai Ying Pun	435
Shaukeiwan	187
Shaukeiwan Pneumoconiosis	48
Shek Kip Mei	176
South Kwai Chung	481
Tai Po	54
Tung Chung	18
Wanchai	265
Yan Oi	470
Yaumatei	210
Yuen Chau Kok	181
Yung Fung Shee	203
Cheung Chau	3
NT Unit	151
Total	3330

APPENDIX 25

HIV Surveillance Among TB Patients

Voluntary HIV Antibody Testing Among TB Patients in Government Chest Clinics (2005 – 2010)

Year	HIV positive		HIV negative		HIV results unknown or not done		Total	
	Number	%	Number	%	Number	%	Number	%
2005	35	0.7%	4174	80.5%	973	18.8%	5182	100%
2006	33	0.7%	4478	90.4%	445	9.0%	4956	100%
2007	41	0.9%	4034	87.8%	517	11.3%	4592	100%
2008	48	1.0%	4073	88.8%	464	10.1%	4585	100%
2009	40	0.9%	3953	88.1%	496	11.0%	4489	100%
2010	28	0.7%	3805	89.5%	418	9.8%	4251	100%

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

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%)

Since late 2008, UAS is no longer performed, and surveillance of HIV among TB patients mainly depends on voluntary HIV testing.

APPENDIX 26

Number of 'Confirmed' cases of TB in health care staff
Notified to Labour Department (1993 – 2010)

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
2008	25
2009	18
2010	11

'Confirmed' Cases of TB in Health Care Staff Notified
to Labour Department (2010) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24					0
25 – 29					0
30 – 34	1				1
35 – 39	2	4			6
40 – 44		1		1	2
45 – 49		1		1	2
50 – 54					0
55 – 59					0
60 – 64					0
Total	3	6	0	2	11

Appendix 27
Cohorts of TB Patients

Treatment outcomes for TB cases (including both HIV-negative and HIV-positive cases) registered in 2009 calendar year (number of patients)

	Total number of cases registered		Cured		Completed		Died		Failed		Defaulted		Not evaluated	
New pulmonary smear-positive	1441	100.00%	852	59.13%	154	10.69%	216	14.99%	0	0.00%	40	2.78%	179	12.42%
New pulmonary smear-negative and extrapulmonary (or smear unknown/not done)	3271	100.00%	-	-	2232	68.24%	553	16.91%	0	0.00%	134	4.10%	352	10.76%
Re-treatment	481	100.00%	127	26.40%	185	38.46%	73	15.18%	0	0.00%	27	5.61%	69	14.35%

NB:
- The above table shows the treatment outcomes for the cases at 12 month (from DOS, date of starting treatment).
- "Not evaluated": includes "transferred out", "still on treatment" and any other registered cases where the treatment outcome has not been evaluated.
- Regarding the item "new pulmonary smear-positive", the total number of cases registered is 1441, including 1210 cases under DOTS and 231 cases under non-DOTS. Among the 1210 DOTS cases, 935 had treatment completed at 12 month, representing a treatment success rate of 77.28% for "new pulmonary smear-positive cases under DOTS". On the other hand, the overall treatment success rate (for both DOTS and non-DOTS cases counted together) is 69.81% [(852+154)/1441].

Treatment outcomes for HIV-positive TB cases registered in 2009 calendar year (number of patients)

	Total number of cases registered		Cured		Completed		Died		Failed		Defaulted		Not evaluated	
New pulmonary smear-positive (and/or culture positive)	11	100.00%	9	81.82%	0	0.00%	1	9.09%	0	0.00%	1	9.09%	0	0.00%
New pulmonary smear-negative and extrapulmonary (or smear unknown/not done)	23	100.00%	-	-	15	65.22%	0	0.00%	0	0.00%	3	13.04%	5	21.74%
Re-treatment	4	100.00%	0	0.00%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	3	75.00%

NB: Overall treatment success rate (at 12 month from DOS) for new cases = 70.59% [(9+15)/(11+23)]

Final treatment outcomes for MDR-TB and XDR-TB cases registered in 2008 calendar year (number of patients)

	Total number of cases registered		Cured		Completed		Died		Failed		Defaulted		Not evaluated	
MDR-TB	26	100.00%	16	61.54%	0	0.00%	2	7.69%	0	0.00%	5	19.23%	3	11.54%
XDR-TB	2	100.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%

NB: Overall treatment success rate (at completion or cessation of drug treatment) = 60.71% [(16+1)/(26+2)].

Part 2

PNEUMOCONIOSIS

Part 2 - Pneumoconiosis: Contents

APPENDIX 1

New Cases of Suspected Pneumoconiosis attending
the Pneumoconiosis Clinic in Hong Kong 1956 - 2010

Year	Number of New Cases Undergoing Assessment				Cumulative Total Compensated	
	Government Workers	Non-government Workers	Total	Cumulative Total	R1	R2
1956	1	-	1	1		
1957	4	4	8	9		
1958	9	13	22	31		
1959	5	7	12	43		
1960	9	6	15	58		
1961	8	-	8	66		
1962	3	1	4	70		
1963	9	5	14	84		
1964	21	17	38	122		
1965	9	4	13	135		
1966	7	9	16	151		
1967	3	6	9	160		
1968	4	2	6	166		
1969	4	10	14	180		
1970	22	36	58	238		
1971	9	18	27	265		
1972	9	29	38	303		
1973	3	39	42	345		
1974	-	97	97	442		
1975	5	84	89	531		
1976	15	252	267	798		
1977	3	216	219	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 (2)	8187	1494	4276
2008	3	118	121 (5)	8308	1494	4348
2009	-	167	167 (5)	8475	1494	4456
2010	-	152	152 (c) (1)	8627	1494 (d)	4518

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 62 of the 152 cases in 2010 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 62 cases.
(d) Under Revised Ordinance 1993 : 584 out of 1494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2010. 130 living pneumoconiotics were each receiving a monthly ex-gratia payment of $4710.00 in 2010.

APPENDIX 2

Age Distribution of Pneumoconiosis Cases 2010

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	1	2
45 - 49	1	2
50 - 54	10	16
55 - 59	14	22
60 - 64	14	22
65 - 69	8	13
70 - 74	5	8
75+	9	15
Total	62	100

APPENDIX 3

Occupation Distribution of Confirmed Pneumoconiosis 2010

Type of Occupation	Number of Cases	%
Construction Construction/Quarry Others	43 6 13	69 10 21
Total	62	100

APPENDIX 4

Pneumoconiosis Patients by Duration of Exposure to Dust 2010

Duration	Number of Cases	%
<5 years	-	-
5 - 9	2	3
10 - 14	9	15
15 - 19	5	8
20 - 24	11	18
25 - 29	10	16
30+	25	40
Unknown	-	-
Total	62	100

APPENDIX 5

Pneumoconiosis Patients by Degree of Incapacity 2010

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	28
10	16
15	5
20	5
25	-
30	2
35	-
40	1
45	1
50	1
55	-
60	-
70	1
75	-
80	-
100	-
N. A.	2
Total	62

APPENDIX 6

Confirmed Pneumoconiosis Patients
Classified by Radiological Appearance 2010

Type of Opacity	Profusion 1	2	3	Sub-Total
Small opacities				
Rounded				
p (up to 1.5 mm diameter)	31	-	-	31
q (1.5 to 3.0 mm diameter)	19	5	-	24
r (3.0 to 10.0 mm diameter)	-	1	1	2
Irregular				
s (fine irregular or linear)	1	-	-	1
t (medium irregular)	1	1	-	2
u (coarse irregular)	-	-	-	-
Sub-total	52	7	1	60
Combined opacities	-	-	-	-
N. A.	-	-	-	2
Total				62

5 out of the 62 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)	3
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	2
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	-
Total	5

Appendix 7

Pneumoconiosis Patients with Tuberculosis 2010

Type of T.B.	Number of Cases	%
Bacteriological Positive	11	18
Bacteriological Negative	42	68
No T.B.	7	11
N.A.	2	3
Total	62	100

Appendix 8

Confirmed Pneumoconiosis Patients by Other Particulars 2010

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	45	73
	Non-smoker	15	24
	Unknown	2	3
	Total	62	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	13	21
	No	47	76
	Unknown	2	3
	Total	62	100
General Condition	Good	60	97
	Fair	-	-
	Poor	-	-
	Died	2	3
	Total	62	100

Part 3

ANNEX

Part 3 – Annex: Contents

Annex 1 (a)

Treatment Outcomes up to 2 year of the 2007 Cohort of TB Patients

A total of 5463 cases of TB were notified in the year 2007. Among them, 4444 were ever seen at chest clinics (ES) while 1019 were never seen at chest clinics (NS). They are categorised as follows:

Categories		ES	%	NS	%	ES/NS	%
(A)	New pulmonary, smear positive	1151	25.9	74	7.3	1225	22.4
(B)	New pulmonary, smear negative	2046	46.0	99	9.7	2145	39.3
(C)	New pulmonary, smear not done/ unknown	84	1.9	18	1.8	102	1.9
(D)	New extra-pulmonary	525	11.8	17	1.7	542	9.9
(E)	Relapse pulmonary, smear positive	117	2.6	23	2.3	140	2.6
(F)	Pulmonary smear-positive retreatment after failure or default	10	0.2	3	0.3	13	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)]	511	11.5	785	77.0	1296	23.7
Total		4444	100.0	1019	100.0	5463	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 2007

Discussion

Annex 1 (b) – Various age groups

Among the total of 5463 patients, 205 (3.8%) were aged between 0 and 19, 1193 (21.8%) between 20 and 39, 1505 (27.5%) between 40 and 59, and 2560 (46.9%) above 60. 64.0% were male. 39.0%, 23.8%, and 15.5% were never smokers, ex-smokers, and current smokers respectively. 75.4% were permanent local residents while 75.5% were of Chinese ethnicity. Most of them (73.1%) presented because of symptoms. 10.1% presented as incidental finding to pre-employment, pre-immigration, other body check or incidental to other illness, while 1.4% were diagnosed through contact tracing.

74.4% of patients had pulmonary TB, 13.3% had extra-pulmonary TB and 12.4% had both. TB pleura and TB lymph node accounted for 9.2% and 8.2% of the site of involvement respectively. Among pulmonary TB patients, 34.8% had pretreatment sputum smear +ve, 74.6% had pretreatment culture +ve and 16.6% had cavitary lesion on their chest radiographs.

With regard to co-morbidity factors for TB, 12.8% of TB patients had diabetes mellitus, 4.7% of patients had coexisting malignancy, 0.9% of patients were immuno-suppressed because of either steroid or cytotoxic therapy. HIV infection was reported for 0.8% of cases. 3.8% of all TB patients were reported to be hepatitis B carrier while 0.5% had chronic active hepatitis.

61.3% of patients were on 6 months short course chemotherapy for TB or other standard regimen based on HREZS. Treatment side effect was reported in 39.7% of patients. 14.0% were GI side effects, 13.4% were skin rash, 3.7% had transient rise in liver enzyme and 7.5% had frank hepatitis.

Among the 4444 patients ever seen in chest clinic, 72.4% received >90% DOT in initial 2 months, while 61.9% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 26.0%, 74.8% and 84.0% respectively. Death rates at corresponding periods were 4.9%, 6.5% and 6.8% respectively.

Among the 1019 patients never seen in chest clinic, 2.6% received >90% DOT in initial 2 months, while 1.9% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 0.9%, 8.1% and 8.3% respectively. Death rates at corresponding periods were 3.0%, 8.8% and 8.8% 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, 1568 were pretreatment smear +ve, 3537 were pretreatment culture +ve, and 15 were MDR-TB patients.

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

Overall sputum smear conversion rate at 2 months were 86.1% for smear +ve patients and 90.0% for MDRTB patients. Culture conversion rate at 2 months were 87.1% for culture +ve patients and 70.0% for MDR-TB patients.

Treatment success rates for smear +ve patients at 6 months, 12 months and 24 months were 16.5%, 65.3% and 74.8% respectively. Those for culture +ve patients were 21.2%, 61.3% and 69.2% respectively. Those for MDR-TB patients were 0.0%, 0.0% and 53.3% respectively. 2 out of 15 (13.3%) 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 20.1%, 72.3% and 83.1% respectively. The corresponding treatment success rates for retreatment pulmonary smear +ve patients were 3.8%, 40.2% and 45.2% respectively.

