

ANNUAL REPORT 2006

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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## PREFACE

Despite the availability of effective treatment, tuberculosis (TB) remains a major health problem in many parts of the world. With its resurgence alongside rampant drug resistance and HIV co-infection, the World Health Organization (WHO) declared TB as a global emergency in April 1993. In May 1998, a resolution in the 51<sup>st</sup> World Health Assembly urged all member states to turn their policies into action and to make strong political commitment on TB control.

The major progress on global TB control in the past decade has been due in large part to the development and widespread implementation of the DOTS strategy in increasing number of countries over the world. In accordance with the 2005 World Health Assembly resolution on sustainable financing for TB control, the major task for the next decade is to achieve the Millennium Development Goal (MDG) and related Stop TB Partnership targets for TB control. These are as follows:

- MDG6, Target 8 - ... halted by 2015 and begun to reverse the incidence ...
- Targets linked to the MDGs and endorsed by the Stop TB Partnership:
  - by 2005, detect at least 70% of new sputum smear-positive TB cases and cure at least 85% of these cases
  - by 2015, reduce TB prevalence and death rates by 50% relative to 1990
  - by 2050, eliminate TB as a public health problem (<1 case per million population)

In order to meet these targets, the WHO defined the “Stop TB Strategy” in 2006. This was set out as a coherent strategy which would be capable of sustaining existing achievements and addressing remaining constraints and challenges more effectively. The six components of the Strategy are:

1. Pursue high-quality DOTS expansion and enhancement
2. Address TB/HIV, MDR-TB and other challenges
3. Contribute to health system strengthening
4. Engage all care providers
5. Empower people with TB, and communities
6. Enable and promote research

Notwithstanding the increasing coverage of DOTS, anti-TB drug resistance remains a grave concern worldwide. The problem is most acute in areas with HIV co-epidemic or gross social inequities, but increasing movement of populations has rendered it a global crisis affecting all countries. Besides multidrug-resistant tuberculosis (MDR-TB) with resistance to at least the two key first-line drugs, isoniazid and rifampicin, there have

been accumulating reports of extensively drug-resistant TB (XDR-TB), which is MDR-TB with additional resistance to the fluoroquinolones and one or more of the three injectable drugs – capreomycin, kanamycin and amikacin, in different parts of the world. XDR-TB carries a very poor prognosis with high treatment failure and mortality rates. The mortality reached >90% among HIV-coinfected patients in a recent report from South Africa. Significant epidemiological clustering was also observed, probably reflecting the prolonged period of infectiousness with ineffective treatment, especially in the nosocomial settings.

In October 2006, the WHO Global Task Force on XDR-TB has called for an international response to the emerging XDR-TB crisis, and issued the following recommendations:

- Strengthen the quality of basic TB and HIV/AIDS control
- Scale up the programmatic management of MDR-TB and XDR-TB
- Strengthen laboratory services
- Expand MDR-TB and XDR-TB surveillance
- Develop and implement infection control measures
- Strengthen advocacy, communication and social mobilization
- Pursue resource mobilization at all levels
- Promote research and development of new tools

MDR-TB and XDR-TB have been found to be distributed worldwide, and the Western Pacific Region is no exception. Cases of XDR-TB have been reported in some areas. With the limited availability of facilities for culture and drug susceptibility testing in many areas, these reported cases probably represent only the tip of an iceberg. In areas with high prevalence of MDR-TB and inadequate health care infrastructure, the emergence of XDR-TB is an ever-present threat. Strengthening of local TB programmes, including full implementation of DOTS-plus with judicious use of second-line drugs, is essential to avert the crisis.

Major restructuring of the public health services occurred locally after the establishment of the Centre for Health Protection (CHP) in June 2004. The Tuberculosis and Chest Service (TB&CS), Social Hygiene Service and Special Preventive Programme were incorporated into the Public Health Services Branch (PHSB) of this newly formed centre. Besides providing direct clinical services for TB, sexually transmitted infections (STIs), and human immunodeficiency virus infection (HIV), the PHSB also plays the key role in their surveillance and control. A “CHP Symposium - Updates on TB, STI and HIV” was held on 19 February 2006. A TB Manual, as well as an HIV Manual and a Social Hygiene Manual with important professional guidelines, were distributed.

After the transient rise of TB notification rate from 89.5 per 100,000 in 2003 to 91.8 per 100,000 in 2004, the figure dropped again to 90.4 per 100,000 in 2005 and 84.1 in 2006. Changes in healthcare seeking behaviour at the time of the 2003 SARS crisis and intensified surveillance afterwards could have accounted for the previous increase. With the effective implantation of DOTS and DOTS-plus in the recent decades, we have been witnessing progressive fall in TB drug resistance rates in Hong Kong. However, TB is a disease that observes no territorial barriers. With the emergence of XDR-TB worldwide, there is no room for complacency. In response to this global crisis, further efforts have been made to strengthen the various components of the local TB programme. These include intensified surveillance to monitor the local situation, improved laboratory diagnosis to detect resistant cases, prompt public health actions to limit transmission, and effective DOTS-plus programme to treat and cure the disease.

In 2006, a number of important studies were published by the TB&CS in collaboration with other investigators from different sectors.<sup>1-6</sup> These studies 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.

In this Annual Report, there are a few newly added/ modified items. The scheme for contact tracing and treatment of latent TB infection has already been updated since 2005. Surveillance data from the TB-HIV registry and HBsAg seroprevalence survey results among TB patients seen at chest clinics are included as in 2005. The format for reporting treatment outcomes of the 2005 cohort has been modified further to keep in line with that required for reporting to WHO. Local surveillance data on XDR-TB is included in this Report for the first time.

During the year, 99,509 patients attended the TB&CS as compared to 100,663 in 2005, and the total attendance was 798,597 in comparison with 835,951 in 2005. Among the 99,509 patients, 25,127 patients were new attendants, of whom 23.8% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (12.8%), active tuberculosis of other forms (2.9%), inactive tuberculosis (8.3%), bronchitis not specified as acute or chronic (10.6%), acute respiratory infection (5.6%), pneumonia (5.8%), malignant neoplasm of trachea and bronchus (1.6%), bronchiectasis (1.2%), asthma (0.6%) and emphysema (0.3%). Among all the attendance, 4,571 hospital admissions were arranged.

## Part 1: Tuberculosis

The number of tuberculosis notifications in 2006 was 5,766, making a notification rate of 84.1 per 100,000 population. The corresponding figures in 2005 were 6,160 and 90.4 respectively.

The number of tuberculosis deaths was 294 in 2006 as compared with 271 in 2005. The corresponding tuberculosis mortality rates were 4.3 and 4.0 per 100,000 respectively.

Tuberculosis stayed outside the top ten causes of death in 2006. Tuberculosis deaths accounted for 0.8% of the total registered deaths in Hong Kong. The average age of tuberculosis deaths was 73.5.

In 2006, 99.4% of the newborns were given direct BCG vaccination at birth. The BCG revaccination programme for primary school children was stopped since the school year starting from September 2000.

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

## Part 2: Pneumoconiosis

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

applied for reassessment under the revised scheme, irrespective of whether there was additional degree of incapacity over previous lump-sum compensation. The 1996 amendment also allowed the Pneumoconiosis Medical Board to take other tests into consideration in adjusting the degree of incapacity as determined by FVC test by a maximum of 5%. The ex-gratia payment scheme for pre-1981 pneumoconiotics was also reviewed. On top of a flat-rate of monthly payment, additional payments were introduced for those in need of constant care, oxygen and medical appliances.

The Pneumoconiosis Clinic continued to provide a full range of outpatient services to patients with suspected or confirmed pneumoconiosis. These services covered not only the assessment aspect, but also addressed the patients' diversified needs in terms of treatment, prevention and rehabilitation. The attendance at the clinic was 8,866 in 2006 compared with 9,144 in 2005. In 2006, 278 new cases of pneumoconiosis were registered in the TB&CS, and 116 new cases (including 7 cases of asbestos-related lung diseases) were confirmed by the Pneumoconiosis Medical Board. Up to the end of 2006, a total of 5,701 patients had been compensated.

#### References

1. Chan-Yeung M, Chan FH, Cheung AH, Dai DL, Chu LW, Lam WK, Leung CC, Kam KM, Tam CM. Prevalence of tuberculous infection and active tuberculosis in old age homes in Hong Kong. *J Am Geriatr Soc* 2006;54:1334-40.
2. Chang KC, Leung CC, Yew WW, Chan SL, Tam CM. Dosing schedules of 6-month regimens and relapse for pulmonary tuberculosis. *Am J Respir Crit Care Med* 2006;174:1153-8.
3. Chan-Yeung M, Cheung AH, Dai DL, Chan FH, Kam KM, Tam CM, Leung CC. Prevalence and determinants of positive tuberculin reactions of residents in old age homes in Hong Kong. *Int J Tuberc Lung Dis* 2006;10:892-8.
4. Chan-Yeung M, Kam KM, Leung CC, Wang J, Yew WW, Lam CW, Tam CM. Population-based prospective molecular and conventional epidemiological study of tuberculosis in Hong Kong. *Respirology* 2006;11:442-8.
5. Yam WC, Yuen KY, Kam SY, Yiu LS, Chan KS, Leung CC, Tam CM, Ho PO, Yew WW, Seto WH, Ho PL. Diagnostic application of genotypic identification of mycobacteria. *J Med Microbiol* 2006;55:529-36.
6. Leung CC, Yew WW, Chang KC, Tam CM, Chan CK, Law WS, Wong MY, Lee SN, Leung M. Risk of active tuberculosis among schoolchildren in Hong Kong. *Arch Pediatr Adolesc Med* 2006;160:247-51.

Part 1

TUBERCULOSIS



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**APPENDIX 1**

**TB Notifications & Death Rate of Tuberculosis (All Forms)  
1947 - 2006**

Year	TB Notifications		Notification Rate per 100,000 Pop	TB Deaths	Death Rate per 100,000 Pop	Ratio (Notifications/ Deaths)	Deaths ----- Notifications x 100%
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)	138.3	409	7.5	18.45	5.42
1986	7432	(46)	134.5	407	7.4	18.26	5.48
1987	7269	(41)	130.3	405	7.3	17.95	5.57
1988	7021	(121)	124.8	388	6.9	18.10	5.53
1989	6704	(226)	117.9	403	7.1	16.64	6.01
1990	6510	(288)	114.1	382	6.7	17.04	5.87
1991	6283	(281)	109.2	409	7.1	15.36	6.51
1992	6534	(309)	112.6	410	7.1	15.94	6.27
1993	6537	(264)	89	396	6.7	16.51	6.06
1994	6319	(230)	87	409	6.8	15.45	6.47
1995	6212	(175)	102	418	6.8	14.86	6.73
1996	6501	( 88)	162	292	4.5	22.26	4.49
1997	7072	( 34)	156	252	3.9	28.06	3.56
1998	7673	( 7)	169	270	4.1	28.42	3.52
1999	7512	( 5)	166	312	4.7	24.08	4.15
2000	7578	( 7)	152	299	4.5	25.34	3.95
2001	7262	( 0)	192	311	4.6	23.35	4.28
2002	6602	( 0)	186	267	4.0	24.73	4.04
2003	6024	( 0)	177	275	4.1	21.91	4.57
2004	6226	( 0)	110	286	4.2	21.77	4.59
2005	6160	( 0)	77	271	4.0	22.73	4.40
2006	5766	( 0)	58	294	4.3	19.61	5.10

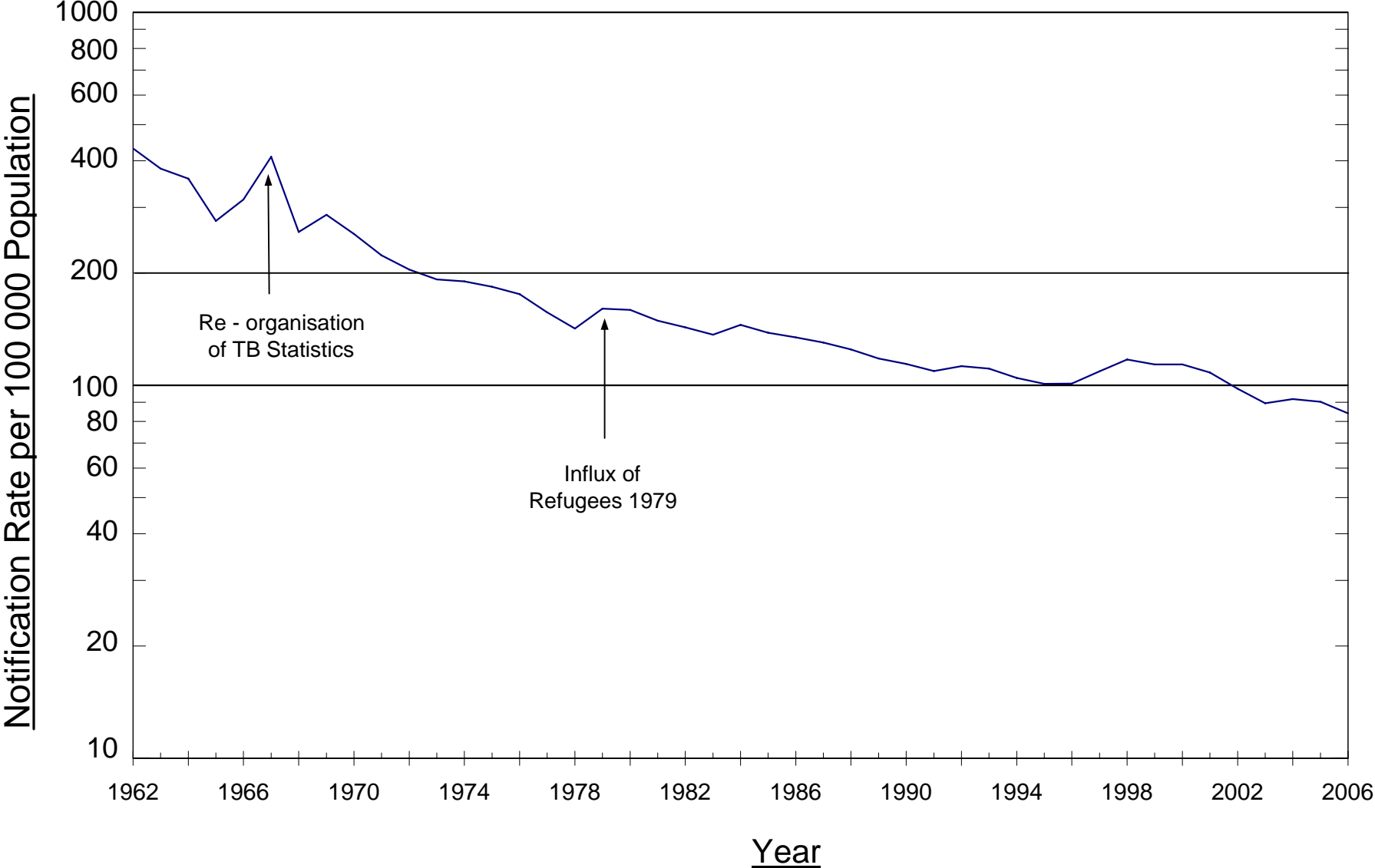
\* Figures in brackets denote the number of Vietnamese refugees included.