Annex 1 (e) – Treatment defaulters

There were 238 treatment defaulters at 24 months in the 2007 cohort. Most (58.4%) were aged between 20 to 59, 25.6% worked full time, 2.1% part time, 22.7% retired, and 18.9% unemployed. 85.3% were new case, 10.1% were relapse, 4.6% were retreatment after default cases, and 0.0% were retreatment after failure of previous treatment cases. 41.9% had pretreatment smear +ve and 13.0% had cavitary lesions on the chest radiograph. 43.7% of patients lost contact after default and 8.8% 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	96	46.8	674	56.5	491	32.6	707	27.6	1968	36.0
Male	109	53.2	519	43.5	1014	67.4	1853	72.4	3495	64.0
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Marital status										
Single	172	83.9	637	53.4	173	11.5	121	4.7	1103	20.2
Married	2	1.0	383	32.1	1015	67.4	1628	63.6	3028	55.4
Separated	0	0.0	10	0.8	23	1.5	9	0.4	42	0.8
Divorce	0	0.0	21	1.8	81	5.4	21	0.8	123	2.3
Widowed	0	0.0	1	0.1	8	0.5	96	3.8	105	1.9
Not recorded	31	15.1	141	11.8	205	13.6	685	26.8	1062	19.4
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Smoking status										
Never	139	67.8	648	54.3	618	41.1	727	28.4	2132	39.0
Ex-smoker	13	6.3	161	13.5	305	20.3	820	32.0	1299	23.8
Current smoker	18	8.8	217	18.2	355	23.6	258	10.1	848	15.5
Not recorded	35	17.1	167	14.0	227	15.1	755	29.5	1184	21.7
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Institution-related										
Yes	118	57.6	126	10.6	69	4.6	282	11.0	595	10.9
No	57	27.8	924	77.5	1231	81.8	1634	63.8	3846	70.4
Not recorded	30	14.6	143	12.0	205	13.6	644	25.2	1022	18.7
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Institution										
Client	109	-	88	-	36	-	251	-	484	-
Staff	2	-	21	-	20	-	0	-	43	-
Institution type										
Old age home	40	-	21	-	20	-	259	-	340	-
School	103	-	65	-	11	-	161	-	340	-
Hospital	0	-	10	-	11	-	1	-	22	-
Handicapped	0	-	17	-	14	-	3	-	34	-
Prison	4	-	36	-	15	-	3	-	58	-
Others	3	-	13	-	12	-	6	-	34	-
Living situation										
Street-sleeper	0	0.0	4	0.3	1	0.1	5	0.2	10	0.2
Cubicle bed space	1	0.5	2	0.2	1	0.1	9	0.4	13	0.2
Institution	10	4.9	41	3.4	33	2.2	269	10.5	353	6.5
Work quarter	0	0.0	52	4.4	10	0.7	1	0.0	63	1.2
Alone (not above)	2	1.0	70	5.9	183	12.2	254	9.9	509	9.3
With friends	2	1.0	48	4.0	24	1.6	13	0.5	87	1.6
With family	160	78.0	824	69.1	1049	69.7	1361	53.2	3394	62.1
Not recorded	30	14.6	152	12.7	204	13.6	648	25.3	1034	18.9
Residential status										
Permanent resident	159	77.6	806	67.6	1252	83.2	1902	74.3	4119	75.4
Chinese immigrant	9	4.4	56	4.7	19	1.3	8	0.3	92	1.7
Imported worker	0	0.0	149	12.5	35	2.3	1	0.0	185	3.4
Tourist - 2 way permit Chinese	1	0.5	8	0.7	2	0.1	1	0.0	12	0.2
Other tourist	0	0.0	4	0.3	4	0.3	1	0.0	9	0.2
Vietnamese	0	0.0	8	0.7	0	0.0	4	0.2	12	0.2
Illegal immigrants	1	0.5	17	1.4	1	0.1	0	0.0	19	0.3
Not recorded	35	17.1	145	12.2	192	12.8	643	25.1	1015	18.6
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	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	117	57.1	594	49.8	727	48.3	321	12.5	1759	32.2
Mainland China	50	24.4	238	19.9	487	32.4	1458	57.0	2233	40.9
Others	10	4.9	231	19.4	98	6.5	103	4.0	442	8.1
Not recorded	28	13.7	130	10.9	193	12.8	678	26.5	1029	18.8
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Ethnicity										
Chinese	165	80.5	837	70.2	1244	82.7	1878	73.4	4124	75.5
Other Asian	7	3.4	179	15.0	52	3.5	28	1.1	266	4.9
Caucasian	0	0.0	2	0.2	4	0.3	2	0.1	8	0.1
Others	3	1.5	37	3.1	11	0.7	8	0.3	59	1.1
Not recorded	30	14.6	138	11.6	194	12.9	644	25.2	1006	18.4
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Previous BCG history										
Yes	144	70.2	707	59.3	504	33.5	81	3.2	1436	26.3
No	5	2.4	84	7.0	224	14.9	750	29.3	1063	19.5
Unknown	56	27.3	402	33.7	777	51.6	1729	67.5	2964	54.3
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
BCG scar										
Yes	137	-	692	-	471	-	88	-	1388	-
No	36	-	320	-	789	-	1688	-	2833	-
Evidence of previous BCG										
BCG history +ve or scar +ve	153	74.6	767	64.3	588	39.1	108	4.2	1616	29.6
Employment status										
Full-time	23	11.2	682	57.2	642	42.7	105	4.1	1452	26.6
Part-time	3	1.5	32	2.7	63	4.2	23	0.9	121	2.2
Retired	0	0.0	1	0.1	98	6.5	1377	53.8	1476	27.0
Unemployed	21	10.2	199	16.7	324	21.5	80	3.1	624	11.4
Housewife	1	0.5	69	5.8	172	11.4	314	12.3	556	10.2
Student	123	60.0	61	5.1	0	0.0	0	0.0	184	3.4
Not recorded	34	16.6	149	12.5	206	13.7	661	25.8	1050	19.2
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Occupation										
Blue collar	12	5.9	295	24.7	438	29.1	101	3.9	846	15.5
White collar	8	3.9	258	21.6	137	9.1	11	0.4	414	7.6
Medical	0	0.0	3	0.3	0	0.0	1	0.0	4	0.1
Nursing	0	0.0	8	0.7	9	0.6	0	0.0	17	0.3
Paramedical	1	0.5	5	0.4	1	0.1	0	0.0	7	0.1
Supporting health staff	0	0.0	3	0.3	9	0.6	0	0.0	12	0.2
Not applicable	118	57.6	350	29.3	603	40.1	1702	66.5	2773	50.8
Not recorded	66	32.2	271	22.7	308	20.5	745	29.1	1390	25.4
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
First presentation										
Private doctor	40	19.5	296	24.8	243	16.1	126	4.9	705	12.9
Private hospital	1	0.5	25	2.1	21	1.4	14	0.5	61	1.1
GOPC	6	2.9	38	3.2	63	4.2	80	3.1	187	3.4
Chest Clinic	26	12.7	114	9.6	205	13.6	264	10.3	609	11.1
Other DH Clinic	5	2.4	39	3.3	27	1.8	26	1.0	97	1.8
HA Clinic	4	2.0	32	2.7	56	3.7	68	2.7	160	2.9
HA Hospital	90	43.9	497	41.7	676	44.9	1339	52.3	2602	47.6
Mainland	4	2.0	13	1.1	23	1.5	17	0.7	57	1.0
Overseas	0	0.0	4	0.3	9	0.6	5	0.2	18	0.3
Not recorded	29	14.1	135	11.3	182	12.1	621	24.3	967	17.7
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	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	151	73.7	926	77.6	1166	77.5	1748	68.3	3991	73.1
N	26	12.7	132	11.1	155	10.3	191	7.5	504	9.2
Not recorded	28	13.7	135	11.3	184	12.2	621	24.3	968	17.7
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Chest symptoms	102	-	665	-	846	-	1365	-	2978	-
Systemic symptoms	22	-	168	-	201	-	323	-	714	-
Other site-specific symptoms	42	-	236	-	239	-	243	-	760	-
Reason for presentation										
Symptom	150	73.2	901	75.5	1106	73.5	1661	64.9	3818	69.9
Contact screening	14	6.8	20	1.7	21	1.4	20	0.8	75	1.4
Pre-employment	5	2.4	35	2.9	15	1.0	2	0.1	57	1.0
Pre-emigration	1	0.5	5	0.4	8	0.5	1	0.0	15	0.3
Other body check	6	2.9	73	6.1	70	4.7	64	2.5	213	3.9
Incidental to other illness	0	0.0	20	1.7	86	5.7	164	6.4	270	4.9
Others	1	0.5	4	0.3	11	0.7	19	0.7	35	0.6
Not recorded	28	13.7	135	11.3	188	12.5	629	24.6	980	17.9
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Contact with TB patients										
Yes	32	15.6	100	8.4	91	6.0	64	2.5	287	5.3
No	144	70.2	959	80.4	1223	81.3	1851	72.3	4177	76.5
Not recorded	29	14.1	134	11.2	191	12.7	645	25.2	999	18.3
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Contact type										
Household	23	-	72	-	56	-	43	-	194	-
Work	0	-	11	-	8	-	5	-	24	-
Casual	6	-	12	-	17	-	8	-	43	-
Time of contact										
Within 2 year	20	-	44	-	31	-	16	-	111	-
Over 2 year	5	-	41	-	49	-	32	-	127	-
Previous chemoprophylaxis										
Yes	1	-	2	-	4	-	5	-	12	-
Reason for chemoprophylaxis										
Contact	0	-	0	-	0	-	1	-	1	-
Silicosis	1	-	0	-	2	-	0	-	3	-
HIV	0	-	1	-	0	-	1	-	2	-
Old scar on CXR	0	-	0	-	0	-	0	-	0	-
Others	0	-	0	-	1	-	2	-	3	-
Disease Classification										
Pulmonary TB only	137	66.8	771	64.6	1111	73.8	2044	79.8	4063	74.4
Extrapulmonary TB only	41	20.0	217	18.2	239	15.9	227	8.9	724	13.3
Both	27	13.2	205	17.2	155	10.3	289	11.3	676	12.4
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	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	16	7.8	137	11.5	111	7.4	239	9.3	503	9.2
Lymph node	29	14.1	180	15.1	155	10.3	86	3.4	450	8.2
Meninges	6	2.9	10	0.8	14	0.9	18	0.7	48	0.9
Miliary	1	0.5	12	1.0	8	0.5	14	0.5	35	0.6
Abdomen	1	0.5	16	1.3	24	1.6	18	0.7	59	1.1
Bone and joint (not spine)	1	0.5	6	0.5	9	0.6	24	0.9	40	0.7
Spine	1	0.5	4	0.3	12	0.8	9	0.4	26	0.5
Genito-urinary tract	1	0.5	10	0.8	13	0.9	23	0.9	47	0.9
Naso/oro-pharynx	0	0.0	14	1.2	9	0.6	1	0.0	24	0.4
Larynx	0	0.0	0	0.0	2	0.1	6	0.2	8	0.1
Pericardium	0	0.0	3	0.3	4	0.3	4	0.2	11	0.2
Skin	4	2.0	14	1.2	10	0.7	14	0.5	42	0.8
Other sites	3	1.5	18	1.5	12	0.8	12	0.5	45	0.8
Case category										
New case	200	97.6	1141	95.6	1345	89.4	2223	86.8	4909	89.9
Relapse	2	1.0	43	3.6	146	9.7	331	12.9	522	9.6
Treatment after default	2	1.0	8	0.7	13	0.9	6	0.2	29	0.5
Failure of previous treatment	1	0.5	1	0.1	1	0.1	0	0.0	3	0.1
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Disease characteristics (pulmonary cases)										
Pretreatment smear +ve	52	31.7	340	34.8	505	39.9	753	32.3	1650	34.8
Pretreatment culture +ve	115	70.1	658	67.4	897	70.9	1867	80.0	3537	74.6
Extent = 1	75	45.7	492	50.4	595	47.0	894	38.3	2056	43.4
Extent=1 & cavity=N	*57*	*34.8*	*409*	*41.9*	*501*	*39.6*	*822*	*35.2*	*1789*	*37.8*
Extent=1 & cavity=Y	*18*	*11.0*	*83*	*8.5*	*94*	*7.4*	*72*	*3.1*	*267*	*5.6*
Extent = 2	29	17.7	198	20.3	284	22.4	466	20.0	977	20.6
Extent=2 & cavity=N	*20*	*12.2*	*124*	*12.7*	*160*	*12.6*	*363*	*15.6*	*667*	*14.1*
Extent=2 & cavity=Y	*9*	*5.5*	*74*	*7.6*	*124*	*9.8*	*103*	*4.4*	*310*	*6.5*
Extent=3	24	14.6	96	9.8	151	11.9	250	10.7	521	11.0
Extent=3 & cavity=N	*12*	*7.3*	*55*	*5.6*	*74*	*5.8*	*177*	*7.6*	*318*	*6.7*
Extent=3 & cavity=Y	*12*	*7.3*	*41*	*4.2*	*77*	*6.1*	*73*	*3.1*	*203*	*4.3*
Extent=not specified	36	22.0	190	19.5	236	18.6	723	31.0	1185	25.0
Extent=ns & cavity=N	*35*	*21.3*	*186*	*19.1*	*235*	*18.6*	*723*	*31.0*	*1179*	*24.9*
Extent=ns & cavity=Y	*1*	*0.6*	*4*	*0.4*	*1*	*0.1*	*0*	*0.0*	*6*	*0.1*
Cavity=N	124	75.6	774	79.3	970	76.6	2085	89.4	3953	83.4
Cavity=Y	40	24.4	202	20.7	296	23.4	248	10.6	786	16.6
Mode of diagnosis										
Bacteriological	118	57.6	690	57.8	878	58.3	1440	56.3	3126	57.2
Histological	24	11.7	158	13.2	204	13.6	170	6.6	556	10.2
Clinical-radiological	38	18.5	197	16.5	229	15.2	218	8.5	682	12.5
Clinical only	1	0.5	5	0.4	8	0.5	7	0.3	21	0.4
Not recorded	24	11.7	143	12.0	186	12.4	725	28.3	1078	19.7
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Histology										
Typical (with caseation)	4	-	54	-	69	-	51	-	178	-
Granulomatous inflammation	15	-	136	-	154	-	170	-	475	-
Other	8	-	26	-	38	-	36	-	108	-
Ziehl-Neelzen staining										
Positive	17	-	93	-	115	-	112	-	337	-

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	3	1.5	79	6.6	410	27.2	891	34.8	1383	25.3
Diabetes mellitus	0	0.0	18	1.5	240	15.9	443	17.3	701	12.8
Lung cancer	0	0.0	2	0.2	14	0.9	59	2.3	75	1.4
Other malignancies	1	0.5	7	0.6	54	3.6	121	4.7	183	3.3
On cytotoxic drugs	0	0.0	1	0.1	6	0.4	8	0.3	15	0.3
On steroid	1	0.5	8	0.7	14	0.9	12	0.5	35	0.6
Chronic renal failure	0	0.0	1	0.1	8	0.5	46	1.8	55	1.0
HIV	0	0.0	18	1.5	18	1.2	7	0.3	43	0.8
Silicosis	0	0.0	0	0.0	13	0.9	26	1.0	39	0.7
Alcoholism	0	0.0	9	0.8	42	2.8	45	1.8	96	1.8
Drug abuser	0	0.0	10	0.8	27	1.8	18	0.7	55	1.0
Gastrectomy	0	0.0	0	0.0	0	0.0	14	0.5	14	0.3
General debilitation	0	0.0	2	0.2	4	0.3	241	9.4	247	4.5
Others	1	0.5	2	0.2	16	1.1	25	1.0	44	0.8
Factors affecting treatment choices										
Yes	5	2.4	77	6.5	221	14.7	549	21.4	852	15.6
Hepatitis-B carrier	0	0.0	38	3.2	101	6.7	71	2.8	210	3.8
Chronic active hepatitis	0	0.0	0	0.0	9	0.6	16	0.6	25	0.5
Impaired renal function	0	0.0	5	0.4	10	0.7	69	2.7	84	1.5
Chronic renal failure	0	0.0	2	0.2	2	0.1	24	0.9	28	0.5
Impaired vision	3	1.5	16	1.3	56	3.7	299	11.7	374	6.8
Impaired heaering	1	0.5	1	0.1	4	0.3	42	1.6	48	0.9
Known drug reaction	0	0.0	2	0.2	4	0.3	6	0.2	12	0.2
Known drug resistance	0	0.0	3	0.3	7	0.5	6	0.2	16	0.3
Gout	0	0.0	0	0.0	11	0.7	44	1.7	55	1.0
Idiopathic thromb. purpura	0	0.0	0	0.0	0	0.0	2	0.1	2	0.0
Others	2	1.0	12	1.0	32	2.1	67	2.6	113	2.1
6-month short course treatment										
Yes	54	26.3	314	26.3	246	16.3	184	7.2	798	14.6
2HRZE+4HR	45	22.0	270	22.6	215	14.3	144	5.6	674	12.3
2HRZS+4HR	1	0.5	6	0.5	4	0.3	7	0.3	18	0.3
Other standard regimen based on HRZES										
Yes	110	53.7	582	48.8	809	53.8	1049	41.0	2550	46.7
Treatment side effects										
Yes	59	28.8	404	33.9	652	43.3	1053	41.1	2168	39.7
GI upset	30	14.6	165	13.8	217	14.4	352	13.8	764	14.0
Skin rash	14	6.8	130	10.9	232	15.4	356	13.9	732	13.4
Visual	5	2.4	15	1.3	50	3.3	91	3.6	161	2.9
Transient rise liver enzyme	5	2.4	35	2.9	63	4.2	99	3.9	202	3.7
Hepatitis	8	3.9	50	4.2	132	8.8	221	8.6	411	7.5
Vestibular	0	0.0	8	0.7	20	1.3	14	0.5	42	0.8
Arthropathy	1	0.5	23	1.9	35	2.3	54	2.1	113	2.1
Fever-chill	2	1.0	22	1.8	27	1.8	35	1.4	86	1.6
Dizziness	2	1.0	21	1.8	44	2.9	55	2.1	122	2.2
Thrombocytopenia	0	0.0	4	0.3	13	0.9	16	0.6	33	0.6
Leucopenia	0	0.0	7	0.6	4	0.3	12	0.5	23	0.4
Flush face	0	0.0	5	0.4	7	0.5	3	0.1	15	0.3
Others	4	2.0	35	2.9	55	3.7	102	4.0	196	3.6
Consequence of side effects										
Rx temporarily withheld	33	16.1	188	15.8	341	22.7	641	25.0	1203	22.0
Desensitiation or drug trial	16	7.8	111	9.3	225	15.0	441	17.2	793	14.5
Change in dosage/frequency	12	5.9	62	5.2	127	8.4	211	8.2	412	7.5
Change of drugs	14	6.8	118	9.9	266	17.7	553	21.6	951	17.4

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%	135	65.9	712	59.7	960	63.8	1437	56.1	3244	59.4
>75%	21	10.2	124	10.4	129	8.6	101	3.9	375	6.9
>50%	10	4.9	72	6.0	89	5.9	67	2.6	238	4.4
>25%	4	2.0	34	2.8	41	2.7	45	1.8	124	2.3
≤25%	2	1.0	25	2.1	34	2.3	41	1.6	102	1.9
Not recorded	33	16.1	226	18.9	252	16.7	869	33.9	1380	25.3
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	111	54.1	582	48.8	807	53.6	1272	49.7	2772	50.7
>75%	22	10.7	140	11.7	170	11.3	112	4.4	444	8.1
>50%	19	9.3	98	8.2	105	7.0	84	3.3	306	5.6
>25%	13	6.3	69	5.8	73	4.9	50	2.0	205	3.8
≤25%	6	2.9	37	3.1	57	3.8	50	2.0	150	2.7
Not recorded	34	16.6	267	22.4	293	19.5	992	38.8	1586	29.0
Under supervision by relatives (initial 2 months)										
>90%	1	0.5	3	0.3	3	0.2	5	0.2	12	0.2
>75%	0	0.0	2	0.2	0	0.0	2	0.1	4	0.1
>50%	0	0.0	1	0.1	3	0.2	4	0.2	8	0.1
>25%	1	0.5	1	0.1	3	0.2	3	0.1	8	0.1
≤25%	105	51.2	639	53.6	814	54.1	1098	42.9	2656	48.6
Not recorded	98	47.8	547	45.9	682	45.3	1448	56.6	2775	50.8
Under supervision by relatives (subsequent 4 months)										
>90%	1	0.5	5	0.4	1	0.1	2	0.1	9	0.2
>75%	0	0.0	3	0.3	4	0.3	4	0.2	11	0.2
>50%	0	0.0	4	0.3	9	0.6	6	0.2	19	0.3
>25%	1	0.5	3	0.3	5	0.3	7	0.3	16	0.3
≤25%	104	50.7	611	51.2	778	51.7	1007	39.3	2500	45.8
Not recorded	99	48.3	567	47.5	708	47.0	1534	59.9	2908	53.2
Supplied for unsupervised treatment (initial 2 months)										
<5%	115	56.1	614	51.5	815	54.2	1247	48.7	2791	51.1
<10%	6	2.9	55	4.6	62	4.1	48	1.9	171	3.1
<15%	12	5.9	45	3.8	59	3.9	33	1.3	149	2.7
<25%	8	3.9	59	4.9	64	4.3	51	2.0	182	3.3
<50%	9	4.4	59	4.9	70	4.7	47	1.8	185	3.4
≥50%	2	1.0	27	2.3	52	3.5	45	1.8	126	2.3
Not recorded	53	25.9	334	28.0	383	25.4	1089	42.5	1859	34.0
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	96	46.8	521	43.7	685	45.5	1088	42.5	2390	43.7
<10%	15	7.3	96	8.0	95	6.3	70	2.7	276	5.1
<15%	14	6.8	47	3.9	72	4.8	39	1.5	172	3.1
<25%	8	3.9	52	4.4	76	5.0	47	1.8	183	3.3
<50%	10	4.9	64	5.4	76	5.0	48	1.9	198	3.6
≥50%	14	6.8	69	5.8	100	6.6	85	3.3	268	4.9
Not recorded	48	23.4	344	28.8	401	26.6	1183	46.2	1976	36.2
Defaulted (initial 2 months)										
<5%	144	70.2	796	66.7	1041	69.2	1476	57.7	3457	63.3
<10%	5	2.4	24	2.0	22	1.5	23	0.9	74	1.4
<15%	2	1.0	14	1.2	12	0.8	9	0.4	37	0.7
<25%	7	3.4	17	1.4	13	0.9	13	0.5	50	0.9
<50%	2	1.0	11	0.9	8	0.5	10	0.4	31	0.6
≥50%	1	0.5	8	0.7	15	1.0	12	0.5	36	0.7
Not recorded	44	21.5	323	27.1	394	26.2	1017	39.7	1778	32.5
Defaulted (subsequent 4 months)										
<5%	135	65.9	711	59.6	984	65.4	1354	52.9	3184	58.3
<10%	4	2.0	48	4.0	44	2.9	24	0.9	120	2.2
<15%	2	1.0	17	1.4	18	1.2	14	0.5	51	0.9
<25%	5	2.4	37	3.1	26	1.7	10	0.4	78	1.4
<50%	8	3.9	26	2.2	12	0.8	9	0.4	55	1.0
≥50%	6	2.9	29	2.4	21	1.4	22	0.9	78	1.4
Not recorded	45	22.0	325	27.2	400	26.6	1127	44.0	1897	34.7

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	67	32.7	385	32.3	330	21.9	383	15.0	1165	21.3
Still on treatment	100	48.8	525	44.0	874	58.1	1180	46.1	2679	49.0
Died	0	0.0	3	0.3	26	1.7	220	8.6	249	4.6
Transferred	5	2.4	88	7.4	38	2.5	26	1.0	157	2.9
Defaulted	4	2.0	40	3.4	48	3.2	76	3.0	168	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	0	0.0	0	0.0	0	0.0
Not recorded	29	14.1	152	12.7	189	12.6	675	26.4	1045	19.1
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Among those cured/ treatment completed										
Bacteriological conversion	40	59.7	232	60.3	184	55.8	243	63.4	699	60.0
Radiological improvement	62	92.5	341	88.6	259	78.5	272	71.0	934	80.2
Other clinical improvement	8	11.9	82	21.3	64	19.4	67	17.5	221	19.0
No evidence of response	3	4.5	5	1.3	19	5.8	14	3.7	41	3.5
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	1	1.0	25	4.8	88	10.1	138	11.7	252	9.4
Extrapulmonary disease	43	43.0	227	43.2	260	29.7	192	16.3	722	27.0
Extensive disease	30	30.0	104	19.8	138	15.8	131	11.1	403	15.0
Interrupted treatment	21	21.0	106	20.2	190	21.7	342	29.0	659	24.6
Drug resistance	3	3.0	28	5.3	40	4.6	51	4.3	122	4.6
Poor response	9	9.0	37	7.0	74	8.5	70	5.9	190	7.1
Others	10	10.0	99	18.9	296	33.9	567	48.1	972	36.3
Among those died - causes of death:										
TB-related cause	0	-	1	33.3	2	7.7	13	5.9	16	6.4
Not TB-related	0	-	2	66.7	18	69.2	124	56.4	144	57.8
Unknown	0	-	0	0.0	4	15.4	47	21.4	51	20.5
Among those transferred, new sources of care:										
GP	0	0.0	14	15.9	7	18.4	2	7.7	23	14.6
Chest Clinic	0	0.0	1	1.1	1	2.6	0	0.0	2	1.3
Hospital	2	40.0	1	1.1	4	10.5	12	46.2	19	12.1
Outside HK	2	40.0	70	79.5	25	65.8	11	42.3	108	68.8
Not recorded	1	20.0	2	2.3	1	2.6	1	3.8	5	3.2
Among those defaulted										
Never found	2	50.0	27	67.5	29	60.4	40	52.6	98	58.3
Retreated after default	2	50.0	2	5.0	4	8.3	2	2.6	10	6.0
Treatment stopped by doctor	0	0.0	6	15.0	5	10.4	12	15.8	23	13.7
Not recorded	0	0.0	5	12.5	10	20.8	22	28.9	37	22.0

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	162	79.0	845	70.8	1057	70.2	1344	52.5	3408	62.4
Still on treatment	11	5.4	74	6.2	154	10.2	247	9.6	486	8.9
Died	0	0.0	4	0.3	41	2.7	334	13.0	379	6.9
Transferred	4	2.0	92	7.7	41	2.7	35	1.4	172	3.1
Defaulted	8	3.9	60	5.0	83	5.5	97	3.8	248	4.5
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	20	9.8	118	9.9	129	8.6	503	19.6	770	14.1
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Among those cured/ treatment completed										
Bacteriological conversion	90	55.6	498	58.9	629	59.5	929	69.1	2146	63.0
Radiological improvement	124	76.5	657	77.8	804	76.1	1021	76.0	2606	76.5
Other clinical improvement	58	35.8	303	35.9	360	34.1	326	24.3	1047	30.7
No evidence of response	3	1.9	14	1.7	30	2.8	39	2.9	86	2.5
After treatment completed:										
No relapse	139	85.8	681	80.6	913	86.4	1107	82.4	2840	83.3
Loss to follow up	14	8.6	89	10.5	52	4.9	65	4.8	220	6.5
Died	0	0.0	2	0.2	3	0.3	23	1.7	28	0.8
TB-related	*0*		*0*		*0*		*1*		*1*	
Not TB-related	*0*		*1*		*2*		*18*		*21*	
Unknown	*0*		*0*		*1*		*4*		*5*	
Relapse	1	0.6	6	0.7	2	0.2	1	0.1	10	0.3
Bacteriological	*1*		*4*		*1*		*1*		*7*	
Histological	*0*		*1*		*1*		*0*		*2*	
Clinico-radiological	*0*		*0*		*0*		*1*		*1*	
Not recorded	8	4.9	67	7.9	87	8.2	148	11.0	310	9.1
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	0	0.0	2	2.7	4	2.6	8	3.2	14	2.9
Extrapulmonary disease	4	36.4	17	23.0	32	20.8	31	12.6	84	17.3
Extensive disease	0	0.0	10	13.5	20	13.0	18	7.3	48	9.9
Interrupted treatment	5	45.5	34	45.9	86	55.8	100	40.5	225	46.3
Drug resistance	4	36.4	21	28.4	19	12.3	24	9.7	68	14.0
Poor response	2	18.2	14	18.9	12	7.8	8	3.2	36	7.4
Others	3	27.3	17	23.0	54	35.1	98	39.7	172	35.4
Among those died - causes of death:										
TB-related cause	0	-	1	25.0	2	4.9	15	4.5	18	4.7
Not TB-related	0	-	2	50.0	24	58.5	170	50.9	196	51.7
Unknown	0	-	1	25.0	4	9.8	59	17.7	64	16.9
Among those transferred, new sources of care:										
GP	0	0.0	10	10.9	5	12.2	2	5.7	17	9.9
Chest Clinic	0	0.0	1	1.1	0	0.0	1	2.9	2	1.2
Hospital	1	25.0	1	1.1	6	14.6	11	31.4	19	11.0
Outside HK	2	50.0	68	73.9	25	61.0	15	42.9	110	64.0
Not recorded	1	25.0	12	13.0	5	12.2	6	17.1	24	14.0
Among those defaulted										
Never found	2	25.0	41	68.3	48	57.8	32	33.0	123	49.6
Retreated after default	1	12.5	2	3.3	4	4.8	3	3.1	10	4.0
Treatment stopped by doctor	0	0.0	8	13.3	6	7.2	14	14.4	28	11.3
Not recorded	5	62.5	9	15.0	25	30.1	48	49.5	87	35.1

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	175	85.4	922	77.3	1199	79.7	1522	59.5	3818	69.9
Still on treatment	0	0.0	2	0.2	5	0.3	3	0.1	10	0.2
Died	0	0.0	4	0.3	42	2.8	348	13.6	394	7.2
Transferred	4	2.0	91	7.6	37	2.5	30	1.2	162	3.0
Defaulted	6	2.9	57	4.8	82	5.4	93	3.6	238	4.4
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	0	0.0	0	0.0	0	0.0
Not recorded	20	9.8	117	9.8	140	9.3	564	22.0	841	15.4
Total	205	100.0	1193	100.0	1505	100.0	2560	100.0	5463	100.0
Among those cured/ treatment completed										
Bacteriological conversion	100	57.1	558	60.5	761	63.5	1088	71.5	2507	65.7
Radiological improvement	133	76.0	730	79.2	936	78.1	1222	80.3	3021	79.1
Other clinical improvement	73	41.7	370	40.1	473	39.4	472	31.0	1388	36.4
No evidence of response	3	1.7	14	1.5	27	2.3	27	1.8	71	1.9
After treatment completed:										
No relapse	136	77.7	674	73.1	996	83.1	1174	77.1	2980	78.1
Loss to follow up	28	16.0	189	20.5	131	10.9	146	9.6	494	12.9
Died	0	0.0	2	0.2	13	1.1	91	6.0	106	2.8
TB-related	*0*		*1*		*0*		*1*		*2*	
Not TB-related	*0*		*0*		*11*		*56*		*67*	
Unknown	*0*		*1*		*2*		*33*		*36*	
Relapse	2	1.1	11	1.2	9	0.8	10	0.7	32	0.8
Bacteriological	*2*		*5*		*1*		*4*		*12*	
Histological	*0*		*5*		*4*		*4*		*13*	
Clinico-radiological	*0*		*0*		*3*		*2*		*5*	
Clinical only	*0*		*0*		*0*		*0*		*0*	
Not recorded	9	5.1	46	5.0	50	4.2	101	6.6	206	5.4
Among those still on treatment										
Reasons for still on treatment:										
Retreatment case	0	-	0	-	0	-	0	-	0	0.0
Extrapulmonary disease	0	-	0	-	3	-	0	-	3	30.0
Extensive disease	0	-	0	-	2	-	0	-	2	20.0
Interrupted treatment	0	-	2	-	1	-	0	-	3	30.0
Drug resistance	0	-	1	-	0	-	1	-	2	20.0
Poor response	0	-	0	-	0	-	0	-	0	0.0
Others	0	-	0	-	2	-	3	-	5	50.0
Among those died - causes of death:										
TB-related cause	0	-	1	25.0	2	4.8	16	4.6	19	4.8
Not TB-related	0	-	2	50.0	25	59.5	180	51.7	207	52.5
Unknown	0	-	1	25.0	4	9.5	63	18.1	68	17.3
Among those transferred, new sources of care:										
GP	0	0.0	11	12.1	5	13.5	1	3.3	17	10.5
Chest Clinic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hospital	0	0.0	2	2.2	5	13.5	9	30.0	16	9.9
Outside HK	3	75.0	66	72.5	22	59.5	14	46.7	105	64.8
Not recorded	1	25.0	12	13.2	5	13.5	6	20.0	24	14.8
Among those defaulted										
Never found	2	33.3	35	61.4	38	46.3	29	31.2	104	43.7
Retreated after default	1	16.7	6	10.5	8	9.8	6	6.5	21	8.8
Treatment stopped by doctor	1	16.7	8	14.0	10	12.2	8	8.6	27	11.3
Not recorded	2	33.3	8	14.0	26	31.7	50	53.8	86	36.1