# 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 2001 onwards have been updated based on the updated population figure from the 2006 by-census.

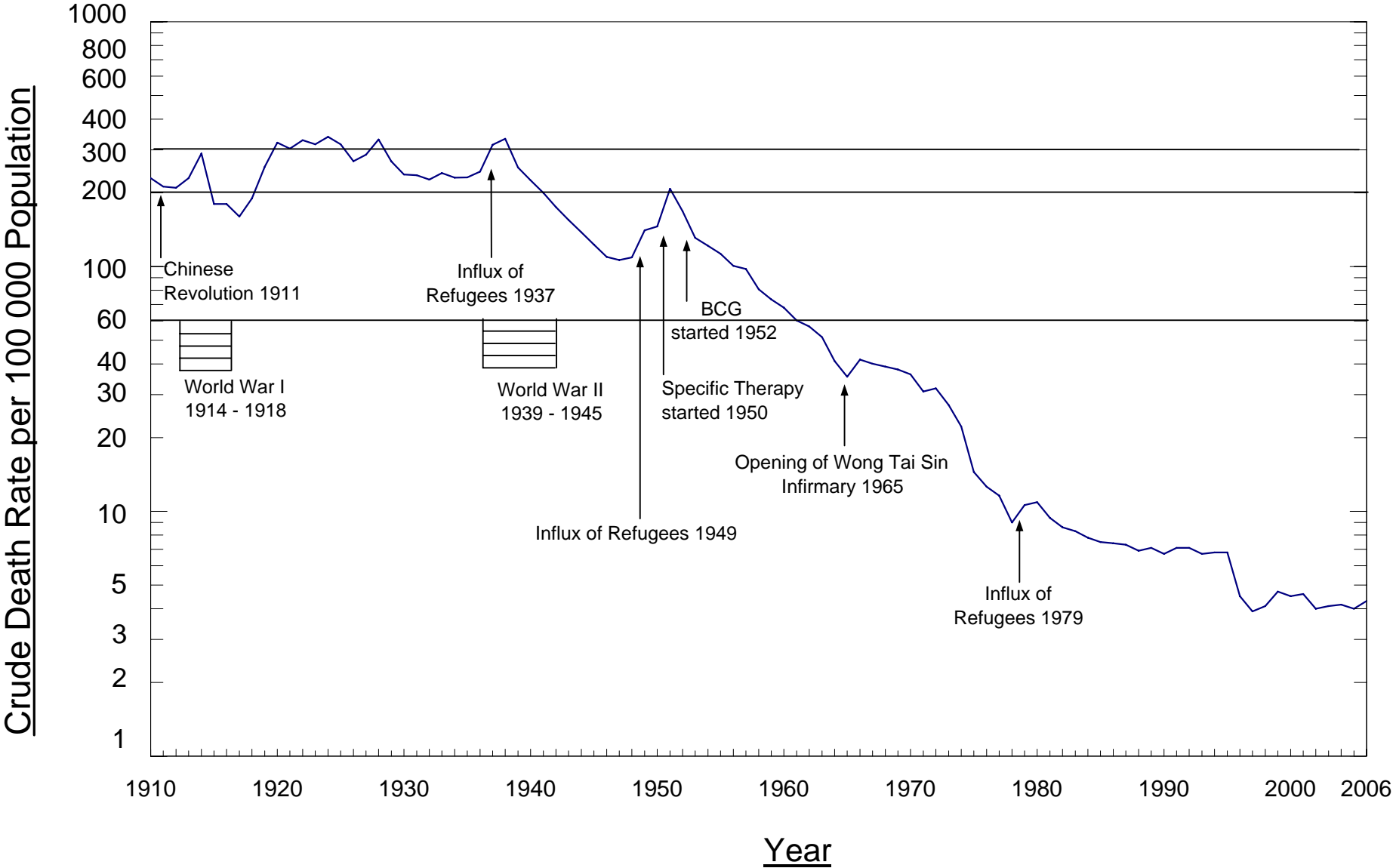
APPENDIX 2

TB Notification Rate (All Forms) 1962-2006



# APPENDIX 3

## Crude Death Rate due to Tuberculosis (All Forms) 1910-2006



## APPENDIX 4 (a)

### Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2006

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100,000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	1	0	1	1.81	2.92	2.35
1	0	0	0			
2	1	0	1			
3	0	1	1			
4	0	2	2			
5-9	4	6	10	2.46	3.95	3.18
10-14	13	20	33	6.15	9.96	8.01
15-19	87	68	155	39.14	31.79	35.53
20-24	131	157	288	58.07	63.61	60.97
25-29	166	191	357	74.17	68.58	71.07
30-34	145	199	344	60.72	64.28	62.73
35-39	174	181	355	70.16	54.62	61.27
40-44	221	147	368	72.60	40.24	54.95
45-49	272	128	400	84.03	38.13	60.66
50-54	270	131	401	102.27	48.95	75.43
55-59	314	107	421	146.25	51.49	99.64
60-64	253	78	331	198.28	67.07	135.71
65-69	344	90	434	274.76	77.19	179.49
70-74	392	104	496	348.75	89.73	217.26
75-79	409	120	529	496.96	124.61	296.19
80-84	301	117	418	671.88	172.31	370.90
85 & over	261	160	421	915.79	257.23	464.17
<b>Total</b>	<b>3759</b>	<b>2007</b>	<b>5766</b>	<b>114.95</b>	<b>55.95</b>	<b>84.09</b>

## Appendix 4 (b)

### Pulmonary TB Notifications by Age & Sex 2006\*\*

Age Group	Pulmonary TB			Bacteriologically *			Smear		
	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	0	0	0	0	0	0	0	0	0
3	0	1	1	0	0	0	0	0	0
4	0	2	2	0	2	2	0	1	1
5-9	4	5	9	1	4	5	0	2	2
10-14	12	17	29	6	13	19	3	6	9
15-19	81	59	140	57	41	98	32	16	48
20-24	110	135	245	73	84	157	44	46	90
25-29	150	160	310	95	103	198	42	60	102
30-34	125	148	273	87	92	179	47	41	88
35-39	156	138	294	95	82	177	51	44	95
40-44	194	107	301	139	70	209	95	33	128
45-49	257	93	350	181	58	239	103	31	134
50-54	244	84	328	181	56	237	99	29	128
55-59	293	73	366	214	50	264	104	29	133
60-64	229	54	283	163	36	199	89	16	105
65-69	319	66	385	248	46	294	128	22	150
70-74	366	76	442	296	53	349	124	24	148
75-79	379	96	475	307	74	381	132	30	162
80-84	284	104	388	228	89	317	88	40	128
85 & over	249	149	398	210	125	335	74	34	108
<b>Total</b>	<b>3452</b>	<b>1567</b>	<b>5019</b>	<b>2581</b>	<b>1078</b>	<b>3659</b>	<b>1255</b>	<b>504</b>	<b>1759</b>

\*\* Pulmonary TB with or without extrapulmonary TB

\* Either smear or culture positive

## Appendix 4(c)

### Rate of Pulmonary TB Notifications by Age & Sex 2006\*\*

#### (Rate per 100,000 Population)

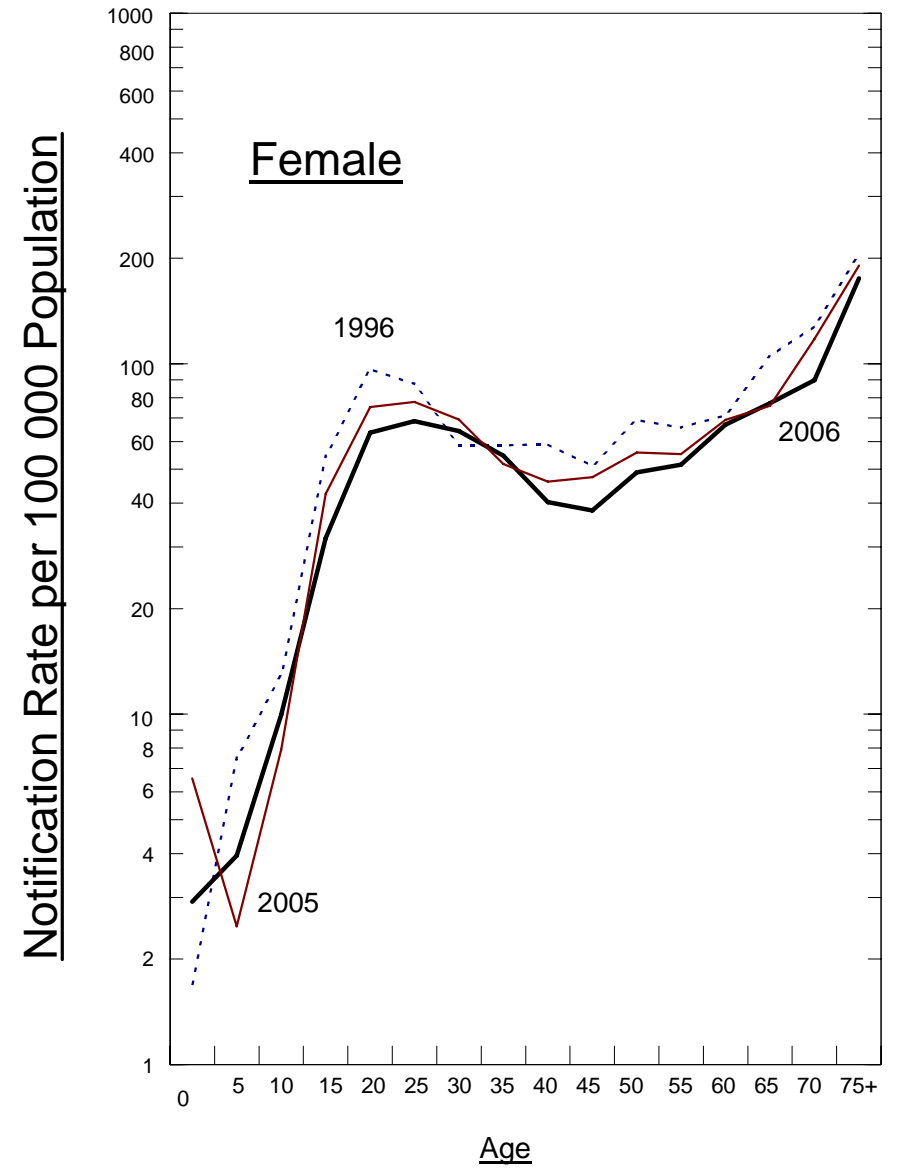
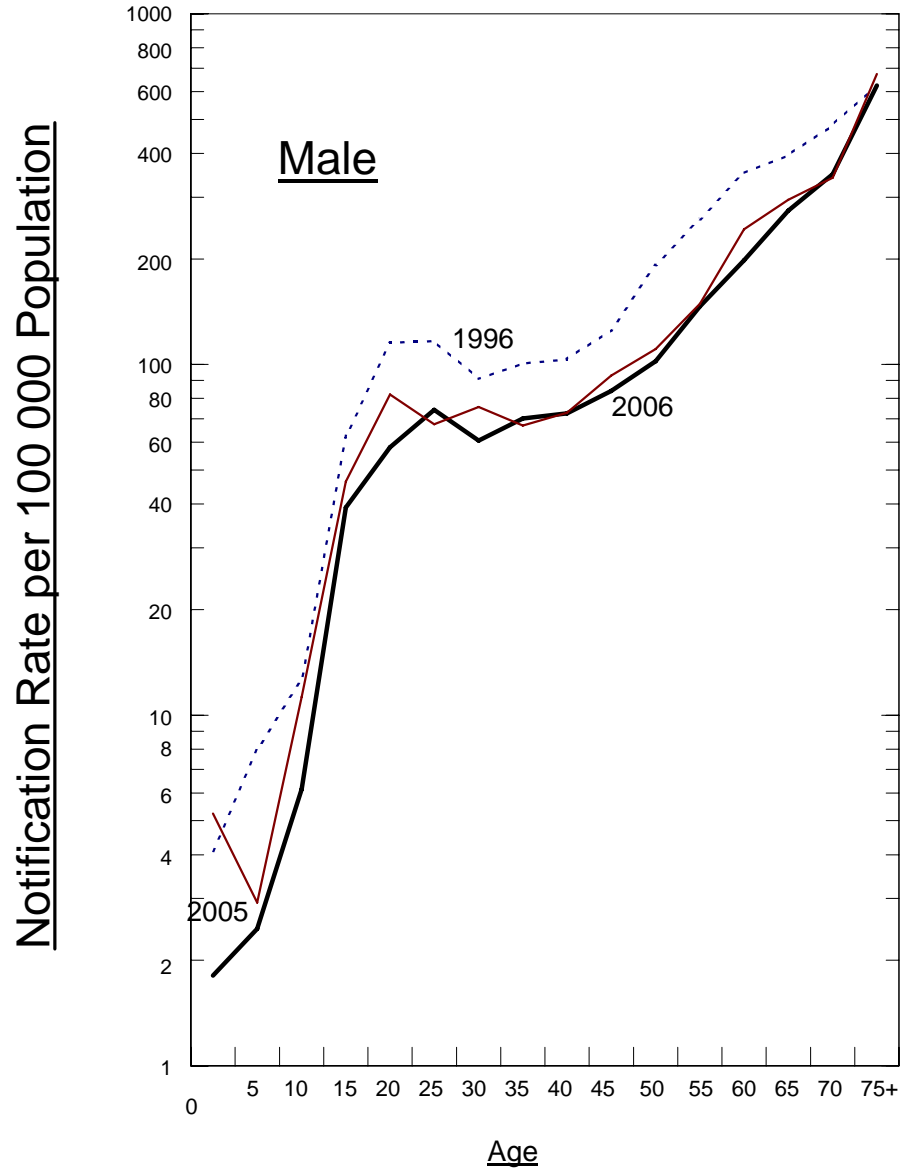
Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0-4	0.0	2.9	1.4	0.0	1.9	0.9	0.0	1.0	0.5
5-9	2.5	3.3	2.9	0.6	2.6	1.6	0.0	1.3	0.6
10-14	5.7	8.5	7.0	2.8	6.5	4.6	1.4	3.0	2.2
15-19	36.4	27.6	32.1	25.6	19.2	22.5	14.4	7.5	11.0
20-24	48.8	54.7	51.9	32.4	34.0	33.2	19.5	18.6	19.1
25-29	67.0	57.5	61.7	42.4	37.0	39.4	18.8	21.5	20.3
30-34	52.3	47.8	49.8	36.4	29.7	32.6	19.7	13.2	16.0
35-39	62.9	41.6	50.7	38.3	24.7	30.5	20.6	13.3	16.4
40-44	63.7	29.3	44.9	45.7	19.2	31.2	31.2	9.0	19.1
45-49	79.4	27.7	53.1	55.9	17.3	36.2	31.8	9.2	20.3
50-54	92.4	31.4	61.7	68.6	20.9	44.6	37.5	10.8	24.1
55-59	136.5	35.1	86.6	99.7	24.1	62.5	48.4	14.0	31.5
60-64	179.5	46.4	116.0	127.7	31.0	81.6	69.7	13.8	43.1
65-69	254.8	56.6	159.2	198.1	39.5	121.6	102.2	18.9	62.0
70-74	325.6	65.6	193.6	263.3	45.7	152.9	110.3	20.7	64.8
75-79	460.5	99.7	266.0	373.0	76.8	213.3	160.4	31.2	90.7
80-84	633.9	153.2	344.3	508.9	131.1	281.3	196.4	58.9	113.6
85 & over	873.7	239.5	438.8	736.8	201.0	369.3	259.6	54.7	119.1
<b>Total</b>	<b>105.6</b>	<b>43.7</b>	<b>73.2</b>	<b>78.9</b>	<b>30.1</b>	<b>53.4</b>	<b>38.4</b>	<b>14.1</b>	<b>25.7</b>