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	85	47.5	590	56.7	425	32.2	510	26.7	1610	36.2
Male	94	52.5	450	43.3	893	67.8	1397	73.3	2834	63.8
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
First presentation										
Private doctor	39	21.8	293	28.2	242	18.4	124	6.5	698	15.7
Private hospital	1	0.6	24	2.3	19	1.4	14	0.7	58	1.3
GOPC	6	3.4	36	3.5	63	4.8	80	4.2	185	4.2
Chest Clinic	26	14.5	112	10.8	203	15.4	257	13.5	598	13.5
Other DH Clinic	5	2.8	17	1.6	18	1.4	24	1.3	64	1.4
HA Clinic	4	2.2	31	3.0	56	4.2	66	3.5	157	3.5
HA Hospital	89	49.7	490	47.1	658	49.9	1220	64.0	2457	55.3
Mainland	4	2.2	13	1.3	23	1.7	16	0.8	56	1.3
Overseas	0	0.0	4	0.4	9	0.7	5	0.3	18	0.4
Not recorded	5	2.8	20	1.9	27	2.0	101	5.3	153	3.4
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
Symptomatic on presentation										
Y	149	83.2	897	86.3	1140	86.5	1627	85.3	3813	85.8
N	26	14.5	123	11.8	149	11.3	181	9.5	479	10.8
Not recorded	4	2.2	20	1.9	29	2.2	99	5.2	152	3.4
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
Chest symptoms	100	-	648	-	828	-	1271	-	2847	-
Systemic symptoms	22	-	158	-	197	-	305	-	682	-
Other site-specific symptoms	42	-	231	-	236	-	236	-	745	-
Reason for presentation										
Symptom	148	82.7	876	84.2	1088	82.5	1544	81.0	3656	82.3
Contact screening	14	7.8	20	1.9	21	1.6	20	1.0	75	1.7
Pre-employment	5	2.8	35	3.4	15	1.1	2	0.1	57	1.3
Pre-emigration	1	0.6	5	0.5	8	0.6	1	0.1	15	0.3
Other body check	6	3.4	60	5.8	61	4.6	62	3.3	189	4.3
Incidental to other illness	0	0.0	20	1.9	81	6.1	157	8.2	258	5.8
Others	1	0.6	4	0.4	11	0.8	15	0.8	31	0.7
Not recorded	4	2.2	20	1.9	33	2.5	106	5.6	163	3.7
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
Disease Classification										
Pulmonary TB only	117	65.4	664	63.8	961	72.9	1474	77.3	3216	72.4
Extrapulmonary TB only	37	20.7	180	17.3	206	15.6	162	8.5	585	13.2
Both	25	14.0	196	18.8	151	11.5	271	14.2	643	14.5
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
6-month short course treatment										
Yes	54	30.2	312	30.0	244	18.5	181	9.5	791	17.8
2HRZE+4HR	45	25.1	269	25.9	214	16.2	143	7.5	671	15.1
2HRZS+4HR	1	0.6	6	0.6	4	0.3	6	0.3	17	0.4
Other standard regimen based on HRZES										
Yes	110	61.5	571	54.9	801	60.8	1045	54.8	2527	56.9

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%	135	75.4	698	67.1	952	72.2	1432	75.1	3217	72.4
>75%	21	11.7	124	11.9	129	9.8	101	5.3	375	8.4
>50%	10	5.6	72	6.9	89	6.8	67	3.5	238	5.4
>25%	4	2.2	34	3.3	41	3.1	45	2.4	124	2.8
≤25%	2	1.1	25	2.4	34	2.6	41	2.1	102	2.3
Not recorded	7	3.9	87	8.4	73	5.5	221	11.6	388	8.7
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	111	62.0	568	54.6	802	60.8	1272	66.7	2753	61.9
>75%	22	12.3	140	13.5	170	12.9	112	5.9	444	10.0
>50%	19	10.6	98	9.4	104	7.9	84	4.4	305	6.9
>25%	13	7.3	69	6.6	73	5.5	50	2.6	205	4.6
≤25%	6	3.4	37	3.6	57	4.3	50	2.6	150	3.4
Not recorded	8	4.5	128	12.3	112	8.5	339	17.8	587	13.2
Under supervision by relatives (initial 2 months)										
>90%	1	0.6	3	0.3	3	0.2	5	0.3	12	0.3
>75%	0	0.0	2	0.2	0	0.0	2	0.1	4	0.1
>50%	0	0.0	1	0.1	3	0.2	4	0.2	8	0.2
>25%	1	0.6	1	0.1	3	0.2	3	0.2	8	0.2
≤25%	105	58.7	639	61.4	813	61.7	1098	57.6	2655	59.7
Not recorded	72	40.2	394	37.9	496	37.6	795	41.7	1757	39.5
Under supervision by relatives (subsequent 4 months)										
>90%	1	0.6	5	0.5	1	0.1	2	0.1	9	0.2
>75%	0	0.0	3	0.3	4	0.3	4	0.2	11	0.2
>50%	0	0.0	4	0.4	9	0.7	6	0.3	19	0.4
>25%	1	0.6	3	0.3	5	0.4	7	0.4	16	0.4
≤25%	104	58.1	611	58.8	777	59.0	1007	52.8	2499	56.2
Not recorded	73	40.8	414	39.8	522	39.6	881	46.2	1890	42.5
Supplied for unsupervised treatment (initial 2 months)										
<5%	115	64.2	614	59.0	814	61.8	1247	65.4	2790	62.8
<10%	6	3.4	55	5.3	62	4.7	48	2.5	171	3.8
<15%	12	6.7	45	4.3	59	4.5	33	1.7	149	3.4
<25%	8	4.5	59	5.7	64	4.9	51	2.7	182	4.1
<50%	9	5.0	59	5.7	70	5.3	47	2.5	185	4.2
≥50%	2	1.1	27	2.6	52	3.9	43	2.3	124	2.8
Not recorded	27	15.1	181	17.4	197	14.9	438	23.0	843	19.0
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	96	53.6	521	50.1	684	51.9	1088	57.1	2389	53.8
<10%	15	8.4	96	9.2	95	7.2	70	3.7	276	6.2
<15%	14	7.8	47	4.5	72	5.5	39	2.0	172	3.9
<25%	8	4.5	52	5.0	76	5.8	47	2.5	183	4.1
<50%	10	5.6	64	6.2	76	5.8	48	2.5	198	4.5
≥50%	14	7.8	69	6.6	100	7.6	83	4.4	266	6.0
Not recorded	22	12.3	191	18.4	215	16.3	532	27.9	960	21.6
Defaulted (initial 2 months)										
<5%	144	80.4	796	76.5	1040	78.9	1476	77.4	3456	77.8
<10%	5	2.8	24	2.3	22	1.7	23	1.2	74	1.7
<15%	2	1.1	14	1.3	12	0.9	9	0.5	37	0.8
<25%	7	3.9	17	1.6	13	1.0	13	0.7	50	1.1
<50%	2	1.1	11	1.1	8	0.6	10	0.5	31	0.7
≥50%	1	0.6	8	0.8	15	1.1	12	0.6	36	0.8
Not recorded	18	10.1	170	16.3	208	15.8	364	19.1	760	17.1
Defaulted (subsequent 4 months)										
<5%	135	75.4	711	68.4	984	74.7	1354	71.0	3184	71.6
<10%	4	2.2	48	4.6	44	3.3	24	1.3	120	2.7
<15%	2	1.1	17	1.6	18	1.4	14	0.7	51	1.1
<25%	5	2.8	37	3.6	25	1.9	10	0.5	77	1.7
<50%	8	4.5	26	2.5	12	0.9	9	0.5	55	1.2
≥50%	6	3.4	29	2.8	21	1.6	22	1.2	78	1.8
Not recorded	19	10.6	172	16.5	214	16.2	474	24.9	879	19.8

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	67	37.4	382	36.7	326	24.7	381	20.0	1156	26.0
Still on treatment	100	55.9	515	49.5	869	65.9	1179	61.8	2663	59.9
Died	0	0.0	3	0.3	21	1.6	194	10.2	218	4.9
Transferred	4	2.2	86	8.3	38	2.9	26	1.4	154	3.5
Defaulted	4	2.2	40	3.8	48	3.6	76	4.0	168	3.8
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	4	2.2	14	1.3	16	1.2	51	2.7	85	1.9
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
Outcome at 12 months										
Cured/ treatment completed	156	87.2	820	78.8	1033	78.4	1316	69.0	3325	74.8
Still on treatment	11	6.1	73	7.0	143	10.8	187	9.8	414	9.3
Died	0	0.0	4	0.4	28	2.1	257	13.5	289	6.5
Transferred	3	1.7	82	7.9	38	2.9	30	1.6	153	3.4
Defaulted	6	3.4	55	5.3	69	5.2	75	3.9	205	4.6
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	0	0.0	0	0.0	0	0.0
Not recorded	3	1.7	6	0.6	7	0.5	42	2.2	58	1.3
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	100.0
Outcome at 24 months										
Cured/ treatment completed	169	94.4	895	86.1	1175	89.2	1494	78.3	3733	84.0
Still on treatment	0	0.0	2	0.2	5	0.4	3	0.2	10	0.2
Died	0	0.0	4	0.4	29	2.2	271	14.2	304	6.8
Transferred	3	1.7	81	7.8	34	2.6	25	1.3	143	3.2
Defaulted	4	2.2	52	5.0	68	5.2	71	3.7	195	4.4
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	0	0.0	0	0.0	0	0.0
Not recorded	3	1.7	6	0.6	7	0.5	43	2.3	59	1.3
Total	179	100.0	1040	100.0	1318	100.0	1907	100.0	4444	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	11	42.3	84	54.9	66	35.3	197	30.2	358	35.1
Male	15	57.7	69	45.1	121	64.7	456	69.8	661	64.9
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
First presentation										
Private doctor	1	3.8	3	2.0	1	0.5	2	0.3	7	0.7
Private hospital	0	0.0	1	0.7	2	1.1	0	0.0	3	0.3
GOPC	0	0.0	2	1.3	0	0.0	0	0.0	2	0.2
Chest Clinic	0	0.0	2	1.3	2	1.1	7	1.1	11	1.1
Other DH Clinic	0	0.0	22	14.4	9	4.8	2	0.3	33	3.2
HA Clinic	0	0.0	1	0.7	0	0.0	2	0.3	3	0.3
HA Hospital	1	3.8	7	4.6	18	9.6	119	18.2	145	14.2
Mainland	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Overseas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	24	92.3	115	75.2	155	82.9	520	79.6	814	79.9
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
Symptomatic on presentation										
Y	2	7.7	29	19.0	26	13.9	121	18.5	178	17.5
N	0	0.0	9	5.9	6	3.2	10	1.5	25	2.5
Not recorded	24	92.3	115	75.2	155	82.9	522	79.9	816	80.1
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
Chest symptoms	2	-	17	-	18	-	94	-	131	-
Systemic symptoms	0	-	10	-	4	-	18	-	32	-
Other site-specific symptoms	0	-	5	-	3	-	7	-	15	-
Reason for presentation										
Symptom	2	7.7	25	16.3	18	9.6	117	17.9	162	15.9
Contact screening	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pre-employment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pre-emigration	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other body check	0	0.0	13	8.5	9	4.8	2	0.3	24	2.4
Incidental to other illness	0	0.0	0	0.0	5	2.7	7	1.1	12	1.2
Others	0	0.0	0	0.0	0	0.0	4	0.6	4	0.4
Not recorded	24	92.3	115	75.2	155	82.9	523	80.1	817	80.2
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
Disease Classification										
Pulmonary TB only	20	76.9	107	69.9	150	80.2	570	87.3	847	83.1
Extrapulmonary TB only	4	15.4	37	24.2	33	17.6	65	10.0	139	13.6
Both	2	7.7	9	5.9	4	2.1	18	2.8	33	3.2
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
6-month short course treatment										
Yes	0	0.0	2	1.3	2	1.1	3	0.5	7	0.7
2HRZE+4HR	0	0.0	1	0.7	1	0.5	1	0.2	3	0.3
2HRZS+4HR	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Other standard regimen based on HRZES										
Yes	0	0.0	11	7.2	8	4.3	4	0.6	23	2.3

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%	0	0.0	14	9.2	8	4.3	5	0.8	27	2.6
>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%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	26	100.0	139	90.8	179	95.7	648	99.2	992	97.4
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	0	0.0	14	9.2	5	2.7	0	0.0	19	1.9
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
>25%	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
Not recorded	26	100.0	139	90.8	181	96.8	653	100.0	999	98.0
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%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Not recorded	26	100.0	153	100.0	186	99.5	653	100.0	1018	99.9
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%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Not recorded	26	100.0	153	100.0	186	99.5	653	100.0	1018	99.9
Supplied for unsupervised treatment (initial 2 months)										
<5%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
<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	2	0.3	2	0.2
Not recorded	26	100.0	153	100.0	186	99.5	651	99.7	1016	99.7
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
<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	2	0.3	2	0.2
Not recorded	26	100.0	153	100.0	186	99.5	651	99.7	1016	99.7
Defaulted (initial 2 months)										
<5%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
<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	26	100.0	153	100.0	186	99.5	653	100.0	1018	99.9
Defaulted (subsequent 4 months)										
<5%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<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	1	0.5	0	0.0	1	0.1
<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	26	100.0	153	100.0	186	99.5	653	100.0	1018	99.9