\*\* Pulmonary TB with or without extrapulmonary TB

\* Either smear or culture positive

# APPENDIX 5

## TB Notification Rate by Age & Sex 1996, 2005 & 2006





## Appendix 6

### Notifications of Tuberculosis by Type by Age & Sex 2006

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
4	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
5-9	4	5	9	-	-	-	-	-	-	-	-	-	-	1	1
10-14	9	16	25	-	-	-	-	-	-	1	-	1	3	4	7
15-19	75	55	130	1	-	1	1	1	2	2	-	2	8	12	20
20-24	108	124	232	-	1	1	3	-	3	1	2	3	19	30	49
25-29	140	137	277	1	6	7	1	1	2	1	1	2	23	46	69
30-34	120	131	251	1	3	4	2	1	3	-	5	5	22	59	81
35-39	145	127	272	2	4	6	1	1	2	1	1	2	25	48	73
40-44	184	99	283	1	1	2	3	2	5	-	3	3	33	42	75
45-49	246	88	334	2	1	3	3	1	4	-	2	2	21	36	57
50-54	231	78	309	4	2	6	2	1	3	-	1	1	33	49	82
55-59	278	68	346	6	-	6	4	1	5	3	2	5	23	36	59
60-64	222	52	274	-	-	-	1	-	1	4	1	5	26	25	51
65-69	309	61	370	4	-	4	1	-	1	2	1	3	28	28	56
70-74	357	72	429	3	2	5	-	3	3	1	4	5	31	23	54
75-79	367	90	457	3	3	6	3	-	3	5	2	7	31	25	56
80-84	280	102	382	1	1	2	1	1	2	-	1	1	19	12	31
85 & over	246	142	388	1	2	3	2	1	3	1	1	2	11	14	25
Total	3321	1450	4771	30	26	56 (a)	28	14	42 (b)	22	27	49 (c)	358	490	848 (d)*

\* Including

TB lymph node	416
TB urogenital system	65
TB peritonitis, intestines, mesenteric, appendicitis	74
TB pleural effusion	152
TB laryngitis	5
TB skin	50
Unspecified	17

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

- (a) All miliary TB cases has coexisting pulmonary TB; also include 15 cases with coexisting TB of other extrapulmonary sites (among which 1 is meninges/CNS and 4 are bones & joints).
- (b) Including 6 cases with coexisting pulmonary TB; also include 2 cases with coexisting TB of other extrapulmonary sites (among which 1 is bones & joints).
- (c) Including 7 cases with coexisting pulmonary TB and 1 case with coexisting TB of other extrapulmonary sites.
- (d) Including 179 cases with coexisting pulmonary TB.

# Pulmonary TB only, without extrapulmonary site involvement

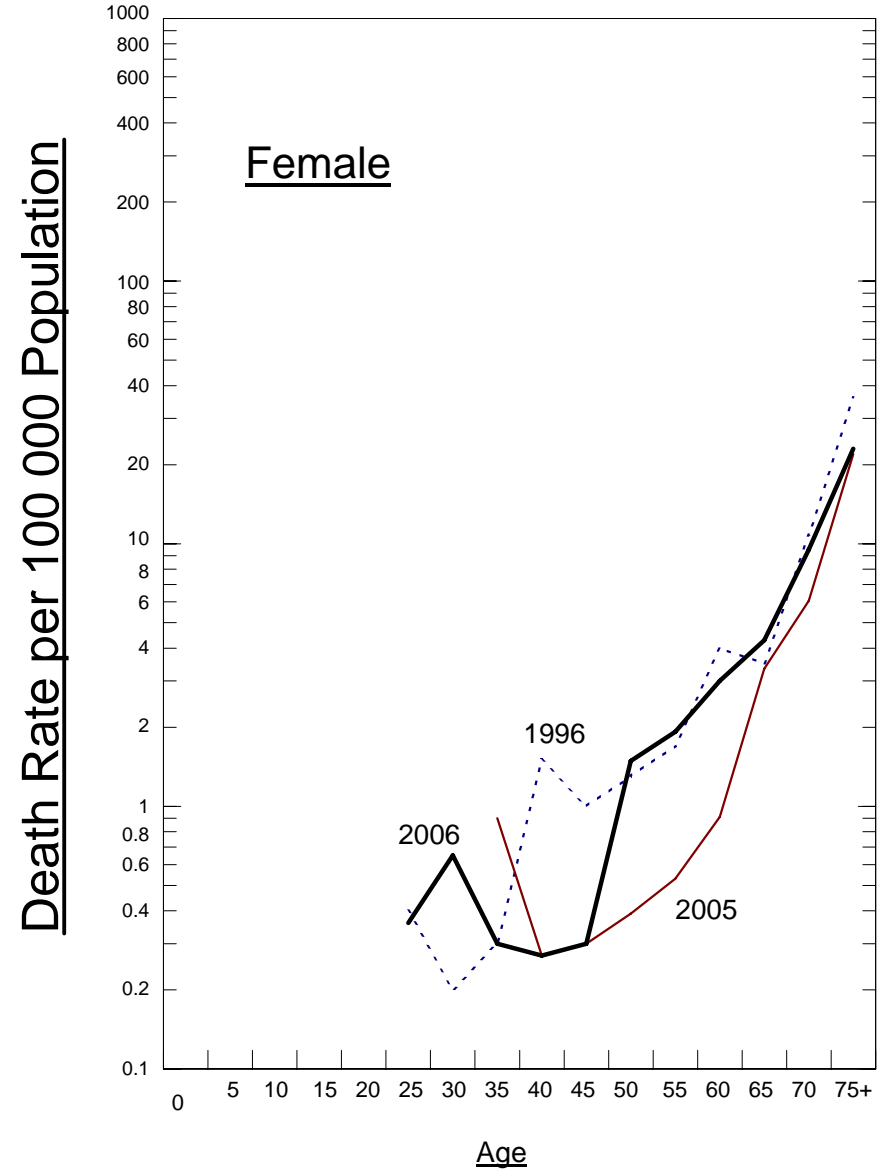
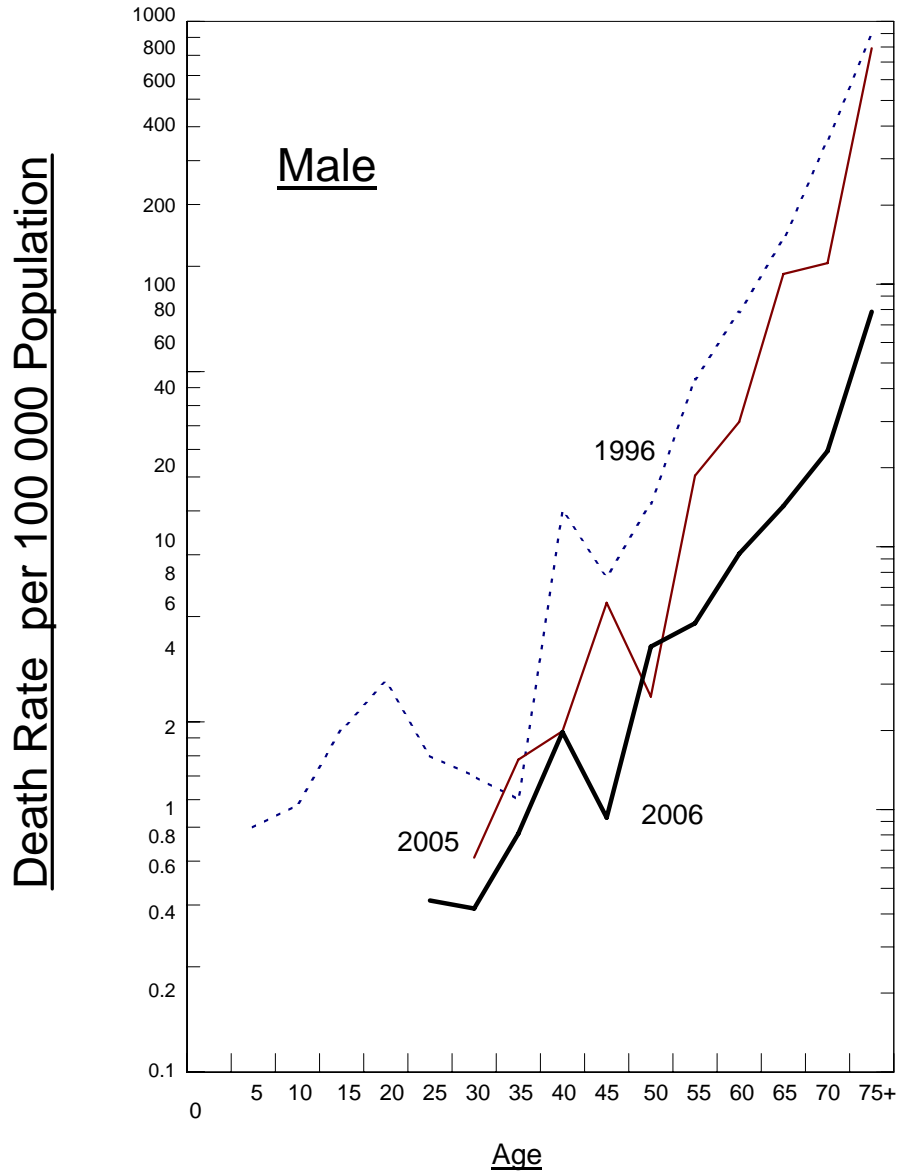
## APPENDIX 7

### TB Death (All Forms) & Death Rate by Age & Sex 2006

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	1	1	2	0.45	0.36	0.40
30-34	1	2	3	0.42	0.65	0.55
35-39	2	0	2	0.81	0.00	0.35
40-44	6	1	7	1.97	0.27	1.05
45-49	3	1	4	0.93	0.30	0.61
50-54	11	4	15	4.17	1.49	2.82
55-59	11	4	15	5.12	1.92	3.55
60-64	12	0	12	9.40	0.00	4.92
65-69	18	5	23	14.38	4.29	9.51
70-74	26	11	37	23.13	9.49	16.21
75-79	39	14	53	47.39	14.54	29.68
80-84	39	18	57	87.05	26.51	50.58
85 & over	44	20	64	154.39	32.15	70.56
<b>Total</b>	<b>213</b>	<b>81</b>	<b>294</b>	<b>6.51</b>	<b>2.26</b>	<b>4.29</b>

# APPENDIX 8

## TB Mortality Rate by Age & Sex 1996, 2005 & 2006



## Appendix 9

### TB Deaths by Type by Age & Sex 2006

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	1	-	1	-	1	1	-	-	-	-	-	-	-	-	-
30-34	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-
35-39	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-
40-44	5	1	6	-	-	-	-	-	-	-	-	-	1	-	1
45-49	2	1	3	-	-	-	-	-	-	1	-	1	-	-	-
50-54	11	2	13	-	1	1	-	-	-	-	-	-	-	1	1
55-59	10	1	11	-	1	1	1	1	2	-	-	-	-	1	1
60-64	12	-	12	-	-	-	-	-	-	-	-	-	-	-	-
65-69	15	3	18	-	-	-	-	-	-	-	-	-	3	2	5
70-74	21	5	26	3	-	3	-	-	-	-	-	-	2	6	8
75-79	25	11	36	1	-	1	1	-	1	1	-	1	11	3	14
80-84	36	14	50	-	2	2	-	-	-	-	1	1	3	1	4
85 & over	39	18	57	2	1	3	-	-	-	-	-	-	3	1	4
<b>Total</b>	<b>179</b>	<b>58</b>	<b>237</b>	<b>7</b>	<b>6</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>23</b>	<b>15</b>	<b>38 *</b>

* Breakdown of Deaths from other forms of TB:-	Number
Other tuberculosis of nervous system	1
Tuberculous peripheral lymphadenopathy	1
Tuberculosis of intestines, peritoneum & mesenteric glands	5
Late effects of Tuberculosis	31
Total	<u>38</u>

# Pulmonary TB only, without extrapulmonary site involvement.

## APPENDIX 10

### Tuberculosis Mortality 1950 - 2006

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

## APPENDIX 11

### Top Ten Causes of Death 2006

Rank	Causes of Death	Detailed List No.	2006		
		ICD 10th Revision	Male	Female	Total
	All Causes		21001	16403	37415 (11)
1	Malignant neoplasms	C00-C97	7386	4,707	12093
2	Diseases of heart	I00-I09, I11 I13, I20-I51	2831	2,788	5619
3	Cerebrovascular diseases	I60-I69	1603	1,699	3302
4	Pneumonia	J12-J18	2264	1,937	4201
5	Chronic lower respiratory diseases *	J40-J47	1382	542	1924
6	External causes of morbidity and mortality #	V01-Y89	1264	697	1961
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	634	653	1287
8	Diabetes mellitus	E10-E14	232	279	511
9	Septicaemia	A40-A41	322	354	676
10	Chronic liver disease and cirrhosis	K70,K73-K74	246	118	364
	Tuberculosis (including late effects of tuberculosis)		213	81	294
	All other causes	Residues of all causes	2624	2548	5183 (11)

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  
1996 - 2006**

Origin	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
East Kowloon Chest Clinic	190	175	225	118	192	173	144	123	121	132	86
Kowloon Chest Clinic	742	667	529	608	477	413	420	432	330	287	231
Sai Ying Pun Chest Clinic (a)	254	180	216	198	196	194	142	133	148	112	92
Shaukiwan Chest Clinic	195	181	199	158	169	158	148	122	138	111	104
Shaukiwan Pneumoconiosis	31	31	50	29	25	23	27	12	29	10	15
Shek Kip Mei Chest Clinic	243	302	282	266	232	208	180	162	157	140	96
South Kwai Chung Chest Clinic	581	547	531	439	342	339	279	300	261	282	224
Tai Po Chest Clinic			98	92	88	84	96	111	112	101	92
Wanchai Chest Clinic	590	502	461	365	375	384	279	264	223	214	191
Yan Oi Chest Clinic	170	428	419	440	425	396	355	320	290	263	238
Yaumatei Chest Clinic	325	280	389	344	339	373	271	233	203	249	204
Yuen Chau Kok Chest Clinic			420	395	308	288	223	226	181	148	136
Yung Fung Shee Chest Clinic	300	240	285	331	222	213	218	197	178	174	148
NT Chest Clinic (b)	630	561									
Castle Peak Hospital (Chest Clinic)									5	3	3
Cheung Chau Chest Clinic								2	2	3	1
Sai Kung Chest Clinic			13	8	4	4	11	7	7	4	9
Sheung Shui Chest Clinic			102	97	103	81	96	59	54	64	61
Tung Chung Chest Clinic			6	13	26	24	35	22	16	11	15
Yuen Long Chest Clinic			94	94	111	96	103	75	80	93	69
<b>Sub-total</b>	<b>4251</b>	<b>4094</b>	<b>4319</b>	<b>3995</b>	<b>3634</b>	<b>3451</b>	<b>3027</b>	<b>2800</b>	<b>2535</b>	<b>2401</b>	<b>2015</b>
Grantham Hospital	285	360	316	296	358	259	249	252	257	165	176
Haven of Hope Hospital	97	72	117	105	141	116	147	119	137	127	124
Kowloon Hospital	335	384	339	426	443	322	237	220	205	113	142
Ruttonjee Hospital	235	333	275	324	326	305	236	223	263	256	264
Wong Tai Sin Hospital	330	442	458	431	352	330	263	166	189	184	140
Other Govt. Institutions (c)	3	5	7	42	43	113	107	84	87	84	60
Other H.A. Hospitals	287	740	1244	1682	2081	2176	2133	1937	2301	2543	2538
Private Practitioners	589	413	343	157	121	125	130	159	136	156	164
Private Hospitals	89	229	255	54	79	65	73	64	116	131	143
<b>Total</b>	<b>6501</b>	<b>7072</b>	<b>7673</b>	<b>7512</b>	<b>7578</b>	<b>7262</b>	<b>6602</b>	<b>6024</b>	<b>6226</b>	<b>6160</b>	<b>5766</b>
% of cases from Chest Clinics among the total	65.4	57.9	56.3	53.2	48.0	47.5	45.8	46.5	40.7	39.0	34.9
% from Chest Hospitals (d)	19.7	22.5	19.6	21.1	21.4	18.3	17.1	16.3	16.9	13.7	14.7
% from Other Public Hospitals	4.5	10.5	16.3	22.9	28.0	31.5	33.9	33.5	38.4	42.6	45.1
% from Private Sector	10.4	9.1	7.8	2.8	2.6	2.6	3.1	3.7	4.0	4.7	5.3

Notes : (a) Including notifications from Cheung Chau Chest Clinic (1996-2002)

(b) Including Yuen Chau Kok Chest Clinic.

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

(d) Chest Hospitals include Kowloon Hospital, Wong Tai Sin Hospital, Ruttonjee Hospital, Grantham Hospital and Haven of Hope Hospital.

## Appendix 12 (b)

### **Breakdown of Origin of TB Notifications for "Other H.A. Hospitals" 2006**

<b>Name of Hospital</b>	<b>No. of TB Notification</b>
Alice Ho Miu Ling Nethersole Hospital	93
Caritas Medical Centre	161
Fung Yiu King Hospital	2
Hong Kong Buddhist Hospital	3
Kwai Chung Hospital	1
Kwong Wah Hospital	209
North District Hospital	187
Our Lady of Maryknoll Hospital	13
Pamela Youde Nethersole Eastern Hospital	171
Pok Oi Hospital	17
Prince of Wales Hospital	227
Princess Margaret Hospital	219
Queen Elizabeth Hospital	291
Queen Mary Hospital	123
Shatin Hospital	9
Tai Po Hospital	11
Tseung Kwan O Hospital	99
Tuen Mun Hospital	294
Tung Wah Eastern Hospital	11
Tung Wah Hospital	8
United Christian Hospital	248
Wong chuk Hang Hospital	1
Yan Chai Hospital	140
<b>Total</b>	<b>2538</b>



## Appendix 13

### Tuberculosis Notifications & Notification Rates by District Council District 2006

District Council District	Notification	Notification Rate (per 100,000 pop.)
<u>Hong Kong Island</u>	1009	79.7
Central & Western	179	71.7
Wanchai	113	73.0
Eastern	476	81.1
Southern	241	87.7
<u>Kowloon</u>	2119	105.0
Kowloon City	308	85.1
Kwun Tong	603	102.8
Sham Shui Po	456	124.3
Wong Tai Sin	437	103.2
Yau Tsim Mong	315	112.5
<u>NT (East)</u>	1172	68.0
Islands	78	56.9
Northern	238	84.8
Sai Kung/Tseung Kwan O	244	60.1
Shatin	404	66.5
Tai Po	208	70.9
<u>NT (West)</u>	1423	77.1
Kwai Tsing	463	88.8
Tsuen Wan	188	65.2
Tuen Mun	378	75.3
Yuen Long	394	73.8
Marine	0	
Unknown	9	
Others	34	
<b>Total</b>	<b>5766</b>	<b>84.1</b>

## APPENDIX 14

### Establishment & Strength of TB & Chest Service

As at 31.12.2006

<b>Post</b>	<b>Establishment</b>	<b>Strength</b>
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	7	6
Medical & Health Officer	23	22
Contract Doctor	1	1
Senior Nursing Officer	1	1
Nursing Officer	14	13
Registered Nurse	59	66
Contract Nurse	3	3
Enrolled Nurse	92	84
Senior Dispenser	9	8
Dispenser	1	1
Executive Officer I	1	1
Statistical Officer II	2	2
Research Assistant	2	2
Personal Secretary I	1	1
Clerical Officer	16	15
Assistant Clerical Officer	20	16
Clerical Assistant	55	55
Project Assistant	5	5
Office Assistant	11	11
Workman II	46	46
General Worker	3	3
Property Attendant	2	0
Senior Radiographer	3	3
Radiographer I	7	4
Radiographer II	14	10
Contract Radiographer	9	9
Radiographic Technician	5	5
Darkroom Technician	11	11
Darkroom Assistant	1	1

**APPENDIX 15**  
**Total Attendances at Chest Clinics**

**1996 - 2006**

Clinic/Hospital	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
East Kowloon Chest Clinic	54921	58862	65220	56317	64102	64820	60729	56132	58535	61835	56737
Kowloon Chest Clinic	104572	120663	117678	112291	119624	106321	98403	97223	86502	77337	73627
Sai Ying Pun Chest Clinic	55967	50875	56233	58380	57916	53854	51808	45437	46974	45159	42034
Shaukiwan Chest Clinic	55737	54639	54732	52446	53011	57215	57968	47541	50828	50699	49667
Shaukiwan Pneumoconiosis	9664	9185	10821	12182	11023	10889	9120	8008	8098	9144	8866
Shek Kip Mei Chest Clinic	63462	72274	75610	68971	70941	71134	65572	60461	60382	60789	57848
South Kwai Chung Chest Clinic	101041	111683	113185	108654	99012	90448	85221	78998	75487	80015	79455
Tai Po Chest Clinic (Full Time)	-	-	-	-	-	-	7866	33518	30879	35347	35728
Tung Chung (Full Time)	-	101	3730	4687	4601	6241	6129	6807	1928	-	-
Wanchai Chest Clinic	89391	92697	91331	85109	84960	79212	70500	62322	60406	57906	58545
Yan Oi Chest Clinic	70741	69581	70979	78840	79188	72982	66905	66084	70168	72078	72144
Yaumatei Chest Clinic	80341	89759	103198	108226	111959	114499	95700	71378	70294	80708	72180
Yuen Chau Kok Chest Clinic	55615	61160	76626	71273	66192	65190	64748	60339	56322	59328	57680
Yung Fung Shee Chest Clinic	58139	58841	66567	74735	73255	73663	77078	77516	71269	78279	72570
Castle Peak Hospital	1773	1169	1283	1151	868	1010	416	372	373	317	241
Cheung Chau Chest Clinic	2490	2808	2943	2706	2611	1640	2404	1944	2032	2066	1589
Sai Kung Chest Clinic	1451	1444	1682	1905	2141	1945	2119	2372	2495	2382	2542
Sheung Shui Chest Clinic	10151	15330	18756	21256	22383	24271	24273	22933	23211	22601	21765
Tai Po Chest Clinic (Part Time)	8773	15760	20350	20758	24688	25636	17761	-	-	-	-
Tung Chung (Part Time)	-	-	-	-	-	-	-	-	2802	5173	4447
Yuen Long Chest Clinic	11687	18742	21677	24075	27603	27208	29393	28702	31054	33056	29344
Hei Ling Chau ATC	3187	2600	2664	1855	3726	2474	2302	2352	1670	585	472
Lai Chi Kok Reception Centre	-	-	-	-	-	-	-	-	723	479	356
Shek Pik Prison Hospital	943	725	173	266	241	291	277	203	211	141	157
Stanley Prison Hospital	7751	6053	7380	9062	10468	10532	11977	8829	7459	527	603
<b>Total</b>	<b>847797</b>	<b>914951</b>	<b>982818</b>	<b>975145</b>	<b>990513</b>	<b>961475</b>	<b>908669</b>	<b>839471</b>	<b>820102</b>	<b>835951</b>	<b>798597</b>

## Appendix 16

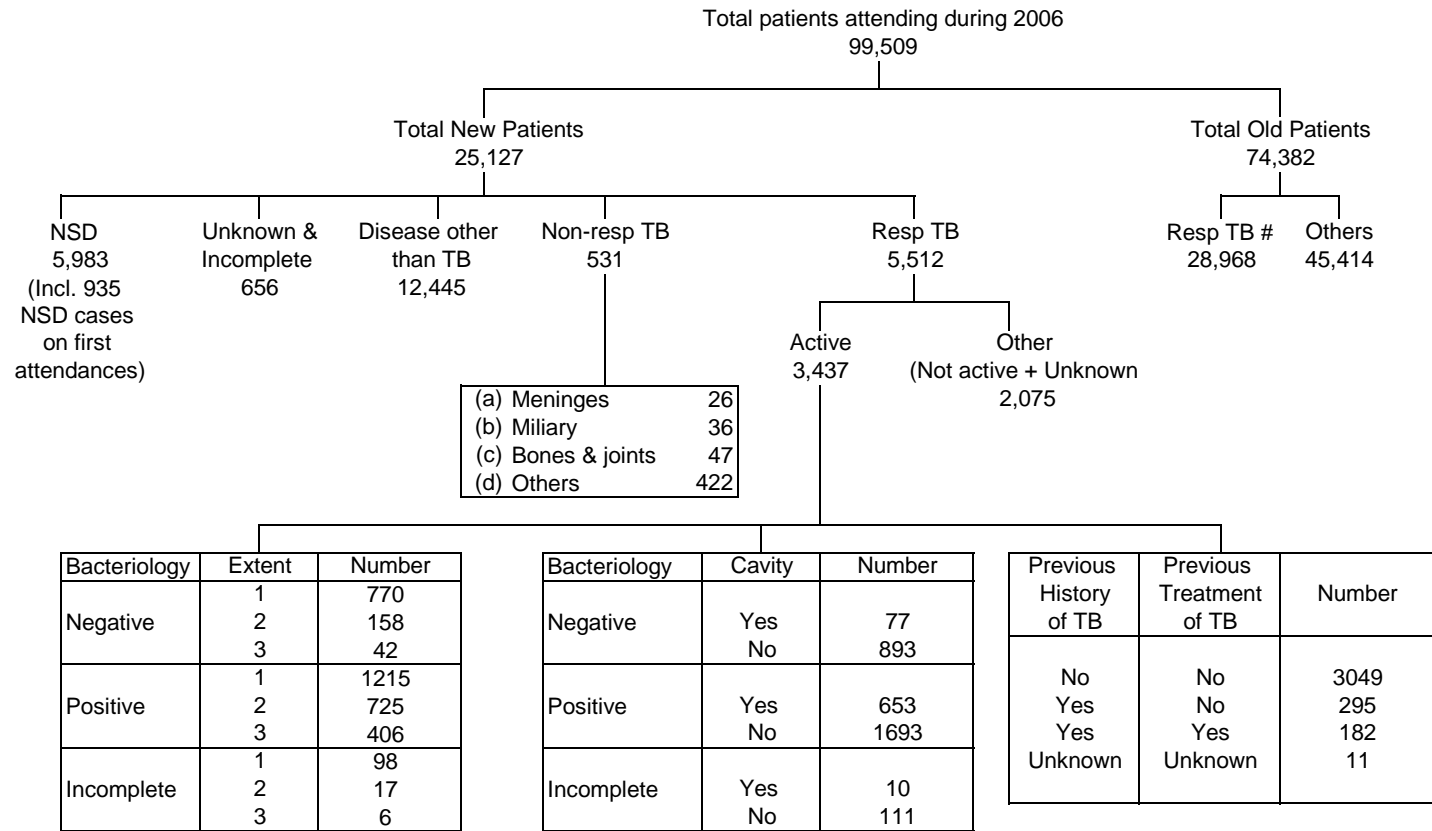
### No. of Doctor Sessions, Cases Seen by Doctor and Patient/ Doctor Session 2006

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
<b><u>Full Time Clinics</u></b>			
East Kowloon	664	16870	25
Kowloon	1123	29985	27
Pneumoconiosis	542	8546	16
Sai Ying Pun	656	16867	26
Shaukeiwan	542	13811	25
Shek Kip Mei	636	16359	26
South Kwai Chung	1124	29236	26
Tai Po	549	11180	20
Wanchai	1184	22466	19
Yan Oi	888	24873	28
Yaumatei	1084	21200	20
Yuen Chau Kok	884	19161	22
Yung Fung Shee	689	18503	27
<b>Sub-total</b>	<b>10565</b>	<b>249057</b>	<b>24</b>
<b><u>Part Time Clinics</u></b>			
Castle Peak	26	241	9
Cheung Chau	25	502	20
Sai Kung	50	887	18
Sheung Shui	289	6416	22
Tung Chung	152	1829	12
Yuen Long	394	7976	20
<b>Sub-total</b>	<b>936</b>	<b>17851</b>	<b>19</b>
<b><u>Institutions Correctional Ser Dept</u></b>			
Hei Ling Chau	13	472	36
Lai Chi Kok Reception Center	52	356	7
Shek Pik	13	157	12
Stanley Prison	26	603	23
<b>Sub-total</b>	<b>104</b>	<b>1588</b>	<b>15</b>
<b>Total</b>	<b>11605</b>	<b>268496</b>	<b>23</b>

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

**APPENDIX 17**

**Flow Chart of Patients Attending Chest Clinics 2006 \***



\* A total of 99509 patients attended, comprising 74382 old cases and 25127 new cases. Among old cases, 28968 had respiratory TB. Among new cases, 5512 had respiratory TB with 3437 being active, 531 had non-respiratory TB, 12445 had diseases other than TB, 656 had unknown and incomplete diagnoses, and 5983 had NSD (no specific diagnosis). Of the 531 new cases with non-respiratory TB, 26 had TB affecting meninges, 36 had miliary TB, 47 had TB affecting bones and joints, and 422 had TB affecting other sites.

Among the 3437 new cases with active respiratory TB, 3049 had neither previous history of TB nor previous treatment of TB, 295 had previous history of TB but no previous treatment, 182 had previous history of TB with treatment, and 11 had unknown status. In terms of bacteriology (negative, positive, or incomplete) and cavity, 77 were negative with cavity, 893 were negative without cavity, 653 were positive with cavity, 1693 were positive without cavity, 10 were incomplete with cavity, and 111 were incomplete without cavity. In terms of bacteriology and extent of disease (1, 2, or 3), 770 were negative with extent 1, 158 were negative with extent 2, 42 were negative with extent 3, 1215 were positive with extent 1, 725 were positive with extent 2, 406 were positive with extent 3, 98 were incomplete with extent 1, 17 were complete with extent 2, and 6 were incomplete with extent 3.