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	0	0.0	3	2.0	4	2.1	2	0.3	9	0.9
Still on treatment	0	0.0	10	6.5	5	2.7	1	0.2	16	1.6
Died	0	0.0	0	0.0	5	2.7	26	4.0	31	3.0
Transferred	1	3.8	2	1.3	0	0.0	0	0.0	3	0.3
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	25	96.2	138	90.2	173	92.5	624	95.6	960	94.2
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
Outcome at 12 months										
Cured/ treatment completed	6	23.1	25	16.3	24	12.8	28	4.3	83	8.1
Still on treatment	0	0.0	1	0.7	11	5.9	60	9.2	72	7.1
Died	0	0.0	0	0.0	13	7.0	77	11.8	90	8.8
Transferred	1	3.8	10	6.5	3	1.6	5	0.8	19	1.9
Defaulted	2	7.7	5	3.3	14	7.5	22	3.4	43	4.2
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	17	65.4	112	73.2	122	65.2	461	70.6	712	69.9
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	100.0
Outcome at 24 months										
Cured/ treatment completed	6	23.1	27	17.6	24	12.8	28	4.3	85	8.3
Still on treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Died	0	0.0	0	0.0	13	7.0	77	11.8	90	8.8
Transferred	1	3.8	10	6.5	3	1.6	5	0.8	19	1.9
Defaulted	2	7.7	5	3.3	14	7.5	22	3.4	43	4.2
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	17	65.4	111	72.5	133	71.1	521	79.8	782	76.7
Total	26	100.0	153	100.0	187	100.0	653	100.0	1019	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	1301	83.0	2839	80.3	14	93.3
No	267	17.0	698	19.7	1	6.7
Total	1568	100.0	3537	100.0	15	100.0
Age group						
0 to 19	51	3.3	115	3.3	0	0.0
Female	24		55		0	
Male	27		60		0	
20 to 39	328	20.9	658	18.6	8	53.3
Female	167		339		1	
Male	161		319		7	
40 to 59	483	30.8	897	25.4	4	26.7
Female	119		218		0	
Male	364		679		4	
60+	706	45.0	1867	52.8	3	20.0
Female	140		441		1	
Male	566		1426		2	
Total	1568	100.0	3537	100.0	15	100.0
Female	450	28.7	1053	29.8	2	13.3
Male	1118	71.3	2484	70.2	13	86.7
Marital status						
Single	352	22.4	673	19.0	6	40.0
Married	890	56.8	1944	55.0	8	53.3
Separated	12	0.8	28	0.8	0	0.0
Divorce	43	2.7	83	2.3	0	0.0
Widowed	24	1.5	69	2.0	1	6.7
Not recorded	247	15.8	740	20.9	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Smoking status						
Never	526	33.5	1174	33.2	4	26.7
Ex-smoker	457	29.1	933	26.4	5	33.3
Current smoker	313	20.0	617	17.4	6	40.0
Not recorded	272	17.3	813	23.0	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Institution-related						
Yes	128	8.2	367	10.4	2	13.3
No	1221	77.9	2474	69.9	12	80.0
Not recorded	219	14.0	696	19.7	1	6.7
Total	1568	100.0	3537	100.0	15	100.0
Institution						
Client	108	-	300	-	2	-
Staff	7	-	19	-	0	-
Institution type						
Old age home	70	-	219	-	0	-
School	79	-	235	-	1	-
Hospital	5	-	11	-	0	-
Handicapped	5	-	18	-	0	-
Prison	16	-	36	-	1	-
Others	5	-	18	-	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	7	0.4	9	0.3	0	0.0
Cubicle bed space	4	0.3	9	0.3	0	0.0
Institution	71	4.5	230	6.5	1	6.7
Work quarter	11	0.7	26	0.7	0	0.0
Alone (not above)	184	11.7	360	10.2	4	26.7
With friends	38	2.4	64	1.8	1	6.7
With family	1028	65.6	2135	60.4	9	60.0
Not recorded	225	14.3	704	19.9	0	0.0
Residential status						
Permanent resident	1250	79.7	2677	75.7	14	93.3
Chinese immigrant	24	1.5	45	1.3	0	0.0
Imported worker	43	2.7	85	2.4	0	0.0
Tourist - 2 way permit Chinese	4	0.3	5	0.1	1	6.7
Other tourist	3	0.2	5	0.1	0	0.0
Vietnamese	8	0.5	10	0.3	0	0.0
Illegal immigrants	8	0.5	12	0.3	0	0.0
Not recorded	228	14.5	698	19.7	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Place of birth						
Hong Kong	542	34.6	1095	31.0	6	40.0
Mainland China	670	42.7	1495	42.3	6	40.0
Others	122	7.8	230	6.5	3	20.0
Not recorded	234	14.9	717	20.3	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Ethnicity						
Chinese	1254	80.0	2681	75.8	11	73.3
Other Asian	72	4.6	136	3.8	3	20.0
Caucasian	2	0.1	4	0.1	0	0.0
Others	17	1.1	23	0.7	0	0.0
Not recorded	223	14.2	693	19.6	1	6.7
Total	1568	100.0	3537	100.0	15	100.0
Previous BCG history						
Yes	425	27.1	825	23.3	3	20.0
No	315	20.1	711	20.1	2	13.3
Unknown	828	52.8	2001	56.6	10	66.7
Total	1568	100.0	3537	100.0	15	100.0
BCG scar						
Yes	409	-	805	-	5	-
No	852	-	1869	-	9	-
Employment status						
Full-time	419	26.7	825	23.3	6	40.0
Part-time	27	1.7	81	2.3	0	0.0
Retired	457	29.1	1104	31.2	2	13.3
Unemployed	257	16.4	424	12.0	4	26.7
Housewife	131	8.4	281	7.9	2	13.3
Student	44	2.8	105	3.0	1	6.7
Not recorded	233	14.9	717	20.3	0	0.0
Total	1568	100.0	3537	100.0	15	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	253	16.1	491	13.9	4	26.7
White collar	112	7.1	235	6.6	2	13.3
Medical	3	0.2	3	0.1	0	0.0
Nursing	5	0.3	10	0.3	0	0.0
Paramedical	1	0.1	5	0.1	0	0.0
Supporting health staff	1	0.1	5	0.1	0	0.0
Not applicable	882	56.3	1885	53.3	9	60.0
Not recorded	311	19.8	903	25.5	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
First presentation						
Private doctor	217	13.8	404	11.4	1	6.7
Private hospital	13	0.8	25	0.7	0	0.0
GOPC	67	4.3	145	4.1	2	13.3
Chest Clinic	143	9.1	387	10.9	2	13.3
Other DH Clinic	20	1.3	54	1.5	1	6.7
HA Clinic	28	1.8	70	2.0	0	0.0
HA Hospital	862	55.0	1759	49.7	8	53.3
Mainland	12	0.8	26	0.7	1	6.7
Overseas	3	0.2	9	0.3	0	0.0
Not recorded	203	12.9	658	18.6	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Symptomatic on presentation						
Y	1300	82.9	2604	73.6	14	93.3
N	64	4.1	276	7.8	1	6.7
Not recorded	204	13.0	657	18.6	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Chest symptoms	1154	-	2239	-	10	-
Systemic symptoms	275	-	506	-	4	-
Other site-specific symptoms	76	-	196	-	2	-
Reason for presentation						
Symptom	1253	79.9	2487	70.3	14	93.3
Contact screening	7	0.4	39	1.1	0	0.0
Pre-employment	5	0.3	21	0.6	0	0.0
Pre-emigration	1	0.1	7	0.2	0	0.0
Other body check	25	1.6	118	3.3	0	0.0
Incidental to other illness	67	4.3	180	5.1	0	0.0
Others	4	0.3	18	0.5	1	6.7
Not recorded	206	13.1	667	18.9	0	0.0
Total	1568	100.0	3537	100.0	15	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	58	3.7	160	4.5	1	6.7
No	1295	82.6	2695	76.2	14	93.3
Not recorded	215	13.7	682	19.3	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Contact type						
Household	42	-	108	-	1	-
Work	3	-	12	-	0	-
Casual	10	-	27	-	0	-
Time of contact						
Within 2 year	16	-	55	-	0	-
Over 2 year	34	-	74	-	0	-
Previous chemoprophylaxis						
Yes	5	-	10	-	0	-
Reason for chemoprophylaxis						
Contact	0	-	0	-	0	-
Silicosis	2	-	3	-	0	-
HIV	2	-	2	-	0	-
Old scar on CXR	0	-	0	-	0	-
Others	0	-	2	-	0	-
Disease Classification						
Pulmonary TB only	1446	92.2	3173	89.7	14	93.3
Both pulm & extrapulm	122	7.8	364	10.3	1	6.7
Total	1568	100.0	3537	100.0	15	100.0
Case category						
New case	1415	90.2	3156	89.2	8	53.3
Relapse	140	8.9	358	10.1	7	46.7
Treatment after default	13	0.8	21	0.6	0	0.0
Failure of previous treatment	0	0.0	2	0.1	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Disease characteristics (pulmonary cases)						
Extent = 1	478	30.5	1394	39.4	7	46.7
Extent=1 & cavity=N	*343*	*21.9*	*1186*	*33.5*	*7*	*46.7*
Extent=1 & cavity=Y	*135*	*8.6*	*208*	*5.9*	*0*	*0.0*
Extent = 2	512	32.7	843	23.8	5	33.3
Extent=2 & cavity=N	*273*	*17.4*	*564*	*15.9*	*3*	*20.0*
Extent=2 & cavity=Y	*239*	*15.2*	*279*	*7.9*	*2*	*13.3*
Extent=3	328	20.9	472	13.3	3	20.0
Extent=3 & cavity=N	*169*	*10.8*	*279*	*7.9*	*1*	*6.7*
Extent=3 & cavity=Y	*159*	*10.1*	*193*	*5.5*	*2*	*13.3*
Extent=not specified	250	15.9	828	23.4	0	0.0
Extent=ns & cavity=N	*249*	*15.9*	*823*	*23.3*	*0*	*0.0*
Extent=ns & cavity=Y	*1*	*0.1*	*5*	*0.1*	*0*	*0.0*
Cavity=N	1034	65.9	2852	80.6	11	73.3
Cavity=Y	534	34.1	685	19.4	4	26.7
6-month short course treatment						
Yes	158	10.1	482	13.6	0	0.0
2HRZE+4HR	123	7.8	396	11.2	0	0.0
2HRZS+4HR	7	0.4	14	0.4	0	0.0
Other standard regimen based on HRZES						
Yes	828	52.8	1600	45.2	2	13.3

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%	1006	64.2	2098	59.3	10	66.7
>75%	125	8.0	230	6.5	3	20.0
>50%	64	4.1	144	4.1	0	0.0
>25%	34	2.2	80	2.3	0	0.0
≤25%	23	1.5	59	1.7	1	6.7
Not recorded	316	20.2	926	26.2	1	6.7
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)						
>90%	859	54.8	1815	51.3	8	53.3
>75%	130	8.3	277	7.8	2	13.3
>50%	82	5.2	173	4.9	2	13.3
>25%	63	4.0	122	3.4	0	0.0
≤25%	51	3.3	97	2.7	1	6.7
Not recorded	383	24.4	1053	29.8	2	13.3
Under supervision by relatives (initial 2 months)						
>90%	2	0.1	5	0.1	0	0.0
>75%	1	0.1	4	0.1	0	0.0
>50%	4	0.3	7	0.2	0	0.0
>25%	3	0.2	4	0.1	0	0.0
≤25%	800	51.0	1667	47.1	10	66.7
Not recorded	758	48.3	1850	52.3	5	33.3
Under supervision by relatives (subsequent 4 months)						
>90%	3	0.2	4	0.1	0	0.0
>75%	2	0.1	7	0.2	0	0.0
>50%	8	0.5	14	0.4	0	0.0
>25%	5	0.3	10	0.3	0	0.0
≤25%	750	47.8	1568	44.3	9	60.0
Not recorded	800	51.0	1934	54.7	6	40.0
Supplied for unsupervised treatment (initial 2 months)						
<5%	865	55.2	1802	50.9	8	53.3
<10%	38	2.4	92	2.6	0	0.0
<15%	50	3.2	90	2.5	1	6.7
<25%	58	3.7	109	3.1	0	0.0
<50%	56	3.6	114	3.2	0	0.0
≥50%	31	2.0	74	2.1	2	13.3
Not recorded	470	30.0	1256	35.5	4	26.7
Supplied for unsupervised treatment (subsequent 4 months)						
<5%	753	48.0	1562	44.2	7	46.7
<10%	75	4.8	163	4.6	2	13.3
<15%	45	2.9	101	2.9	0	0.0
<25%	55	3.5	119	3.4	0	0.0
<50%	53	3.4	113	3.2	1	6.7
≥50%	85	5.4	155	4.4	1	6.7
Not recorded	502	32.0	1324	37.4	4	26.7
Defaulted (initial 2 months)						
<5%	1054	67.2	2199	62.2	12	80.0
<10%	20	1.3	50	1.4	0	0.0
<15%	13	0.8	28	0.8	1	6.7
<25%	14	0.9	32	0.9	0	0.0
<50%	9	0.6	20	0.6	0	0.0
≥50%	8	0.5	20	0.6	0	0.0
Not recorded	450	28.7	1188	33.6	2	13.3
Defaulted (subsequent 4 months)						
<5%	965	61.5	2030	57.4	10	66.7
<10%	35	2.2	75	2.1	0	0.0
<15%	20	1.3	39	1.1	0	0.0
<25%	25	1.6	49	1.4	1	6.7
<50%	18	1.1	33	0.9	1	6.7
≥50%	23	1.5	50	1.4	0	0.0
Not recorded	482	30.7	1261	35.7	3	20.0

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	259	16.5	750	21.2	0	0.0
Still on treatment	899	57.3	1721	48.7	13	86.7
Died	82	5.2	195	5.5	1	6.7
Transferred	35	2.2	72	2.0	0	0.0
Defaulted	37	2.4	92	2.6	1	6.7
Failure	0	0.0	0	0.0	0	0.0
Not recorded	256	16.3	707	20.0	0	0.0
Total	1568	100.0	3537	100.0	15	100.0
Outcome at 12 months						
Cured/ treatment completed	1024	65.3	2167	61.3	0	0.0
Still on treatment	220	14.0	358	10.1	10	66.7
Died	163	10.4	300	8.5	1	6.7
Transferred	47	3.0	82	2.3	1	6.7
Defaulted	88	5.6	160	4.5	2	13.3
Failure	0	0.0	0	0.0	0	0.0
Not recorded	26	1.7	470	13.3	1	6.7
Total	1568	100.0	3537	100.0	15	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	1173	74.8	2446	69.2	8	53.3
Still on treatment	2	0.1	8	0.2	2	13.3
Died	165	10.5	311	8.8	1	6.7
Transferred	48	3.1	82	2.3	1	6.7
Defaulted	84	5.4	152	4.3	2	13.3
Failure	0	0.0	0	0.0	0	0.0
Not recorded	96	6.1	538	15.2	1	6.7
Total	1568	100.0	3537	100.0	15	100.0
Among those cured/ treatment completed						
Bacteriological conversion	1105	94.2	2265	92.6	8	100.0
Radiological improvement	1080	92.1	2188	89.5	7	87.5
Other clinical improvement	298	25.4	626	25.6	1	12.5
No evidence of response	0	0.0	4	0.2	0	0.0
After treatment completed:						
No relapse	895	76.3	1892	77.4	6	75.0
Loss to follow up	156	13.3	313	12.8	1	12.5
Died	29	2.5	74	3.0	0	0.0
TB-related	*0*		*0*		*0*	
Not TB-related	*16*		*46*		*0*	
Unknown	*13*		*27*		*0*	
Relapse	15	1.3	23	0.9	0	0.0
Bacteriological	*5*		*9*		*0*	
Histological	*6*		*8*		*0*	
Clinico-radiological	*4*		*5*		*0*	
Not recorded	78	6.6	144	5.9	0	0.0
Among those still on treatment						
Reasons for still on treatment:						
Retreatment case	0	-	0	-	0	-
Extrapulmonary disease	0	-	2	-	0	-
Extensive disease	0	-	1	-	0	-
Interrupted treatment	1	-	2	-	1	-
Drug resistance	1	-	2	-	1	-
Poor response	0	-	0	-	0	-
Others	0	-	5	-	1	-
Among those died - causes of death:						
TB-related cause	9	5.5	13	4.2	1	-
Not TB-related	74	44.8	156	50.2	0	-
Unknown	23	13.9	57	18.3	0	-
Among those transferred, new sources of care:						
GP	4	8.3	7	8.5	0	0.0
Chest Clinic	0	0.0	0	0.0	0	0.0
Hospital	2	4.2	7	8.5	0	0.0
Outside HK	29	60.4	53	64.6	1	100.0
Not recorded	13	27.1	15	18.3	0	0.0
Among those defaulted						
Never found	29	34.5	60	39.5	0	0.0
Retreated after default	6	7.1	15	9.9	2	100.0
Treatment stopped by doctor	8	9.5	13	8.6	0	0.0
Not recorded	41	48.8	64	42.1	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	108	8.8	209	8.1	8	53.3
Streptomycin - S	1122	91.2	2356	91.9	7	46.7
Isoniazid - R	53	4.3	120	4.7	15	100.0
Isoniazid - S	1177	95.7	2442	95.3	0	0.0
Rifampicin - R	11	0.9	20	0.8	15	100.0
Rifampicin - S	1219	99.1	2544	99.2	0	0.0
Ethambutol - R	5	0.4	7	0.3	3	20.0
Ethambutol - S	1225	99.6	2557	99.7	12	80.0
Pyrazinamide - R	3	9.4	6	9.1	3	23.1
Pyrazinamide - S	29	90.6	60	90.9	10	76.9
Ofloxacin - R	2	4.5	4	4.4	3	20.0
Ofloxacin - S	42	95.5	86	95.6	12	80.0
Smear conversion rates						
1. Smear at 2 month = N (a)	763				9	
2. Smear at 2 month = P (b)	123				1	
2. Sm 2m (P); Sm 3m (N) (c)	56				0	
2. Sm 2m (P); Sm 3m (P) (d)	35				1	
2. Sm 2m (P); Sm 3m (U) (e)	32				0	
3. Smear at 2 month = U (f)	682				5	
3. Sm 2m (U); Sm 3m (N) (g)	201				2	
3. Sm 2m (U); Sm 3m (P) (h)	12				0	
3. Sm 2m (U); Sm 3m (U) (i)	469				3	
Overall percentage of smear conversion at 2m = (a)/ [(a)+(b)]	86.1		-		90.0	
Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	95.6		-		91.7	
Culture conversion rates						
1. Culture at 2 month = N (a)			1420		7	
2. Culture at 2 month = P (b)			211		3	
2. Cu 2m (P); Cu 3m (N) (c)			119		1	
2. Cu 2m (P); Cu 3m (P) (d)			25		2	
2. Cu 2m (P); Cu 3m (U) (e)			67		0	
3. Culture at 2 month = U (f)			1906		5	
3. Cu 2m (U); Cu 3m (N) (g)			449		3	
3. Cu 2m (U); Cu 3m (P) (h)			19		0	
3. Cu 2m (U); Cu 3m (U) (i)			1438		2	
Overall percentage of culture conversion at 2m = (a)/ [(a)+(b)]	-		87.1		70.0	
Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]	-		97.8		84.6	