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

**APPENDIX 18**

**Classification of Patients of First Attendance with New Case Card Completed  
By Clinics According to International Classification of Diseases Code 2006**

Code	Classification	Total
010	Primary Tuberculosis Infection	8
011	Pulmonary Tuberculosis	3222
012	Other Respiratory Tuberculosis	207
013	Tuberculosis of Meninges	26
014	Tuberculosis of Intestines	34
015	Tuberculosis of Bones & Joints	47
016	Tuberculosis of Genito-urinary System	46
017	Tuberculosis of Other Organs	342
018	Miliary Tuberculosis	36
137	Late effects of Tuberculosis	2075
160-165	Malignant Neoplasm of Respiratory System	408
212	Benign Neoplasm of Respiratory System	4
460-466	Acute Respiratory Infection	1405
470-478	Other Diseases of Upper Resp Tract	120
480-486	Pneumonia	1456
487	Influenza	0
490-491	Bronchitis, (not specified as acute or chronic) & chronic brochitis	2655
492	Emphysema	68
493	Asthma	163
494	Bronchiectasis	295
495-496	Others	302
501	Asbestosis	1
502	Silicosis	1
505	Pneumoconiosis, unspecified	5
506-508	Others	1
510	Empyema	3
511	Pleurisy	100
512	Pneumothorax	43
513-519	Other Diseases of Respiratory System	600
786	Unknown	2463
V71	N.S.D.	2577
	Diseases Other than TB & Resp System	4815
<b>Total</b>		<b>23528</b>

## **Appendix 19 (a)**

### **Extent of Active Respiratory TB in First Attenders at Chest Clinics**

**2004-2006**

Extent *	2004		2005		2006	
	No.	%	No.	%	No.	%
1. Minimal	2196	60.5	2222	60.6	2083	60.6
2. Moderate	971	26.7	979	26.7	900	26.2
3. Extensive	464	12.8	465	12.7	454	13.2
Total	3631	100.0	3666	100.0	3437	100.0
No. of first attenders	26909		29082		25127	
% of active TB	13.5		12.6		13.7	

- \* 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 2006**

	Number	%
Smear +	1305	38.0
Smear - Culture +	1041	30.3
Smear - Culture -	933	27.1
Incomplete	158	4.6
Total	3437	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 2006 (Data from Programme Forms)

Age Group	Category	% resistance to				* % resistance to			MDR-TB	# Total % resistance	Total no. of cases analysed
		E	R	H	S	1 drug	2 drugs	≥ 3 drugs			
0 - 19	New cases	1.85	1.85	3.70	7.41	3.70	1.85	1.85	1.85	7.41	54
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	Overall	1.85	1.85	3.70	7.41	3.70	1.85	1.85	1.85	7.41	54
20 - 39	New cases	0.32	1.58	6.01	8.23	10.13	2.53	0.32	0.63	12.97	316
	Previously treated cases	5.56	5.56	11.11	11.11	11.11	0.00	5.56	5.56	16.67	18
	Overall	0.60	1.80	6.29	8.38	10.18	2.40	0.60	0.90	13.17	334
40 - 59	New cases	0.52	0.52	3.67	7.35	7.61	1.31	0.52	0.52	9.45	381
	Previously treated cases	1.85	7.41	9.26	11.11	5.56	5.56	3.70	7.41	14.81	54
	Overall	0.69	1.38	4.37	7.82	7.36	1.84	0.92	1.38	10.11	435
60 up	New cases	0.19	0.56	2.79	4.83	5.58	0.74	0.37	0.37	6.69	538
	Previously treated cases	0.00	1.08	11.83	10.75	11.83	4.30	1.08	1.08	17.20	93
	Overall	0.16	0.63	4.12	5.71	6.50	1.27	0.48	0.48	8.24	631
All	New cases	0.39	0.85	3.88	6.52	7.21	1.40	0.47	0.54	9.08	1289
	Previously treated cases	1.21	3.64	10.91	10.91	9.70	4.24	2.42	3.64	16.36	165
	Overall	0.48	1.17	4.68	7.02	7.50	1.72	0.69	0.89	9.90	1454

Notes: E = ethambutol; R = rifampicin; H = isoniazid; S = streptomycin  
 \* % resistant to one, two or more than two of the four drugs E, R, H and S  
 # total % resistance: resistant to at least one of the four drugs E, R, H and S  
 New cases: for cases with no past history of anti-tuberculosis treatment  
 Previously treated cases: for cases with past history of anti-tuberculosis treatment  
 Overall: for all cases

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



APPENDIX 19 (b2)

Rate of Drug-resistant Tuberculosis

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

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1289	100	165	100	1454	100
Susceptible to all 4 drugs	1172	90.92	138	83.64	1310	90.10
Any resistance	117	9.08	27	16.36	144	9.90
H	50	3.88	18	10.91	68	4.68
R	11	0.85	6	3.64	17	1.17
E	5	0.39	2	1.21	7	0.48
S	84	6.52	18	10.91	102	7.02
Mono-resistance	93	7.21	16	9.70	109	7.50
H	27	2.09	7	4.24	34	2.34
R	3	0.23	0	0.00	3	0.21
E	1	0.08	0	0.00	1	0.07
S	62	4.81	9	5.45	71	4.88
Multidrug resistance	7	0.54	6	3.64	13	0.89
H+R	1	0.08	2	1.21	3	0.21
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	3	0.23	2	1.21	5	0.34
H+R+E+S	3	0.23	2	1.21	5	0.34
Other patterns	17	1.32	5	3.03	22	1.51
H+E	1	0.08	0	0.00	1	0.07
H+S	15	1.16	5	3.03	20	1.38
H+E+S	0	0.00	0	0.00	0	0.00
R+E	0	0.00	0	0.00	0	0.00
R+S	1	0.08	0	0.00	1	0.07
R+E+S	0	0.00	0	0.00	0	0.00
E+S	0	0.00	0	0.00	0	0.00
Number of drugs resistant to:						
0 drug	1172	90.92	138	83.64	1310	90.10
1 drug	93	7.21	16	9.70	109	7.50
2 drugs	18	1.40	7	4.24	25	1.72
3 drugs	3	0.23	2	1.21	5	0.34
4 drugs	3	0.23	2	1.21	5	0.34

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to December 2005 (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	1.53	2.29	3.82	6.87	6.11	1.53	1.53	2.29	9.16	131
	Previously treated cases	50.00	50.00	0.00	50.00	0.00	0.00	50.00	0.00	50.00	2
	Overall	2.26	3.01	3.76	7.52	6.02	1.50	2.26	2.26	9.77	133
20 - 39	New cases	0.72	0.87	4.78	5.93	6.80	1.74	0.58	0.58	9.12	691
	Previously treated cases	9.09	15.15	9.09	12.12	6.06	3.03	9.09	9.09	18.18	33
	Overall	1.10	1.52	4.97	6.22	6.77	1.80	0.97	0.97	9.53	724
40 - 59	New cases	0.77	1.02	4.34	7.02	7.78	1.91	0.51	0.51	10.20	784
	Previously treated cases	6.72	4.20	9.24	11.76	3.36	5.88	5.04	3.36	14.29	119
	Overall	1.55	1.44	4.98	7.64	7.20	2.44	1.11	0.89	10.74	903
60 up	New cases	0.17	0.52	3.71	6.98	6.64	2.07	0.17	0.26	8.88	1160
	Previously treated cases	0.99	0.99	8.37	8.37	8.87	3.94	0.49	0.99	13.30	203
	Overall	0.29	0.59	4.40	7.19	6.97	2.35	0.22	0.37	9.54	1363
All	New cases	0.54	0.83	4.16	6.72	6.98	1.92	0.43	0.51	9.33	2766
	Previously treated cases	3.92	3.64	8.68	10.08	6.72	4.48	3.08	2.52	14.29	357
	Overall	0.93	1.15	4.67	7.11	6.95	2.21	0.74	0.74	9.89	3123

Notes: E = ethambutol; R = rifampicin; H = isoniazid; S = streptomycin  
 \* % resistant to one, two or more than two of the four drugs E, R, H and S  
 # total % resistance: resistant to at least one of the four drugs E, R, H and S  
 New cases: for cases with no past history of anti-tuberculosis treatment  
 Previously treated cases: for cases with past history of anti-tuberculosis treatment  
 Overall: for all cases

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

APPENDIX 19 (c2)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period  
January to December 2005 (Data from Programme Forms)

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2766	100	357	100	3123	100
Susceptible to all 4 drugs	2508	90.67	306	85.71	2814	90.11
Any resistance	258	9.33	51	14.29	309	9.89
H	115	4.16	31	8.68	146	4.67
R	23	0.83	13	3.64	36	1.15
E	15	0.54	14	3.92	29	0.93
S	186	6.72	36	10.08	222	7.11
Mono-resistance	193	6.98	24	6.72	217	6.95
H	52	1.88	8	2.24	60	1.92
R	7	0.25	1	0.28	8	0.26
E	2	0.07	0	0.00	2	0.06
S	132	4.77	15	4.20	147	4.71
Multidrug resistance	14	0.51	9	2.52	23	0.74
H+R	4	0.14	1	0.28	5	0.16
H+R+E	3	0.11	1	0.28	4	0.13
H+R+S	3	0.11	2	0.56	5	0.16
H+R+E+S	4	0.14	5	1.40	9	0.29
Other patterns	51	1.84	18	5.04	69	2.21
H+E	4	0.14	2	0.56	6	0.19
H+S	43	1.55	10	2.80	53	1.70
H+E+S	2	0.07	2	0.56	4	0.13
R+E	0	0.00	2	0.56	2	0.06
R+S	2	0.07	0	0.00	2	0.06
R+E+S	0	0.00	1	0.28	1	0.03
E+S	0	0.00	1	0.28	1	0.03
Number of drugs resistant to:						
0 drug	2508	90.67	306	85.71	2814	90.11
1 drug	193	6.98	24	6.72	217	6.95
2 drugs	53	1.92	16	4.48	69	2.21
3 drugs	8	0.29	6	1.68	14	0.45
4 drugs	4	0.14	5	1.40	9	0.29

APPENDIX 19 (d)

Rate of Resistance to Ofloxacin

Drug susceptibility testing to ofloxacin has been performed for Mycobacterium tuberculosis strains isolated in TB Reference Laboratory of Department of Health. The rates of resistance to ofloxacin are tabulated as follows for the years 1999 to 2005. However, the data should be interpreted with caution as susceptibility testing to ofloxacin for Cat [B], [C] and [D] are done only if requested by the attending doctor, and not all such strains are included. Thus, the resistance rates among Cat [B], [C] and [D] are probably somewhat over-estimated. For Cat [E], the test is done for all MDR-TB strains and thus the rates are more representative of the true picture.

Year		All strains [A] (=B+C)	Strains with full susceptibility to SHRE [B]	Strains with resistance to any one drug of SHRE [C] (=D+E)	Non-MDR resistant strains [D]	MDR-TB strains [E]
<b>1999</b>	Total number tested	349	146	203	153	50
	Resistant to Ofloxacin	Number %	17 (4.9%)	2 (1.4%)	15 (7.4%)	4 (2.61%)
<b>2000</b>	Total number tested	343	153	190	135	55
	Resistant to Ofloxacin	Number %	14 (4.1%)	0 (0%)	14 (7.4%)	3 (2.2%)
<b>2001</b>	Total number tested	288	123	165	121	44
	Resistant to Ofloxacin	Number %	15 (5.2%)	1 (0.8%)	14 (8.5%)	5 (4.1%)
<b>2002</b>	Total number tested	270	141	129	101	28
	Resistant to Ofloxacin	Number %	14 (5.2%)	0 (0%)	14 (10.7%)	6 (5.9%)
<b>2003</b>	Total number tested	307	173	134	100	34
	Resistant to Ofloxacin	Number %	5 (1.6%)	0 (0%)	5 (3.7%)	1 (1.0%)
<b>2004</b>	Total number tested	614 *	442	172	143	29
	Resistant to Ofloxacin	Number %	9 (1.4%)	2 (0.5%)	7 (4.3%)	3 (2.1%)
<b>2005</b>	Total number tested	519 *	369	150	123	27
	Resistant to Ofloxacin	Number %	8 (1.5%)	1 (0.3%)	7 (4.7%)	2 (1.6%)

\* Note: Increase in number of strains tested due to inclusion of testing for QMH isolates

## Appendix 19 (e)

### Trend of anti-TB drug resistance (1998-2006) (Data from Programme Forms)

#### New cases

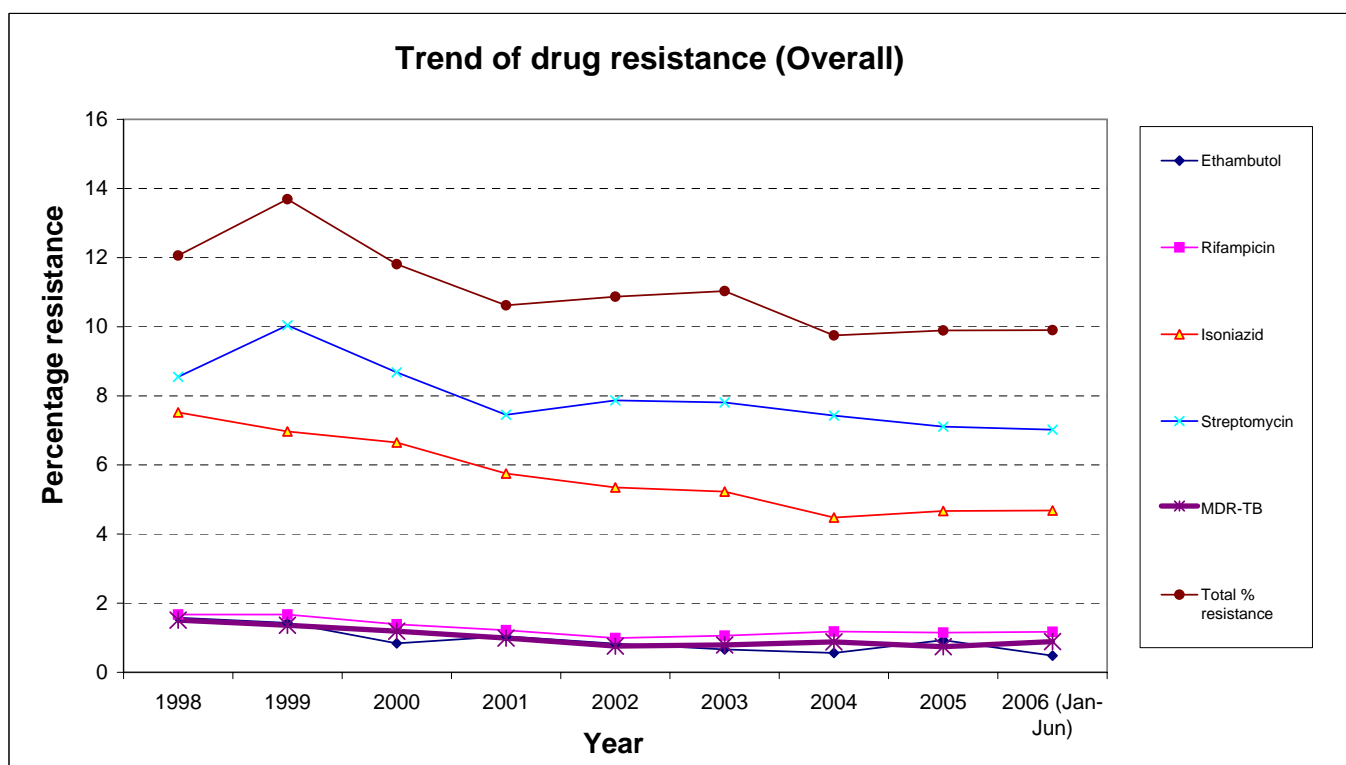
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006 (Jan-Jun)
Ethambutol	1.24	1.11	0.54	0.96	0.65	0.42	0.34	0.54	0.39
Rifampicin	1.17	0.97	0.61	0.83	0.46	0.69	0.75	0.83	0.85
Isoniazid	6.78	6.22	5.21	5.02	4.71	4.64	3.65	4.16	3.88
Streptomycin	7.65	9.34	7.78	7.39	7.40	7.59	6.90	6.72	6.52
MDR-TB	1.06	0.75	0.47	0.55	0.34	0.46	0.48	0.51	0.54
Total % resistance	10.89	12.61	10.35	10.39	10.22	10.54	8.84	9.33	9.08

#### Previously treated cases

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	2.19	2.14	3.92	1.21
Rifampicin	4.61	6.09	5.98	3.71	4.59	3.41	4.29	3.64	3.64
Isoniazid	11.84	11.51	15.26	11.80	9.69	9.00	10.46	8.68	10.91
Streptomycin	13.82	14.45	13.81	10.96	10.97	9.25	11.26	10.08	10.91
MDR-TB	4.17	5.19	5.36	3.54	3.57	2.92	3.75	2.52	3.64
Total % resistance	18.86	20.32	20.41	16.36	16.58	14.11	16.35	14.29	16.36

#### Overall

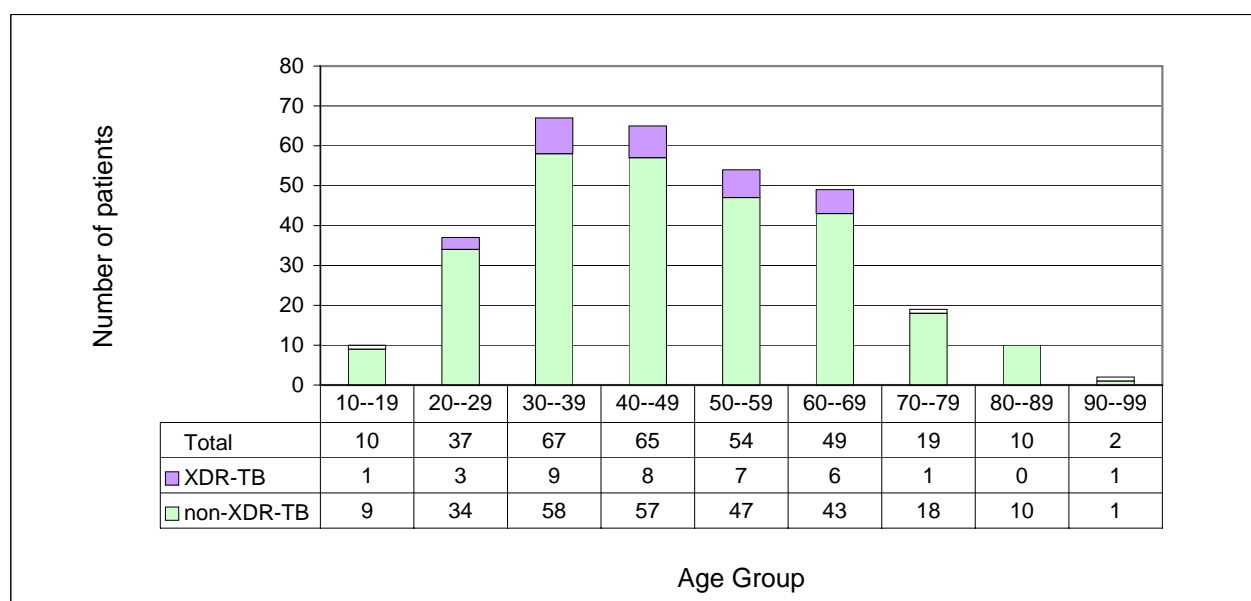
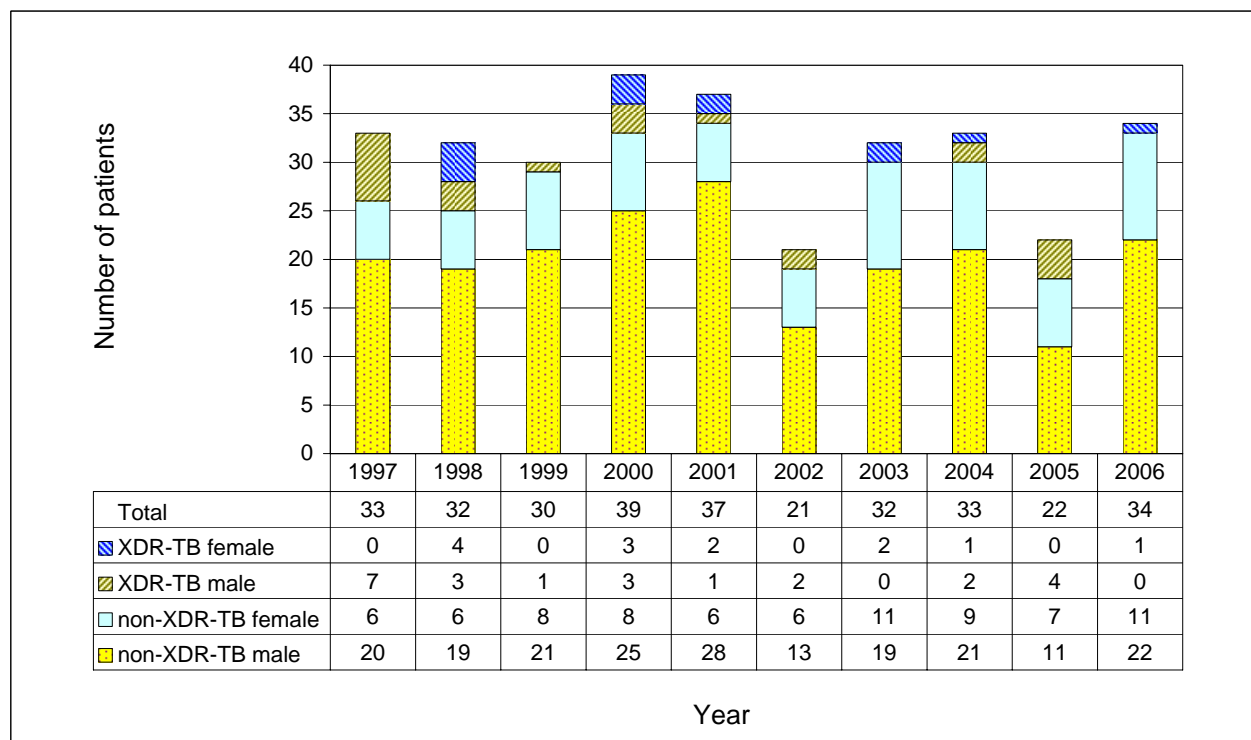
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006 (Jan-Jun)
Ethambutol	1.58	1.43	0.84	1.04	0.83	0.66	0.56	0.93	0.48
Rifampicin	1.67	1.67	1.39	1.22	0.99	1.06	1.18	1.15	1.17
Isoniazid	7.52	6.97	6.65	5.75	5.35	5.23	4.48	4.67	4.68
Streptomycin	8.55	10.04	8.68	7.45	7.87	7.81	7.43	7.11	7.02
MDR-TB	1.51	1.36	1.19	0.99	0.76	0.79	0.88	0.74	0.89
Total % resistance	12.06	13.69	11.81	10.62	10.87	11.03	9.75	9.89	9.90



Appendix 19 (f)

MDR-TB and XDR-TB by Sex and Year (Upper Graph) and by Age (Lower Graph) (1997-2006)

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.



Note: XDR-TB = extensively drug-resistant tuberculosis  
 non-XDR-TB = multidrug-resistant tuberculosis excluding XDR-TB cases

**Appendix 20 (a)**  
**Treatment Return 2006**

Name of Clinic/Hospital	No. put on Rx b/f	Service Regimen																								
		Bought in					Treatment completed				Transfer out to		Interrupt		Drop out				Complete defaulter				No. still	Unsup	Incomp	No. def.
		1	2	3	4	5	<6M	at 6M	>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
<b>Full Time Clinics</b>																										
East Kowloon	196	78	11	7	170	115	10	70	194	91.3	75	35	0	5	0	2	0	3	3	9	3	5.2	168	12	63	0
Kowloon	110	199	18	11	142	236	22	66	215	87.3	81	73	0	17	3	11	3	8	0	0	2	0.6	215	0	92	4
South Kwai Chung	322	275	28	25	183	101	17	138	307	85.2	81	17	0	32	1	10	0	8	1	15	10	5.0	297	32	90	24
Sai Ying Pun	100	98	6	7	79	50	9	46	140	93.9	45	15	1	6	1	0	1	2	0	1	2	1.5	71	0	38	0
Shaukeiwan	171	98	14	10	132	82	4	74	148	89.9	50	18	0	6	1	4	0	11	0	1	2	1.2	188	0	43	3
Shek Kip Mei	125	115	11	4	134	89	8	69	151	84.3	60	17	0	7	0	2	0	13	6	9	4	7.3	132	8	59	0
Tai Po	169	92	2	1	82	30	3	68	119	89.5	12	5	0	9	1	2	1	5	0	0	5	2.4	146	0	14	0
Wanchai	203	150	11	16	170	172	11	78	178	79.0	154	26	1	5	4	45	0	4	0	10	0	3.1	206	0	68	0
Yan Oi	241	251	1	25	200	144	26	140	247	91.1	119	10	2	20	2	16	1	5	0	0	10	2.4	279	8	90	6
Yaumatei	276	230	6	21	124	86	22	145	214	85.9	52	23	0	15	2	8	2	8	4	12	5	5.0	226	2	30	29
Yuen Chau Kok	189	194	8	2	125	43	14	101	170	88.9	39	24	2	11	5	5	1	5	3	0	1	1.3	176	15	24	2
Yung Fung Shee	283	173	13	12	219	85	4	122	221	93.2	66	56	1	19	2	2	4	5	0	0	5	1.4	286	0	111	5
Sub-total	2385	1953	129	141	1760	1233	150	1117	2304	87.7	834	319	7	152	22	107	13	77	17	57	49	3.2	2376	77	722	73
<b>Hosp Discharge Clinic</b>																										
East Kowloon	2	0	0	0	1	1	0	2	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	2	1	1	0
<b>Part Time Clinics</b>																										
Castle Peak	1	3	0	0	3	4	1	0	3	100.0	2	2	0	0	0	0	0	0	0	0	0	0.0	3	0	0	0
Cheung Chau	4	0	1	1	4	3	0	0	5	100.0	1	0	0	0	0	0	0	0	0	0	0	0.0	7	0	1	0
Sai Kung	19	12	0	1	7	7	1	6	11	85.0	4	2	0	0	0	1	0	1	0	0	1	5.0	19	0	0	0
Sheung Shui	123	79	4	5	80	40	3	44	78	90.4	42	6	0	5	1	3	1	1	0	0	3	2.2	144	0	114	7
Tung Chung	20	17	0	1	16	6	4	8	20	96.6	2	1	0	1	0	0	0	0	0	0	0	0.0	24	0	2	0
Yuen Long	135	87	6	5	69	40	8	32	119	87.8	31	8	0	6	0	3	2	0	0	0	12	7.0	121	9	108	5
Sub-total	302	198	11	13	179	100	17	90	236	89.6	82	19	0	12	1	7	3	2	0	0	16	4.4	318	9	225	12
<b>Institutions Correctional Services Dept</b>																										
Hei Ling Chau	9	14	10	0	0	0	3	4	3	53.8	0	12	0	0	0	6	0	0	0	0	0	0.0	5	0	0	0
Stanley Prison	14	15	0	0	0	0	0	4	0	100.0	0	2	0	0	0	0	0	0	0	0	0	0.0	23	0	0	0
Shek Pik Prison	16	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	16	0	0	0
Sub-total	39	29	10	0	0	0	3	8	3	64.7	0	14	0	0	0	6	0	0	0	0	0	0.0	44	0	0	0
<b>Total</b>	<b>2728</b>	<b>2180</b>	<b>150</b>	<b>154</b>	<b>1940</b>	<b>1334</b>	<b>170</b>	<b>1217</b>	<b>2543</b>	<b>87.7</b>	<b>916</b>	<b>352</b>	<b>7</b>	<b>164</b>	<b>23</b>	<b>120</b>	<b>16</b>	<b>79</b>	<b>17</b>	<b>57</b>	<b>65</b>	<b>3.2</b>	<b>2740</b>	<b>87</b>	<b>948</b>	<b>85</b>

**Appendix 20 (b)**  
**Treatment Return 2006**

Name of Clinic/Hospital	Other Regimen																									
	No. put on Rx b/f	Bought in					Treatment completed				Transfer out to		Interrup	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	at6M	>6M	%	hosp.	other cc	Rx temp		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
<b>Full Time Clinics</b>																										
East Kowloon	53	12	3	4	51	28	2	7	46	89.8	33	13	0	4	0	1	0	0	0	1	0	1.7	44	2	33	0
Kowloon	133	45	5	5	54	31	6	15	51	85.7	82	19	0	6	2	1	3	1	1	0	0	1.3	86	0	35	0
South Kwai Chung	67	11	1	3	26	13	1	5	35	88.9	9	0	0	5	0	0	0	0	0	0	0	0.0	66	5	12	0
Sai Ying Pun	85	11	3	6	46	13	2	7	32	86.7	18	0	0	3	0	1	0	0	0	0	2	4.4	99	0	18	0
Shaueiwan	20	11	4	5	10	12	0	0	21	91.3	8	2	0	2	0	0	0	0	0	0	0	0.0	29	0	16	1
Shek Kip Mei	83	16	7	2	51	19	3	10	36	80.7	20	5	0	6	0	0	0	1	2	1	1	7.0	93	6	27	0
Tai Po	9	16	4	4	8	8	1	2	11	92.9	5	2	0	1	0	0	0	0	0	0	0	0.0	27	0	3	0
Wanchai	26	12	4	6	25	23	0	4	14	81.8	27	2	0	1	0	2	0	0	0	1	0	4.5	45	0	17	0
Yan Oi	70	13	0	4	18	11	3	2	13	78.9	8	1	0	2	0	1	0	0	0	0	1	5.3	85	0	9	0
Yaumatei	26	7	0	2	25	11	6	7	19	78.8	5	1	0	3	1	1	3	0	0	1	1	6.1	23	0	10	2
Yuen Chau Kok	41	30	1	5	22	5	5	5	35	97.6	7	5	0	0	1	0	0	0	0	0	0	0.0	46	12	15	0
Yung Fung Shee	24	7	1	1	19	12	0	2	24	92.9	1	5	1	2	0	0	0	0	0	0	0	0.0	29	0	9	0
Sub-total	637	191	33	47	355	186	29	66	337	87.0	223	55	1	35	4	7	6	2	3	4	5	2.6	672	25	204	3
<b>Hosp Discharge Clinic</b>																										
East Kowloon	1	0	0	1	0	4	0	0	0	0.0	4	0	0	0	0	0	0	0	0	0	0	0.0	2	0	0	0
<b>Part Time Clinics</b>																										
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	3	0	0	0	2	0	0	0	0	0.0	0	0	0	2	0	0	0	0	0	0	0	0.0	3	0	1	0
Sai Kung	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Sheung Shui	9	4	0	0	2	4	0	0	9	90.0	2	0	0	0	0	0	0	0	0	0	1	10.0	7	0	6	0
Tung Chung	2	1	0	0	4	0	0	1	1	66.7	1	0	0	1	0	0	0	0	0	0	0	0.0	3	0	0	0
Yuen Long	4	1	0	0	4	1	0	0	4	80.0	2	0	0	1	0	0	0	0	0	0	0	0.0	3	0	9	0
Sub-total	18	6	0	0	12	5	0	1	14	75.0	5	0	0	4	0	0	0	0	0	0	1	5.0	16	0	16	0
<b>Institutions Correctional Services Dept</b>																										
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
<b>Total</b>	<b>656</b>	<b>197</b>	<b>33</b>	<b>48</b>	<b>367</b>	<b>195</b>	<b>29</b>	<b>67</b>	<b>351</b>	<b>86.5</b>	<b>232</b>	<b>55</b>	<b>1</b>	<b>39</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>2.7</b>	<b>690</b>	<b>25</b>	<b>220</b>	<b>3</b>