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	1151	94.0	150	43.7
No	74	6.0	193	56.3
Total	1225	100.0	343	100.0
Age group				
0 to 19	44	3.6	7	2.0
Female	21		3	
Male	23		4	
20 to 39	294	24.0	34	9.9
Female	150		17	
Male	144		17	
40 to 59	387	31.6	96	28.0
Female	99		20	
Male	288		76	
60+	500	40.8	206	60.1
Female	98		42	
Male	402		164	
Total	1225	100.0	343	100.0
Female	368	30.0	82	23.9
Male	857	70.0	261	76.1
Disease Classification				
Pulmonary TB only	1110	90.6	336	98.0
Both pulmon and extrapulm	115	9.4	7	2.0
Total	1225	100.0	343	100.0
6-month short course treatment				
Yes	154	12.6	4	1.2
2HRZE+4HR	122	10.0	1	0.3
2HRZS+4HR	6	0.5	1	0.3
Other standard regimen based on HRZES				
Yes	730	59.6	98	28.6
Outcome at 6 months				
Cured/ treatment completed	246	20.1	13	3.8
Still on treatment	789	64.4	110	32.1
Died	67	5.5	15	4.4
Transferred	31	2.5	4	1.2
Defaulted	28	2.3	9	2.6
Failure	0	0.0	0	0.0
Not recorded	64	5.2	192	56.0
Total	1225	100.0	343	100.0
Outcome at 12 months				
Cured/ treatment completed	886	72.3	138	40.2
Still on treatment	148	12.1	72	21.0
Died	108	8.8	55	16.0
Transferred	33	2.7	14	4.1
Defaulted	50	4.1	38	11.1
Failure	0	0.0	0	0.0
Not recorded	0	0.0	26	7.6
Total	1225	100.0	343	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	1018	83.1	155	45.2
Still on treatment	2	0.2	0	0.0
Died	108	8.8	57	16.6
Transferred	35	2.9	13	3.8
Defaulted	45	3.7	39	11.4
Failure	0	0.0	0	0.0
Not recorded	17	1.4	79	23.0
Total	1225	100.0	343	100.0
Among those cured/ treatment completed				
Bacteriological conversion	994	97.6	111	71.6
Radiological improvement	973	79.4	107	31.2
Other clinical improvement	269	22.0	29	8.5
No evidence of response	0	0.0	0	0.0
After treatment completed:				
No relapse	805	65.7	90	26.2
Loss to follow up	141	11.5	15	4.4
Died	25	2.0	4	1.2
TB-related	*0*		*0*	
Not TB-related	*14*		*2*	
Unknown	*11*		*2*	
Relapse	15	1.2	0	0.0
Bacteriological	*5*		*0*	
Histological	*6*		*0*	
Clinico-radiological	*4*		*0*	
Not recorded	32	2.6	46	13.4
Among those still on treatment				
Reasons for still on treatment:				
Retreatment case	0	-	0	-
Extrapulmonary disease	0	-	0	-
Extensive disease	0	-	0	-
Interrupted treatment	1	-	0	-
Drug resistance	1	-	0	-
Poor response	0	-	0	-
Others	1	-	0	-
Among those died - causes of death:				
TB-related cause	8	7.4	1	1.8
Not TB-related	62	57.4	12	21.1
Unknown	18	16.7	5	8.8
Among those transferred, new sources of care:				
GP	3	8.6	1	7.7
Chest Clinic	0	0.0	0	0.0
Hospital	2	5.7	0	0.0
Outside HK	26	74.3	3	23.1
Not recorded	4	11.4	9	69.2
Among those defaulted				
Never found	25	55.6	4	10.3
Retreated after default	4	8.9	2	5.1
Treatment stopped by doctor	7	15.6	1	2.6
Not recorded	9	20.0	32	82.1

Annex 1 (e) - Treatment defaulters - 01

Ever seen at chest clinics	N	%
Yes	195	81.9
No	43	18.1
Total	238	100.0

Age group

0 to 19	6	2.5
Female	0	
Male	6	
20 to 39	57	23.9
Female	25	
Male	32	
40 to 59	82	34.5
Female	23	
Male	59	
60+	93	39.1
Female	14	
Male	79	
Total	238	100.0
Female	62	26.1
Male	176	73.9

Marital status

Single	50	21.0
Married	112	47.1
Separated	3	1.3
Divorce	9	3.8
Widowed	4	1.7
Not recorded	60	25.2
Total	238	100.0

Smoking status

Never	45	18.9
Ex-smoker	49	20.6
Current smoker	78	32.8
Not recorded	66	27.7
Total	238	100.0

Institution-related

Yes	7	2.9
No	174	73.1
Not recorded	57	23.9
Total	238	100.0

Institution

Client	5	-
Staff	1	-

Institution type

Old age home	2	-
School	6	-
Hospital	0	-
Handicapped	0	-
Prison	4	-
Others	0	-

Annex 1 (e) - Treatment defaulters - 02

Living situation	N	%
Street-sleeper	1	0.4
Cubicle bed space	1	0.4
Institution	3	1.3
Work quarter	7	2.9
Alone (not above)	41	17.2
With friends	7	2.9
With family	120	50.4
Not recorded	58	24.4

Residential status		
Permanent resident	161	67.6
Chinese immigrant	4	1.7
Imported worker	12	5.0
Tourist - 2 way permit Chinese	0	0.0
Other tourist	1	0.4
Vietnamese	1	0.4
Illegal immigrants	1	0.4
Not recorded	58	24.4
Total	238	100.0

Place of birth		
Hong Kong	66	27.7
Mainland China	87	36.6
Others	28	11.8
Not recorded	57	23.9
Total	238	100.0

Ethnicity		
Chinese	159	66.8
Other Asian	20	8.4
Caucasian	1	0.4
Others	2	0.8
Not recorded	56	23.5
Total	238	100.0

Employment status		
Full-time	61	25.6
Part-time	5	2.1
Retired	54	22.7
Unemployed	45	18.9
Housewife	15	6.3
Student	1	0.4
Not recorded	57	23.9
Total	238	100.0

Occupation		
Blue collar	39	16.4
White collar	13	5.5
Medical	0	0.0
Nursing	0	0.0
Paramedical	0	0.0
Supporting health staff	0	0.0
Not applicable	121	50.8
Not recorded	65	27.3
Total	238	100.0

Annex 1 (e) - Treatment defaulters - 03

First presentation	N	%
Private doctor	23	9.7
Private hospital	1	0.4
GOPC	5	2.1
Chest Clinic	27	11.3
Other DH Clinic	6	2.5
HA Clinic	3	1.3
HA Hospital	113	47.5
Mainland	4	1.7
Overseas	0	0.0
Not recorded	56	23.5
Total	238	100.0

Symptomatic on presentation

Y	155	65.1
N	27	11.3
Not recorded	56	23.5
Total	238	100.0

Chest symptoms	111	-
Systemic symptoms	27	-
Other site-specific symptoms	32	-

Reason for presentation

Symptom	144	60.5
Contact screening	5	2.1
Pre-employment	7	2.9
Pre-emigration	2	0.8
Other body check	7	2.9
Incidental to other illness	15	6.3
Others	2	0.8
Not recorded	56	23.5
Total	238	100.0

Contact with TB patients

Yes	9	3.8
No	171	71.8
Not recorded	58	24.4
Total	238	100.0

Contact type

Household	5	-
Work	1	-
Casual	0	-

Time of contact

Within 2 year	4	-
Over 2 year	3	-

Annex 1 (e) - Treatment defaulters - 04

Previous chemoprophylaxis	N	%
Yes	1	-

Reason for chemoprophylaxis

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

Disease Classification

Pulmonary TB only	188	79.0
Extrapulmonary TB only	23	9.7
Both	27	11.3
Total	238	100.0

Case category

New case	203	85.3
Relapse	24	10.1
Treatment after default	11	4.6
Failure of previous treatment	0	0.0
Total	238	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	90	41.9
Pretreatment culture +ve	152	70.7
Extent = 1	89	41.4
Extent=1 & cavity=N	*79*	*36.7*
Extent=1 & cavity=Y	*10*	4.7
Extent = 2	38	17.7
Extent=2 & cavity=N	*28*	*13.0*
Extent=2 & cavity=Y	*10*	*4.7*
Extent=3	20	9.3
Extent=3 & cavity=N	*12*	*5.6*
Extent=3 & cavity=Y	*8*	*3.7*
Extent=not specified	68	31.6
Extent=ns & cavity=N	*68*	*31.6*
Extent=ns & cavity=Y	*0*	*0.0*
Cavity=N	187	87.0
Cavity=Y	28	13.0

6-month short course treatment

Yes	6	2.5
2HRZE+4HR	5	2.1
2HRZS+4HR	0	0.0

Other standard regimen based on HRZES

Yes	71	29.8

Among those defaulted

Never found	104	43.7
Retreated after default	21	8.8
Treatment stopped by doctor	27	11.3
Not recorded	86	36.1

Annex 1 (e) - Treatment defaulters - 05

Treatment supervision	N	%
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)		
>90%	67	28.2
>75%	19	8.0
>50%	13	5.5
>25%	9	3.8
≤25%	19	8.0
Not recorded	111	46.6
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)		
>90%	22	9.2
>75%	7	2.9
>50%	17	7.1
>25%	14	5.9
≤25%	24	10.1
Not recorded	154	64.7
Under supervision by relatives (initial 2 months)		
>90%	0	0.0
>75%	0	0.0
>50%	0	0.0
>25%	0	0.0
≤25%	72	30.3
Not recorded	166	69.7
Under supervision by relatives (subsequent 4 months)		
>90%	1	0.4
>75%	0	0.0
>50%	0	0.0
>25%	0	0.0
≤25%	46	19.3
Not recorded	191	80.3
Supplied for unsupervised treatment (initial 2 months)		
<5%	81	34.0
<10%	9	3.8
<15%	3	1.3
<25%	8	3.4
<50%	7	2.9
≥50%	1	0.4
Not recorded	129	54.2
Supplied for unsupervised treatment (subsequent 4 months)		
<5%	49	20.6
<10%	7	2.9
<15%	2	0.8
<25%	2	0.8
<50%	12	5.0
≥50%	2	0.8
Not recorded	164	68.9
Defaulted (initial 2 months)		
<5%	71	29.8
<10%	7	2.9
<15%	2	0.8
<25%	11	4.6
<50%	9	3.8
≥50%	20	8.4
Not recorded	118	49.6
Defaulted (subsequent 4 months)		
<5%	22	9.2
<10%	4	1.7
<15%	0	0.0
<25%	8	3.4
<50%	17	7.1
≥50%	40	16.8
Not recorded	147	61.8

Annex 1 (f) Sources completing Programme Forms

Sources completing Programme Forms	PFA	PFB1	PFB2	PFC	PFD
Chest Clinics	3554	4273	4372	4360	4323
Hospital Authority	923	47	46	39	37
Private Practitioners/ Private Hospitals	0	0	0	0	0
Correctional Services and Others	42	21	19	10	8
Not Recorded	944	1122	1026	1054	1095
Total	5463	5463	5463	5463	5463

Breakdown for Hospital Authority:

Alice Ho Miu Ling Nethersole Hospital	1	1	1	1	1
Caritas Medical Centre	12	7	6	7	7
Castle Peak Hospital	4	4	4	3	3
Duchess of Kent Children Hospital	0	0	0	0	0
Fung Yiu King Hospital	0	0	0	0	0
Grantham Hospital	211	4	3	3	4
Haven of Hope Hospital	67	3	3	0	0
Kowloon Hospital	57	4	6	5	5
Kwong Wah Hospital	106	0	0	0	0
North District Hospital	71	0	0	0	0
Nam Long Hospital	0	0	0	0	0
Our Lady of Maryknoll Hospital	1	0	0	0	0
Pamela Youde Nethersole Eastern Hospital	0	0	0	0	0
Pok Oi Hospital	0	0	0	0	0
Prince of Wales Hospital	17	9	8	7	7
Princess Margaret Hospital	0	0	0	0	0
Queen Elizabeth Hospital	71	10	10	9	8
Queen Mary Hospital	30	0	0	0	0
Ruttonjee Hospital	216	4	4	2	0
Shatin Hospital	0	0	0	0	0
Tai Po Hospital	0	0	0	0	0
Tseung Kwan O Hosital	0	0	0	0	0
Tuen Mun Hospital	6	0	0	0	0
Tung Wah Eastern Hospital	0	0	0	0	0
Tung Wah Hospital	2	1	1	2	2
United Christian Hospital	51	0	0	0	0
Wong Tai Sin Hospital	0	0	0	0	0
Wong Chuk Hang Hospital	0	0	0	0	0
Yan Chai Hospital	0	0	0	0	0
Total	923	47	46	39	37

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	2006	2007	2008	2009	2010
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	8	14	9	16	13
	≤2 year	4	12	8	11	13
	≤3 year	10	8	17	10	17
	≤4 year	8	9	6	10	12
	≤5 year	10	7	14	10	11
	≤6 year	7	3	6	7	5
	≤7 year	11	3	7	4	9
	Total	58	56	67	68	80
Overall notified TB cases		5766	5463	5635	5193	5093

The above table shows the number of all notified TB cases in Hong Kong from 2006 to 2010 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 2006 to 2010 are 84.1, 78.9, 80.8, 74.1 and 72.5 respectively.

From Annex 2 (b), the overall estimated rates (per 100,000) among the new immigrants from 2006 to 2010 are 16.2, 16.8, 20.8, 20.9 and 25.5 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 (2006-2010)

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

	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009	2010	2010	2010
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	6	4	10	2	6	8	2	1	3	3	5	8	8	9	17
20-39	5	25	30	6	26	32	6	36	42	7	32	39	13	29	42
40-59	4	10	14	5	9	14	9	12	21	6	11	17	2	13	15
60+	2	2	4	0	2	2	1	0	1	3	1	4	2	4	6
Total	17	41	58	13	43	56	18	49	67	19	49	68	25	55	80

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

	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009	2010	2010	2010
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	9.0	6.2	7.6	3.2	10.1	6.6	3.3	1.7	2.6	5.1	9.0	7.0	14.3	17.1	15.6
20-39	19.0	17.1	17.4	24.3	18.7	19.6	28.4	26.8	27.0	32.6	23.1	24.4	58.4	22.0	27.2
40-59	31.5	34.4	33.5	37.4	33.9	35.1	64.3	44.3	51.1	40.3	37.8	38.6	13.0	43.5	33.2
60+	79.6	21.9	34.4	0.0	32.1	23.6	47.2	0.0	13.3	146.3	21.7	60.0	101.3	103.6	102.8
Total	15.7	16.5	16.2	12.7	18.6	16.8	18.5	21.8	20.8	19.6	21.5	20.9	26.1	25.2	25.5

Annex 2 (c)

TB Notification and Rates (All Cases) By Age & Sex (2006-2010)

All TB cases by age and sex

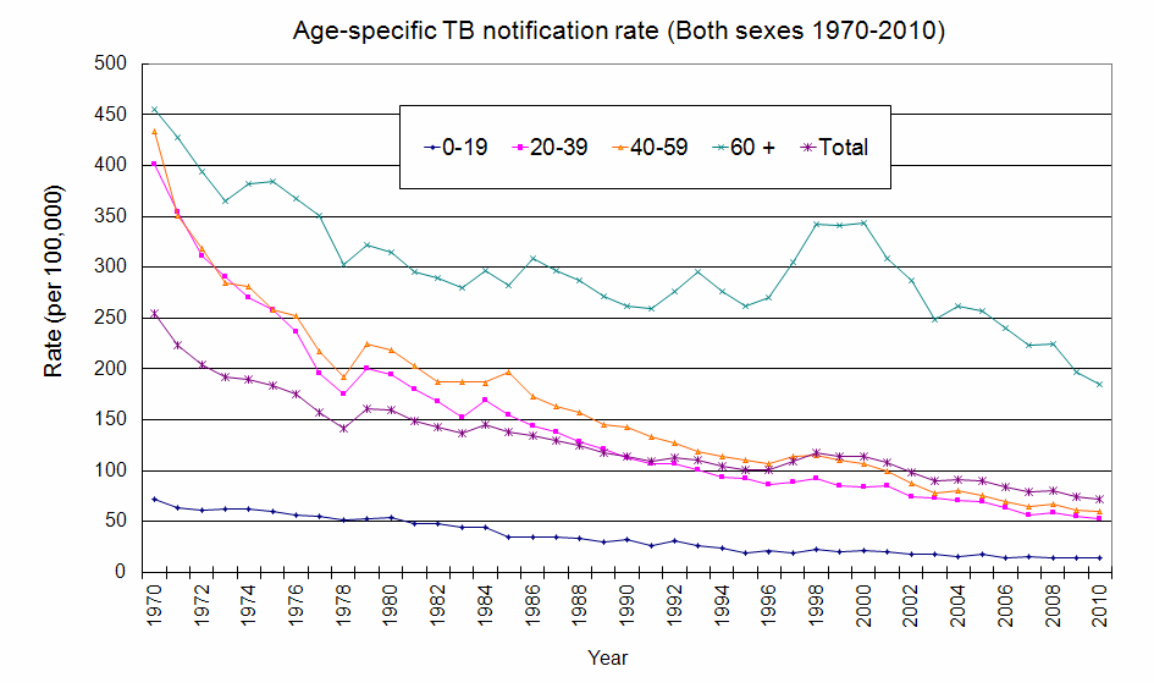
	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009	2010	2010	2010
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	106	97	203	108	96	204	82	102	184	92	87	179	94	85	179
20-39	616	728	1344	520	674	1194	563	673	1236	489	663	1152	496	615	1111
40-59	1077	513	1590	1014	491	1505	1027	529	1556	936	502	1438	900	514	1414
60+	1960	669	2629	1853	707	2560	1956	703	2659	1734	690	2424	1740	649	2389
Total	3759	2007	5766	3495	1968	5463	3628	2007	5635	3251	1942	5193	3230	1863	5093

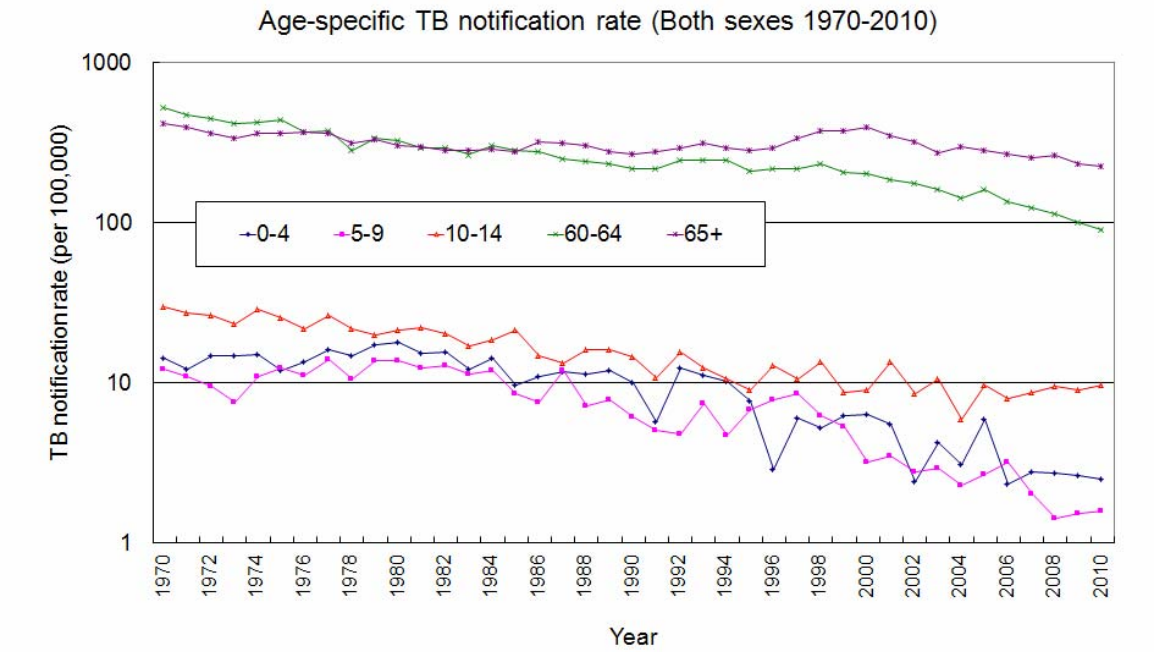
Rate of TB (all notified cases) (per 100,000)

	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009	2010	2010	2010
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	15.0	14.5	14.8	15.4	14.5	15.0	11.8	15.7	13.7	13.6	13.7	13.7	14.3	13.8	14.1
20-39	65.8	62.4	63.9	56.0	57.1	56.6	61.1	56.6	58.5	53.3	55.6	54.6	54.4	51.9	53.0
40-59	97.3	43.6	69.6	91.1	41.0	65.1	91.8	43.4	66.6	83.5	40.6	61.0	81.1	41.0	59.9
60+	376.3	116.3	239.9	341.1	117.8	223.9	348.2	113.4	225.0	297.4	107.2	197.6	282.5	95.8	184.7
Total	115.0	56.0	84.1	106.3	54.1	78.9	110.0	54.5	80.8	98.6	52.4	74.1	98.0	49.9	72.5

Annex 3

Trend of age-specific TB notification rates (1970-2010)





- 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 25 cases with TB-HIV co-infection were reported from various sources to the TB-HIV Registry in 2010. Twenty two (88.0%) were under the care of TB & Chest Service (TB&CS) and/or Special Preventive Programme (SPP), Public Health Services Branch, Department of Health (DH). The remaining three cases were managed at hospital under Hospital Authority for their HIV-associated TB.

Table 1 shows the total number of TB-HIV cases reported to the TB-HIV Registry for the years 1996-2010. The number of cases reported to the TB-HIV Registry has dropped in 2010 compared to the past few years.

Table 2 shows the data on TB as primary AIDS-defining illness in the Hong Kong HIV/AIDS reporting system for the years 1996-2010. Out of a total of 79 AIDS cases newly diagnosed in 2010, 20 (25.3%) had TB as a primary AIDS-defining illness, compared to 36 (45.6%) for *Pneumocystis jiroveci* pneumonia. As in 2009, TB was second to *Pneumocystis jiroveci* pneumonia as the most common primary AIDS-defining illness in Hong Kong in 2010.

Table 3 shows the distribution of ADI criteria among 303 cases reported from chest clinics and SPP for the years 1996-2010 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. Relatively more patients have pulmonary TB with a low CD_4 count as primary AIDS-defining illness compared to extra-pulmonary TB.

The pre-treatment drug sensitivity pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2010 is shown in **Table 4**. Of the 14 cases with a positive sputum or other specimen culture reported to TB-HIV Registry in 2010, 12 (85.7%) had disease due to *Mycobacterium tuberculosis* with favourable sensitivity pattern. One had bacillary resistance to streptomycin and another had bacillary resistance to both streptomycin and isoniazid. Among all the 337 cases reported to TB-HIV Registry with a positive sputum or other specimen culture between 1996 and 2010, 4 (1.2%) had MDRTB. This figure is comparable to the MDRTB rate in general population. 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 22 patients reported from chest clinics and SPP in 2010. The characteristics of these patients are similar to those of the 2009 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. Extra-pulmonary involvement is common, with nearly half of patients having TB involving one or more extra-pulmonary sites.

Annex 4(b)

Table 1. Total number of TB-HIV cases reported to TB-HIV Registry (1996-2010)*

Year	Number of TB-HIV cases**
1996	22
1997	19
1998	22
1999	25
2000	24
2001	34
2002	22
2003	28
2004	35
2005	42
2006	50
2007	56
2008	50
2009	38
2010	25
Total	492

* 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 (1) taking out some mismatched cases and cases with a revised diagnosis (2) adding some cases which were previously unreported.

Table 2. TB as primary ADI in Hong Kong HIV/AIDS reporting system, all sources (1996-2010)*

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%**
2008	31	96	32.29%
2009	24	76	31.58%
2010	20	79	25.30%
Total	321	1185	27.09%

* 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 in 2005 and 2007.

Annex 4(c)

Table 3. Criteria for TB as AIDS-defining illness among 303 cases reported from chest clinics and SPP (1996-2010)*

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	12
1999	7	6	3	16
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**
2008	14	13	6	33
2009	9	3	6	23***
2010	4	10	5	19****
Total	87	131	78	303

* Of all the cases reported to the TB-HIV Registry from 1996 to 2010, 303 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 303 cases.
** Information on TB as AIDS-defining illness not available in two patients.
*** Information on TB as AIDS-defining illness not available in five patients.
**** Information on TB as AIDS-defining illness not available in three patients.

Table 4. Pre-treatment drug sensitivity pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry (1996-2010)*

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	30	7	1	0	38
2008	30	3	0	0	33
2009	22	7	0	0	29
2010	12	2	0	0	14
Total	281	53	3 (+1)***	0	337

* Of all the cases reported to the TB-HIV Registry from 1996 to 2010, 337 had a positive culture (sputum or other specimens). The table is compiled basing on data of these 337 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: Characteristics of 22 TB-HIV cases reported from chest clinics and SPP in 2010*

Age distribution	Number	Proportion
0 to 19	0	0.00%
20 to 39	10	45.45%
40 to 59	11	50.00%
60+	1	4.55%
Sex distribution		
Male	17	77.27%
Female	5	22.73%
Ethnicity		
Chinese	16	72.73%
Asians, non-Chinese	5	22.73%
African	1	4.55%
Others	0	0.00%
Case category		
New case	20	90.91%
Relapse	2	9.09%
Treatment after default	0	0.00%
Failure of previous treatment	0	0.00%
TB as primary AIDS defining illness**		
Yes	14	73.68%
No	5	26.32%
HIV stage		
A1	0	0.00%
A2	1	4.55%
A3	0	0.00%
B1	0	0.00%
B2	4	18.18%
B3	1	4.55%
C1	0	0.00%
C2	0	0.00%
C3	7	31.82%
Unknown	9	40.91%
CD4 count at time of co-infection (median, IQR)	92 (34-303)/μL	
Viral load at time of co-infection (median, IQR)	120000 (4000-230000) copies/mL	
Anti-retroviral therapy at time of co-infection		
Yes	5	22.73%
No	15	68.18%
Unknown	2	9.09%
Presence of extra-pulmonary TB		
Yes	10	45.45%
No	12	54.55%
Extent of Respiratory TB***		
Minimal	12	63.16%
Moderate	5	26.32%
Extensive	2	10.53%
Sputum bacteriological status (pre-treatment)		
Smear + culture +	6	27.27%
Smear - culture +	4	18.18%
Smear + culture -	2	9.09%
Smear - culture -	9	40.91%
Incomplete	1	4.55%
Drug resistance pattern (pre-treatment)****		
Susceptible to SHRE	12	85.71%
Resistant to streptomycin	1	7.14%
Resistant to isoniazid	0	0.00%
Resistant to streptomycin and isoniazid	1	7.14%
MDR	0	0.00%
XDR	0	0.00%

* Among 25 cases reported to TB-HIV Registry in 2010, 22 were managed at chest clinics and/or SPP. The table is compiled basing on data of these 22 cases.
** Information on TB as primary AIDS-defining illness unknown in 3 patients.
*** 19 out of the 22 cases had lung parenchymal lesion on CXR.
**** 14 out of the 22 cases had a positive sputum or other specimen culture.

Annex 5

HBsAg Seroprevalence Survey
Among TB Patients Seen at Chest Clinics (2010)

In a sample survey conducted by the TB & Chest Service of the Department of Health in 2010 (2-month period from 1.3.2010 to 31.5.2010), the overall HBsAg seropositive rate among TB patients seen at chest clinics was 8.55%.

Sex/Age group	HBsAg status			HBsAg seropositive rate (%)*	Total
	Positive	Negative	Unknown		
Male					
0-19	0	15	2	0.00	17
20-39	7	104	1	6.31	12
40-59	30	169	5	15.08	204
≥60	27	307	2	8.08	336
Female					
0-19	0	16	1	0.00	17
20-39	8	103	1	7.21	112
40-59	9	101	1	8.18	111
≥60	5	105	3	4.55	113
Total	86	920	16	8.55	1022

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

HBsAg Seroprevalence Survey 2009-2010

Sex/Age group	HBsAg seropositive rate (%)	
	2009	2010
Male		
0-19	0.00	0.00
20-39	9.09	6.31
40-59	18.22	15.08
≥60	5.22	8.08
Female		
0-19	0.00	0.00
20-39	7.48	7.21
40-59	10.24	8.18
≥60	3.76	4.55
Total	8.70	8.55

Annex 6

Crude and Standardised Death Rate and Notification Rate 1981 - 2010

(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
2008	3.3	1.8	80.8	59.2
2009	2.9	1.6	74.1	53.9
2010	2.7	1.4	72.5	52.0

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

Annex 7 (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	2.82	2.04
10-14	19	17	36	9.05	8.51	8.79
15-19	81	75	156	35.82	34.92	35.38
20-24	117	136	253	52.87	55.74	54.37
25-29	128	191	319	56.46	66.55	62.10
30-34	143	178	321	60.41	56.85	58.38
35-39	132	169	301	54.23	50.95	52.34
40-44	188	136	324	64.14	37.93	49.72
45-49	244	132	376	76.23	39.09	57.16
50-54	298	123	421	107.81	43.80	75.56
55-59	284	100	384	127.81	45.58	86.96
60-64	263	73	336	186.79	55.43	123.30
65-69	285	71	356	232.65	63.22	151.62
70-74	334	127	461	289.43	106.10	196.09
75-79	417	125	542	479.86	126.77	292.18
80-84	281	122	403	587.87	170.15	337.24
85 & over	273	189	462	889.25	283.78	474.82
Total	**3495**	**1968**	**5463**	**106.43**	**54.18**	**78.99**

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Appendix 7 (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