## 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.)

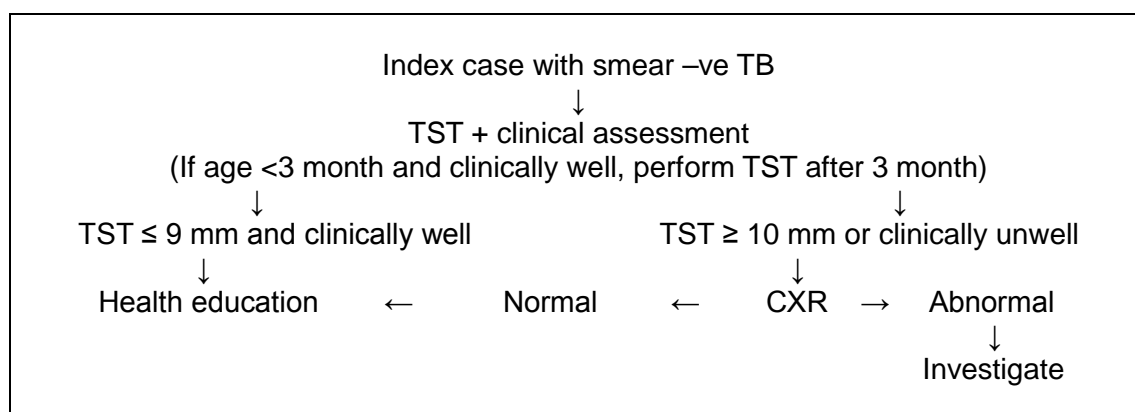
This item needs to be counted only on the last working day of the month when completing the monthly treatment return.

## 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.

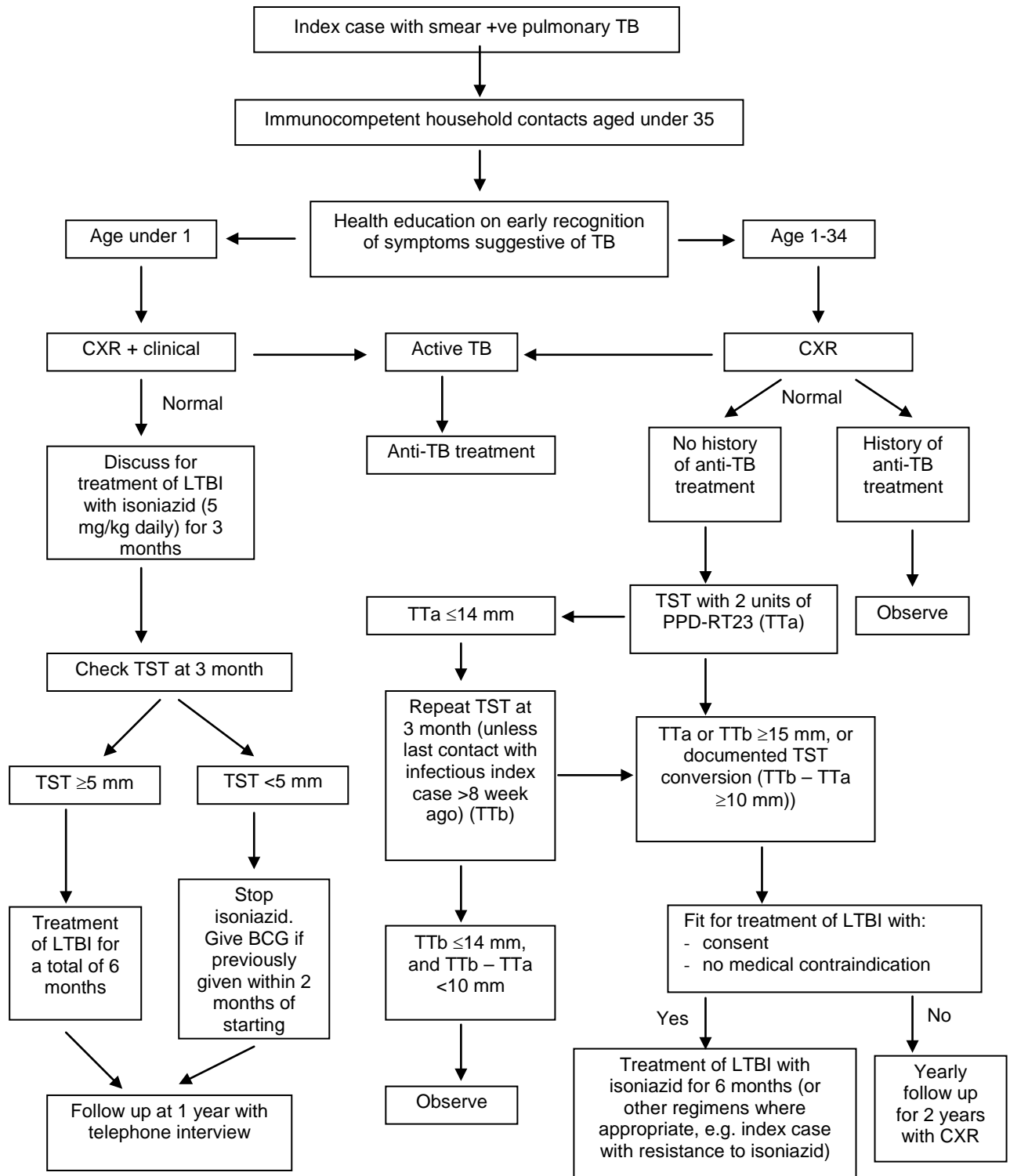
#### Flow chart for contact investigation of close contacts aged below 5 with smear negative index case \*



\* 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 2006**

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	1602	3724	5326
No. of contacts listed	4474	12780	17254
Number of contacts x-rayed	4321 ( 100.00% )	9106 ( 100.00% )	13427 ( 100.00% )
<u>Results</u>			
(a) NSD & Unknown	3817 ( 88.34% )	8032 ( 88.21% )	11849 ( 88.25% )
(b) Disease other than TB	300 ( 6.94% )	670 ( 7.36% )	970 ( 7.22% )
(c) Inactive respiratory TB	135 ( 3.12% )	275 ( 3.02% )	410 ( 3.05% )
(d) Active respiratory TB			
(radiologically)	21 ( 0.49% )	20 ( 0.22% )	41 ( 0.31% )
A (bacteriologically)	11 ( 0.25% )	12 ( 0.13% )	23 ( 0.17% )
B (incomplete)	3 ( 0.07% )	13 ( 0.14% )	16 ( 0.12% )
(e) Non-respiratory TB	2 ( 0.05% )	11 ( 0.12% )	13 ( 0.10% )
(f) Result not yet known	32 ( 0.74% )	73 ( 0.80% )	105 ( 0.78% )

APPENDIX 22 (a)

Scheme for BCG Administration in Hong Kong, 2006

<u>Population Group</u>		<u>Procedures</u>
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 2006**

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	3553	3539	99.6
	Queen Mary	3969	3968	100.0
Private Hospital	Canossa	1228	1210	98.5
	H.K. Adventist	923	896	97.1
	H.K. Sanatorium	1446	1430	98.9
	Matilda International	901	810	89.9
	St. Paul's	3600	3560	98.9
Total (HK Island)		15620	15413	98.7
Hospital under HA management	Kwong Wah	6232	6191	99.3
	Queen Elizabeth	5487	5466	99.6
	United Christian	4281	4298	100.4 *
Private Hospital	H.K. Baptist	6081	5996	98.6
	St. Teresa's	6695	6607	98.7
Total (Kowloon)		28776	28558	99.2
Hospital under HA management	Alice H.M.L. Nethersole	-	-	-
	Prince of Wales	6892	6977	101.2 *
	Princess Margaret	4317	4358	100.9 *
	Tuen Mun	5753	5732	99.6
Private Hospital	T.W. Adventist	1502	1485	98.9
	Shatin Int'l Medical Ctr Union	2799	2753	98.4
Total (NT Areas)		21263	21305	100.2 *
Mother & Child Health Centre		-	48	-
Grand Total		65659	65324	99.5

Note: \* Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 2005

Vaccination Method 2006	Percentage
Intradermal	100.0
Percutaneous	0.0



## **APPENDIX 23**

### **TB Beds in Public Services, 2006**

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	155
	Kowloon Hospital	114
	Ruttonjee Hospital	156
	Haven of Hope Hospital	123
	Wong Tai Sin Hospital	99
	Total (Hospital Authority)	647
Custody	Stanley Prison Hospital	20
Grand Total (2006)		667
Grand Total (2005)		686
Grand Total (2004)		704

## APPENDIX 24

### Annual Admissions to Hospitals from Government Chest Clinics 1995 - 2006

Year	Total Admissions
1995	5392
1996	4607
1997	4597
1998	4709
1999	5012
2000	5408
2001	5317
2002	5183
2003	4603
2004	4986
2005	4435
2006	4571

Admissions by Clinic	Year 2006
East Kowloon	475
Kowloon	346
Sai Ying Pun	376
Shaukeiwan	244
Shaukeiwan Pneumoconiosis	105
Shek Kip Mei	345
South Kwai Chung	409
Tai Po	76
Tung Chung	29
Wanchai	719
Yan Oi	486
Yaumatei	270
Yuen Chau Kok	206
Yung Fung Shee	317
Cheung Chau	3
NT Unit	165
Total	4571

## APPENDIX 25

### Unlinked Anonymous Screening (UAS) for HIV in TB & Chest Service (2006)

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
< 20	17	12	29
20-29	51 (1)	53	104 (1)
30-39	59 (1)	83 (1)	142 (2)
40-49	79	37	116
50-59	87 (1)	36	123 (1)
≥ 60	239 (1)	77	316 (1)
Unknown	11	0	11
Total	543 (4)	298 (1)	841 (5)

### UAS for HIV in TB & Chest Service (1990 to 2006)

<u>Period</u>	<u>Category</u>	<u>Sample</u>	<u>Number Tested</u> (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%)

## APPENDIX 26

### Number of 'Confirmed' cases of TB in health care staff Notified to Labour Department (1993 – 2006)

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

### 'Confirmed' Cases of TB in Health Care Staff Notified to Labour Department (2006) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24					0
25 – 29			1		1
30 – 34		5	1		6
35 – 39	1	3	1		5
40 – 44	1	1			2
45 – 49		1		1	2
50 – 54				2	2
55 – 59					0
60 – 64					0
65 – 69					0
Total	2	10	3	3	18

**Appendix 27 (a)**

**Cohort of TB Patients in 2005**

Number of these cases, by **strategy**, that are

		<b>DOTS</b>	<b>Non-DOTS</b>	
A	<b>New pulmonary smear-positive</b>	1,266	295	1,561
B	<b>New pulmonary smear-negative</b>	2,490	550	3,040
C	<b>New pulmonary smear-unknown/not done</b>	55	84	139
D	<b>New extrapulmonary</b>	550	151	701
E	<b>Other NEW cases not in lines A–D</b>	0	0	0
F	<b>Relapse</b> (smear-positive pulmonary)	177	42	219
G	<b>Treatment after failure</b> (smear-positive pulmonary)	0	1	1
H	<b>Treatment after default</b> (smear-positive pulmonary)	24	2	26
I	<b>Other RE-TREATMENT cases not in lines F–H</b>	367	106	473
J	<b>Other, not in lines A-I</b> (i.e., history unknown)	0	0	0
		4,929	1,231	6,160
K	<b>New pulmonary lab-confirmed cases</b>	2,655	738	3,393
L	<b>Total number of TB cases in 2005</b>	<b>6,160</b>		

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

Note (2): New pulmonary lab-confirmed cases are bacteriologically confirmed cases by smear or culture.

**Appendix 27 (b)**

**Cohort of TB Patients in 2005**

**New pulmonary smear-positive TB cases, 2005 calendar year (number of patients)**

DOTS		0-4	5-14	0-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male		0	3	3	72	76	93	178	148	313	883
Female		0	2	2	57	73	76	49	27	99	383
<b>Non-DOTS</b>											1,266
Male		0	0	0	4	8	15	22	20	140	209
Female		0	1	1	10	8	16	8	7	36	86
											295

**New pulmonary smear-negative/smear-unknown/smear-not done TB cases, 2005 calendar year (number of patients)**

DOTS		0-4	5-14	0-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male		0	12	12	159	170	184	232	241	646	1,644
Female		2	11	13	155	201	126	107	65	234	901
<b>Non-DOTS</b>											2,545
Male		2	5	7	18	20	29	32	42	261	409
Female		1	0	1	17	36	22	16	13	120	225
											634

**New extrapulmonary TB cases, 2005 calendar year (number of patients)**

DOTS		0-4	5-14	0-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male		1	7	8	25	32	29	31	30	58	213
Female		0	1	1	26	71	71	74	38	56	337
<b>Non-DOTS</b>											550
Male		3	0	3	1	8	9	9	7	20	57
Female		4	5	9	4	14	12	16	8	31	94
											151

**Appendix 27 (c)**

**Cohort of TB Patients in 2005 (Smear-positive Cases) - Treatment Outcomes**

		Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Total evaluated
<b>DOTS</b>									
A	New pulmonary smear-positive	1,266	936	38	66	137	44	28	1,249
B	New pulmonary smear-negative/unknown/not done	2,545	<del>          </del>	2,005	161	161	127	52	2,506
C	New extrapulmonary	550	<del>          </del>	423	17	54	27	23	544
D	Relapse (smear-positive pulmonary)	177	123	12	7	18	7	6	173
E	Treatment after failure (smear-positive pulmonary)	0	0	0	0	0	0	0	0
F	Treatment after default (smear-positive pulmonary)	24	8	1	1	4	9	0	23
G	Other re-treatment	367	151	117	19	39	31	5	362
<b>non-DOTS</b>									
H	New pulmonary smear-positive	295	8	2	8	2	0	1	21
I	New pulmonary smear-negative/unknown/not done	634	<del>          </del>	18	7	1	1	1	28
J	New extrapulmonary	151	<del>          </del>	1	1	1	0	0	3
K	Relapse (smear-positive pulmonary)	42	0	0	1	0	0	0	1
L	Treatment after failure (smear-positive pulmonary)	1	0	0	0	0	0	0	0
M	Treatment after default (smear-positive pulmonary)	2	0	0	0	0	0	0	0
N	Other re-treatment	106	3	1	4	1	0	0	9

Note: For those under DOTS, the treatment success rate (as at 12 month) for new pulmonary smear-positive cases is 78.0% [(936+38)/1249]. Among the 137 cases "failed", all of them were still on treatment at 12 month, with 130 sputum smear converted negative at 7 month, 3 sputum smear still positive at 7 month, and 4 unknown.