Annex 7 (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	6.7	5.0	5.9	3.3	1.5	2.4	1.9	0.5	1.2
15-19	30.5	29.3	29.9	22.1	23.3	22.7	10.2	10.7	10.4
20-24	48.4	45.9	47.1	37.1	31.1	34.0	18.5	15.6	17.0
25-29	50.3	49.8	50.0	34.0	34.5	34.3	17.6	17.8	17.7
30-34	55.3	43.8	48.7	38.4	29.7	33.5	19.9	14.4	16.7
35-39	45.2	37.1	40.5	32.0	22.6	26.6	16.8	11.2	13.6
40-44	58.3	28.4	41.9	44.7	18.1	30.1	26.3	10.3	17.5
45-49	68.7	28.1	47.9	51.2	18.7	34.5	27.8	10.4	18.9
50-54	98.8	28.1	63.2	73.8	17.8	45.6	39.8	10.0	24.8
55-59	115.7	31.4	73.8	87.8	21.4	54.8	46.4	11.9	29.2
60-64	172.6	42.5	109.7	134.9	33.4	85.9	64.6	12.1	39.3
65-69	216.3	50.8	137.1	178.8	37.4	111.2	88.2	20.5	55.8
70-74	269.5	79.4	172.7	218.4	61.0	138.2	90.1	20.9	54.9
75-79	454.5	100.4	266.3	371.7	75.1	214.0	155.4	26.4	86.8
80-84	564.9	157.6	320.5	495.8	136.7	280.3	175.7	51.6	101.3
85 & over	853.4	249.2	439.9	732.9	205.7	372.0	208.5	60.1	106.9
Total	**98.0**	**41.9**	**68.5**	**77.0**	**30.0**	**52.3**	**35.4**	**13.4**	**23.9**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Annex 7 (d)

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	0.47	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	8.52	0.00	4.40
65-69	18	3	21	14.69	2.67	8.94
70-74	17	3	20	14.73	2.51	8.51
75-79	32	9	41	36.82	9.13	22.10
80-84	29	12	41	60.67	16.74	34.31
85 & over	44	18	62	143.32	27.03	63.72
Unknown	1	0	1			
Total	**179**	**52**	**231**	5.45	1.43	3.34

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Annex 8 (a)

Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2008

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	2	0	2	3.51	1.90	2.74
1	2	0	2			
2	0	0	0			
3	0	1	1			
4	0	1	1			
5-9	1	3	4	0.68	2.23	1.43
10-14	12	26	38	5.90	13.46	9.58
15-19	65	71	136	28.66	33.13	30.83
20-24	131	146	277	60.12	61.11	60.64
25-29	137	190	327	59.44	63.91	61.96
30-34	140	184	324	60.82	59.16	59.87
35-39	155	153	308	64.24	45.79	53.53
40-44	197	136	333	71.09	39.49	53.58
45-49	240	154	394	74.98	44.23	58.96
50-54	281	139	420	97.03	47.01	71.76
55-59	309	100	409	134.99	43.67	89.32
60-64	249	94	343	160.54	63.30	112.98
65-69	260	65	325	219.04	60.69	143.93
70-74	358	114	472	308.35	95.32	200.25
75-79	423	110	533	463.31	108.06	276.02
80-84	346	133	479	686.51	179.25	384.43
85 & over	320	187	507	975.61	264.50	489.86
Total	**3628**	**2007**	**5635**	**110.27**	**54.72**	**80.99**

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Appendix 8 (b)

Pulmonary TB Notifications by Age & Sex 2008**

Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
Under 1	0	0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	1	1	0	0	0	0	0	0
4	0	1	1	0	0	0	0	0	0
5-9	0	2	2	0	1	1	0	0	0
10-14	8	21	29	2	13	15	0	8	8
15-19	59	61	120	38	35	73	18	16	34
20-24	118	124	242	83	98	181	42	49	91
25-29	121	139	260	80	85	165	42	47	89
30-34	120	141	261	84	79	163	42	43	85
35-39	142	119	261	89	68	157	43	39	82
40-44	177	92	269	117	57	174	62	30	92
45-49	214	104	318	154	69	223	78	35	113
50-54	261	94	355	184	52	236	109	18	127
55-59	282	69	351	226	50	276	128	20	148
60-64	232	67	299	190	47	237	109	20	129
65-69	236	53	289	182	33	215	87	18	105
70-74	336	80	416	268	62	330	115	28	143
75-79	400	91	491	327	67	394	117	21	138
80-84	325	116	441	266	80	346	103	35	138
85 & over	298	170	468	252	126	378	67	35	102
Total	**3330**	**1545**	**4875**	**2542**	**1022**	**3564**	**1162**	**462**	**1624**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 8 (c)

Rate of Pulmonary TB Notifications by Age & Sex 2008**

(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	0.9	1.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	1.5	0.7	0.0	0.7	0.4	0.0	0.0	0.0
10-14	3.9	10.9	7.3	1.0	6.7	3.8	0.0	4.1	2.0
15-19	26.0	28.5	27.2	16.8	16.3	16.5	7.9	7.5	7.7
20-24	54.2	51.9	53.0	38.1	41.0	39.6	19.3	20.5	19.9
25-29	52.5	46.8	49.3	34.7	28.6	31.3	18.2	15.8	16.9
30-34	52.1	45.3	48.2	36.5	25.4	30.1	18.2	13.8	15.7
35-39	58.8	35.6	45.4	36.9	20.4	27.3	17.8	11.7	14.3
40-44	63.9	26.7	43.3	42.2	16.6	28.0	22.4	8.7	14.8
45-49	66.9	29.9	47.6	48.1	19.8	33.4	24.4	10.1	16.9
50-54	90.1	31.8	60.7	63.5	17.6	40.3	37.6	6.1	21.7
55-59	123.2	30.1	76.7	98.7	21.8	60.3	55.9	8.7	32.3
60-64	149.6	45.1	98.5	122.5	31.6	78.1	70.3	13.5	42.5
65-69	198.8	49.5	128.0	153.3	30.8	95.2	73.3	16.8	46.5
70-74	289.4	66.9	176.5	230.8	51.8	140.0	99.1	23.4	60.7
75-79	438.1	89.4	254.3	358.2	65.8	204.0	128.1	20.6	71.5
80-84	644.8	156.3	353.9	527.8	107.8	277.7	204.4	47.2	110.8
85 & over	908.5	240.5	452.2	768.3	178.2	365.2	204.3	49.5	98.6
Total	**101.2**	**42.1**	**70.1**	**77.3**	**27.9**	**51.2**	**35.3**	**12.6**	**23.3**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Annex 8 (d)

TB Death (All Forms) & Death Rate by Age & Sex 2008

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	0	0	0.00	0.00	0.00
20-24	0	0	0	0.00	0.00	0.00
25-29	0	1	1	0.00	0.34	0.19
30-34	2	0	2	0.87	0.00	0.37
35-39	0	2	2	0.00	0.60	0.35
40-44	2	3	5	0.72	0.87	0.80
45-49	5	2	7	1.56	0.57	1.05
50-54	8	1	9	2.76	0.34	1.54
55-59	7	1	8	3.06	0.44	1.75
60-64	9	4	13	5.80	2.69	4.28
65-69	10	3	13	8.42	2.80	5.76
70-74	24	3	27	20.67	2.51	11.46
75-79	29	3	32	31.76	2.95	16.57
80-84	37	6	43	73.41	8.09	34.51
85 & over	39	28	67	118.90	39.60	64.73
Total	**172**	**57**	**229**	**5.23**	**1.55**	**3.29**

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Annex 9 (a)

Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2009

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	0	0	1.70	3.69	2.65
1	1	1	2			
2	0	1	1			
3	1	1	2			
4	0	1	1			
5-9	2	2	4	1.47	1.58	1.52
10-14	13	21	34	6.76	11.50	9.07
15-19	75	60	135	33.81	28.67	31.32
20-24	109	114	223	49.79	48.43	49.09
25-29	125	220	345	54.21	72.92	64.81
30-34	121	177	298	53.78	56.95	55.62
35-39	134	152	286	55.83	45.82	50.03
40-44	150	132	282	57.10	39.47	47.23
45-49	198	128	326	62.68	36.09	48.61
50-54	285	133	418	95.22	43.34	68.95
55-59	303	109	412	127.90	45.61	86.57
60-64	244	90	334	143.87	54.28	99.58
65-69	260	80	340	219.78	75.97	152.06
70-74	321	94	415	278.40	79.39	177.58
75-79	366	150	516	382.05	142.18	256.33
80-84	298	105	403	560.15	137.08	310.48
85 & over	245	171	416	696.02	228.00	377.50
Total	**3251**	**1942**	**5193**	**98.97**	**52.66**	**74.48**

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Appendix 9 (b)

Pulmonary TB Notifications by Age & Sex 2009**

Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
Under 1	0	0	0	0	0	0	0	0	0
1	1	1	2	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	1	1	2	0	0	0	0	0	0
4	0	1	1	0	0	0	0	0	0
5-9	0	1	1	0	0	0	0	0	0
10-14	10	19	29	7	10	17	3	7	10
15-19	66	53	119	40	36	76	24	22	46
20-24	95	95	190	60	60	120	32	31	63
25-29	105	163	268	55	97	152	35	64	99
30-34	101	138	239	64	85	149	30	48	78
35-39	116	116	232	78	69	147	43	41	84
40-44	133	105	238	82	61	143	48	41	89
45-49	172	92	264	119	49	168	73	26	99
50-54	258	88	346	196	51	247	120	29	149
55-59	278	82	360	201	52	253	117	29	146
60-64	223	53	276	163	38	201	97	14	111
65-69	239	54	293	181	37	218	95	15	110
70-74	299	70	369	237	52	289	110	28	138
75-79	346	117	463	268	84	352	113	35	148
80-84	274	87	361	231	54	285	95	15	110
85 & over	232	152	384	190	119	309	68	35	103
Total	**2949**	**1488**	**4437**	**2172**	**954**	**3126**	**1103**	**480**	**1583**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Annex 9 (c)

Rate of Pulmonary TB Notifications by Age & Sex 2009**

(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	1.7	2.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
10-14	5.2	10.4	7.7	3.6	5.5	4.5	1.6	3.8	2.7
15-19	29.8	25.3	27.6	18.0	17.2	17.6	10.8	10.5	10.7
20-24	43.4	40.4	41.8	27.4	25.5	26.4	14.6	13.2	13.9
25-29	45.5	54.0	50.3	23.9	32.2	28.6	15.2	21.2	18.6
30-34	44.9	44.4	44.6	28.4	27.3	27.8	13.3	15.4	14.6
35-39	48.3	35.0	40.6	32.5	20.8	25.7	17.9	12.4	14.7
40-44	50.6	31.4	39.9	31.2	18.2	23.9	18.3	12.3	14.9
45-49	54.4	25.9	39.4	37.7	13.8	25.1	23.1	7.3	14.8
50-54	86.2	28.7	57.1	65.5	16.6	40.7	40.1	9.4	24.6
55-59	117.3	34.3	75.6	84.8	21.8	53.2	49.4	12.1	30.7
60-64	131.5	32.0	82.3	96.1	22.9	59.9	57.2	8.4	33.1
65-69	202.0	51.3	131.0	153.0	35.1	97.5	80.3	14.2	49.2
70-74	259.3	59.1	157.9	205.6	43.9	123.7	95.4	23.6	59.1
75-79	361.2	110.9	230.0	279.7	79.6	174.9	118.0	33.2	73.5
80-84	515.0	113.6	278.1	434.2	70.5	219.6	178.6	19.6	84.7
85 & over	659.1	202.7	348.5	539.8	158.7	280.4	193.2	46.7	93.5
Total	**89.8**	**40.3**	**63.6**	**66.1**	**25.9**	**44.8**	**33.6**	**13.0**	**22.7**

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Annex 9 (d)

TB Death (All Forms) & Death Rate by Age & Sex 2009

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	1	0	1	0.45	0.00	0.23
20-24	0	1	1	0.00	0.42	0.22
25-29	0	0	0	0.00	0.00	0.00
30-34	0	2	2	0.00	0.64	0.37
35-39	3	2	5	1.25	0.60	0.87
40-44	1	2	3	0.38	0.60	0.50
45-49	1	1	2	0.32	0.28	0.30
50-54	4	0	4	1.34	0.00	0.66
55-59	10	2	12	4.22	0.84	2.52
60-64	8	1	9	4.72	0.60	2.68
65-69	19	2	21	16.06	1.90	9.39
70-74	19	3	22	16.48	2.53	9.41
75-79	27	8	35	28.18	7.58	17.39
80-84	24	10	34	45.11	13.05	26.19
85 & over	31	22	53	88.07	29.33	48.09
Total	**148**	**56**	**204**	4.51	1.52	2.93

NB. The rates have been updated based on the updated population figures from the 2011 Population Census.

Part 4

SUPPLEMENT

Part 4 – Supplement: Contents

Supplement

FORM 1

PREVENTION AND CONTROL OF DISEASE ORDINANCE

(Cap. 599)

TUBERCULOSIS NOTIFICATION

Particulars of Infected Person

Name in English:	Name in Chinese:	Age / Sex:	I.D. Card / Passport No.:
Residential Address:			Telephone No.: (Home) : (Mobile) : Patient : Family member : (Office / school / others):
Name and address of workplace / school / other institution:			
Job title / Class attended :			
Hospital / Clinic sent to (if any):			Hospital No.:

Site of TB (please ✓ all applicable)		Sputum (please ✓ and attach laboratory report if available)				Other specimens (specify and ✓ below):	
☐ Lung	☐ Meninges		Smear	Culture	PCR test	Smear	Culture
☐ Pleura	☐ Bone & Joint	Positive					
☐ Lymph node	☐ Urinary system	Negative					
☐ Miliary	☐ Genital system	Unknown					
☐ Other(s) (please specify):		Not done					

Duration of stay in Hong Kong: _____ Years

History of past treatment for TB
(delete whichever not applicable): Yes / No

If yes, YEAR first receiving treatment: _____

Disposal (please ✓ in front boxes and specify):

☐ Treatment started on: _____ (Date: dd/mm/yyyy)

☐ On observation

☐ Referred to _____ Hospital / Clinic / Private Practitioner

☐ Died on: _____ (Date: dd/mm/yyyy)

(Please DELETE whichever is not applicable)

I will arrange for examination of contacts myself. / Please arrange for examination of contacts.

Further Remarks:

Notified under the Prevention and Control of Disease Regulation by

Dr. _____ of _____Hospital / Clinic / Private Practice
(Full Name in BLOCK Letters)

_____ Ward / Unit / Specialty on _____ / _____ / _____ (Date: dd/mm/yyyy)

Telephone No.: _____ Fax No.: _____ _____
(Signature)

To: Statistics Unit, Wanchai Chest Clinic
99 Kennedy Road, Hong Kong
(Fax: 28346627)

Date:

Denotification of previously notified TB cases

Clinic:

Name:

ID number: Clinic number:

Date notified:

Revised Diagnosis:

Smear: positive / negative / unknown

Culture: negative / M. tuberculosis / atypical mycobacteria / unknown

Denotification request by: _____

To Statistics Unit: Please confirm receiving TB de-notification form of the following patient:

Name: _____ Clinic no.: _____

HKID no.: _____ Chest Clinic: _____

It is confirmed that the TB de-notification form of the above named has been received by the Statistics Unit, TB&CS.

Chop or signature: _____ Date: _____

(Form TBCS/DE/0405)

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. (Employer) _____

Workplace address (if different from employer's address): _____

_____

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	□50	Severe Acute Respiratory Syndrome
□17	Avian Chlamydiosis	□34	Skin Cancer	□51	Avian Influenza A

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: _____

Fax 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.

LD483 (Rev. 8.2.2005)