**Appendix 27 (d)**

**Cohort of TB Patients in 2005 (Bacteriologically-positive Cases) - Treatment Outcomes**

		Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Total evaluated
<b>DOTS</b>									
A	New pulmonary lab-confirmed	2,655	1,913	116	182	241	108	54	2,614
B	New pulmonary not lab-confirmed	1,156	<del>          </del>	950	45	57	63	26	1,141
C	New extrapulmonary	550	<del>          </del>	423	17	54	27	23	544
D	Relapse (lab-confirmed pulmonary)	355	249	20	16	37	19	7	348
E	Treatment after failure (lab-confirmed pulmonary)	0	0	0	0	0	0	0	0
F	Treatment after default (lab-confirmed pulmonary)	35	15	1	1	5	12	0	34
G	Other re-treatment	178	18	109	10	19	16	4	176
<b>non-DOTS</b>									
H	New pulmonary lab-confirmed	738	13	7	14	2	0	2	38
I	New pulmonary not lab-confirmed	191	<del>          </del>	8	1	1	1	0	11
J	New extrapulmonary	151	<del>          </del>	1	1	1	0	0	3
K	Relapse (lab-confirmed)	105	2	0	4	1	0	0	7
L	Treatment after failure (lab-confirmed pulmonary)	2	0	0	0	0	0	0	0
M	Treatment after default (lab-confirmed pulmonary)	4	1	0	0	0	0	0	1
N	Other re-treatment	40	0	1	1	0	0	0	2

Note: For those under DOTS, the treatment success rate (as at 12 month) for new pulmonary bacteriologically-positive cases is 77.6% [(1913+116)/2614]. Among the 241 cases "failed", all of them were still on treatment at 12 month, with 223 sputum-bacteriologically converted negative at 7 month, 6 sputum-bacteriologically still positive at 7 month, and 12 unknown.



**Appendix 27 (e)**

**Treatment Outcomes of Special Groups**

**Treatment outcomes for HIV-positive TB cases (smear-positive) (2005 cohort)**

	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Total evaluated
A <b>New pulmonary smear-positive</b>	18	13	0	3	0	0	2	18
B <b>New pulmonary smear-negative/unknown/not done</b>	12	<del>          </del>	7	2	0	2	1	12
C <b>New extrapulmonary</b>	8	<del>          </del>	5	0	2	0	1	8
D <b>Relapses</b> (smear-positive pulmonary)	2	1	0	0	0	1	0	2
E <b>Treatment after failure</b> (smear-positive pulmonary)	0	0	0	0	0	0	0	0
F <b>Treatment after default</b> (smear-positive pulmonary)	0	0	0	0	0	0	0	0
G <b>Other re-treatment</b>	2	1	1	0	0	0	0	2
H <b>All TB cases</b>	42	15	13	5	0	3	4	42

**Appendix 27 (f)**

**Treatment Outcomes of Special Groups**

**Treatment outcomes for HIV-positive TB cases (bacteriologically-positive) (2005 cohort)**

	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Total evaluated
A New pulmonary lab-confirmed	26	16	0	5	0	2	3	26
B New pulmonary not lab-confirmed	4	<del>4</del>	4	0	0	0	0	4
C New extrapulmonary	8	<del>8</del>	5	0	2	0	1	8
D Relapses (lab-confirmed)	3	2	0	0	0	1	0	3
E Treatment after failure (lab-confirmed pulmonary)	0	0	0	0	0	0	0	0
F Treatment after default (lab-confirmed pulmonary)	0	0	0	0	0	0	0	0
G Other re-treatment	1	0	1	0	0	0	0	1
H All TB cases	42	18	10	5	0	3	4	42

**Final treatment outcomes for MDR cases registered in 2003**

	Total number of cases registered	Cured	Completed	Died	Failed	Defaulted	Transferred out	Total evaluated
<b>GLC-approved</b>								
I New cases	0							
J Re-treatment cases	0							
K Other cases	0							
<b>Other</b>								
L New	14	10	0	1	0	2	1	14
M Re-treatment	17	12	0	1	2	1	1	17
N Other	0							

Part 2

# PNEUMOCONIOSIS

## Part 2 - Pneumoconiosis: Contents

Appendix  
No.

- 1 New Cases of Suspected Pneumoconiosis attending the Pneumoconiosis Clinic in Hong Kong 1956-2006
- 2 Age Distribution of Pneumoconiosis Cases 2006
- 3 Occupation Distribution of Confirmed Pneumoconiosis 2006
- 4 Pneumoconiosis Patients by Duration of Exposure to Dust 2006
- 5 Pneumoconiosis Patients by Degree of Incapacity 2006
- 6 Confirmed Pneumoconiosis Patients Classified by Radiological Appearance 2006
- 7 Pneumoconiosis Patients with Tuberculosis 2006
- 8 Confirmed Pneumoconiosis Patients by Other Particulars 2006

## APPENDIX 1

### New Cases of Suspected Pneumoconiosis attending the Pneumoconiosis Clinic in Hong Kong 1956 - 2006

Year	Number of New Cases Undergoing Assessment					
	Government Workers	Non-government Workers	Total	Cumulative Total	Cumulative Total Compensated	
					R1	R2
1956	1	-	1	1		
1957	4	4	8	9		
1958	9	13	22	31		
1959	5	7	12	43		
1960	9	6	15	58		
1961	8	-	8	66		
1962	3	1	4	70		
1963	9	5	14	84		
1964	21	17	38	122		
1965	9	4	13	135		
1966	7	9	16	151		
1967	3	6	9	160		
1968	4	2	6	166		
1969	4	10	14	180		
1970	22	36	58	238		
1971	9	18	27	265		
1972	9	29	38	303		
1973	3	39	42	345		
1974	-	97	97	442		
1975	5	84	89	531		
1976	15	252	267	798		
1977	3	216	219	1017		
1978	12	207	219	1236		
1979	2	210	212	1448		
1980	12	532 (a)	544	1992	386 (a)	-
1981	8	608	616	2608	1332	162
1982	4	511	515	3123	1434	634
1983	2	292	294	3417	1469	945
1984	1	231	232	3649	1477	1140
1985	1	179	180 (b)	3829	1479	1322
1986	3	176	179 (3)	4008	1485	1513
1987	4	166	170 (2)	4178	1485	1679
1988	6	172	178 (4)	4356	1488	1877
1989	-	156	156 (1)	4512	1488	2023
1990	2	147	149 (1)	4661	1489	2142
1991	-	171	171 (1)	4832	1489	2151
1992	2	171	173 (3)	5005	1490	2340
1993	2	247	249 (4)	5254	1492	2492
1994	-	327	327 (7)	5581	1493	2770
1995	9	245	254 (9)	5835	1494	3000
1996	4	193	197 (9)	6032	1494	3119
1997	4	154	158 (7)	6190	1494	3242
1998	2	197	199 (5)	6389	1494	3351
1999	-	291	291 (15)	6680	1494	3505
2000	3	235	238 (11)	6918	1494	3619
2001	6	230	236 (9)	7154	1494	3751
2002	3	212	215 (9)	7369	1494	3868
2003	3	142	145 (6)	7514	1494	3948
2004	3	138	141 (4)	7655	1494	4021
2005	-	134	134 (2)	7789	1494	4091
2006	-	278	278 (c) (7)	8067	1494 (d)	4207

- 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 116 of the 278 cases in 2006 had been assessed and confirmed pneumoconiosis by the Pneumoconiosis Medical Board. And the following tables (Appendix 2 to Appendix 8) are compiled basing on the data of these 116 cases.
  - (d) Under Revised Ordinance 1993 : 583 out of 1494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2006. 200 living pneumoconiotics were each receiving a monthly ex-gratia payment of \$4710.00 in 2006.

## APPENDIX 2

### Age Distribution of Pneumoconiosis Cases 2006

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	1	1
45 - 49	17	14
50 - 54	18	16
55 - 59	18	16
60 - 64	16	14
65 - 69	13	11
70 - 74	14	12
75+	19	16
Total	116	100

### **APPENDIX 3**

#### **Occupation Distribution of Confirmed Pneumoconiosis 2006**

Type of Occupation	Number of Cases	%
Construction	94	81
Construction/Quarry	5	4
Others	17	15
Total	116	100

### **APPENDIX 4**

#### **Pneumoconiosis Patients by Duration of Exposure to Dust 2006**

Duration	Number of Cases	%
<5 years	2	2
5 - 9	2	2
10 - 14	9	8
15 - 19	14	12
20 - 24	35	30
25 - 29	20	17
30+	30	26
Unknown	4	3
Total	116	100

## APPENDIX 5

### Pneumoconiosis Patients by Degree of Incapacity 2006

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	56
10	35
15	9
20	3
25	1
30	4
35	1
40	-
45	-
50	1
55	1
60	-
70	1
80	-
100	-
N. A.	4
Total	116



## APPENDIX 6

### **Confirmed Pneumoconiosis Patients Classified by Radiological Appearance 2006**

Type of Opacity	Profusion			Sub-Total
	1	2	3	
<u>Small opacities</u>				
<u>Rounded</u>				
p (up to 1.5 mm diameter)	17	-	-	17
q (1.5 to 3.0 mm diameter)	66	6	-	72
r (3.0 to 10.0 mm diameter)	5	3	-	8
<u>Irregular</u>				
s (fine irregular or linear)	4	-	-	4
t (medium irregular)	7	1	-	8
u (coarse irregular)	-	3	-	3
Sub-total	99	13	-	112
<u>Combined opacities</u>				
	-	-	-	-
<u>N. A.</u>	-	-	-	4
Total				116

18 out of the 116 patients have large opacities as follows :

<u>Large opacities</u>	
A (Single opacity 1 - 5 cm or multiple opacities > 1 cm each but sum of diameter < 5 cm)	10
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	8
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	-
Total	18

## Appendix 7

### Pneumoconiosis Patients with Tuberculosis 2006

Type of T.B.	Number of Cases	%
Bacteriological Positive	22	19
Bacteriological Negative	16	14
No T.B.	74	64
N.A.	4	3
Total	116	100

## Appendix 8

### Confirmed Pneumoconiosis Patients by Other Particulars 2006

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	98	85
	Non-smoker	14	12
	Unknown	4	3
	Total	116	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	29	25
	No	83	72
	Unknown	4	3
	Total	116	100
General Condition	Good	105	91
	Fair	7	6
	Poor	-	-
	Died	4	3
	Total	116	100

Part 3

ANNEX

## Part 3 – Annex: Contents

### Annex No.

- 1(a) Treatment Outcomes up to 2 year of the 2003 Cohort of TB Patients
- 1(b) Analysis for Various Age Groups
- 1(c) Analysis for Pulmonary Pretreatment Smear Positive, Pretreatment Culture Positive, and MDR-TB Cases
- 1(d) Analysis for New Pulmonary Smear Positive and Retreatment Pulmonary Smear Positive Cases
- 1(e) Analysis for Treatment Defaulters
- 1(f) Sources completing Programme Forms PFA, PFB1, PFB2, PFC, and PFD
- 1(g) Sample of the set of “Programme Forms” used since 2001
- 2(a) TB among Chinese New Immigrants
- 2(b) TB Notification and Estimated Rates among Chinese New Immigrants by Age & Sex (2002-2006)
- 2(c) TB Notification and Rates (All Cases) by Age & Sex (2002-2006)
- 3 Trend of Age-specific TB Notification Rates (1970-2006)
- 4(a) TB-HIV Registry
- 4(b) TB-HIV Registry
- 4(c) TB-HIV Registry
- 5 HBsAg Seroprevalence Survey Among TB Patients Seen at Chest Clinics (2006) and (2005-2006)
- 6 Crude and Standardised Death Rate and Notification Rate 1981-2006

Annex 1 (a)

Treatment Outcomes up to 2 year of the 2003 Cohort of TB Patients

"Programme Forms" have been completed for a total of 5314 TB patients notified in the year 2003. Among them, 4878 were ever seen at chest clinics (ES) while 436 were never seen at chest clinics (NS). They are categorised as follows:

Categories		ES	%	NS	%	ES/NS	%
(A)	New pulmonary, smear positive	1395	28.6	123	28.2	1518	28.6
(B)	New pulmonary, smear negative	2213	45.4	197	45.2	2410	45.4
(C)	New pulmonary, smear not done/ unknown	161	3.3	31	7.1	192	3.6
(D)	New extra-pulmonary	501	10.3	21	4.8	522	9.8
(E)	Relapse pulmonary, smear positive	204	4.2	18	4.1	222	4.2
(F)	Pulmonary smear-positive retreatment after failure or default	22	0.5	3	0.7	25	0.5
(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)]	382	7.8	43	9.9	425	8.0
Total		4878	100.0	436	100.0	5314	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
Annex 1 (c)	(iii) NS (cases never seen at chest clinics) - sheet 01 to 03
	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 2003
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## Discussion

### Annex 1 (b) – Various age groups

Among the total of 5314 patients, 230 (4.3%) were aged between 0 and 19, 1452 (27.3%) between 20 and 39, 1479 (27.8%) between 40 and 59, and 2153 (40.5%) above 60. 65.8% were male. 45.3%, 27.0%, and 22.3% were never smokers, ex-smokers, and current smokers respectively. 90.4% were permanent local residents while 92.5% were of Chinese ethnicity. Most of them (87.3%) presented because of symptoms. 11.4% presented as incidental finding to pre-employment, pre-immigration, other body check or incidental to other illness, while 2.3% were diagnosed through contact tracing.

75.6% of patients had pulmonary TB, 10.8% had extra-pulmonary TB and 13.6% had both. TB pleura and TB lymph node accounted for 10.3% and 8.3% of the site of involvement respectively. Among pulmonary TB patients, 39.9% had pretreatment sputum smear +ve, 71.3% had pretreatment culture +ve and 14.8% had cavitory lesion on their chest radiographs.

With regard to co-morbidity factors for TB, 13.3% of TB patients had diabetes mellitus, 4.6% of patients had coexisting malignancy, 0.7% of patients were immuno-suppressed because of either steroid or cytotoxic therapy. HIV infection was reported for 0.5% of cases. 4.3% of all TB patients were reported to be hepatitis B carrier while 0.4% had chronic active hepatitis.

73.3% of patients were on 6 months short course chemotherapy for TB or other standard regimen based on HREZS. Treatment side effect was reported in 47.0% of patients. 17.8% were GI side effects, 15.1% were skin rash, 6.3% had transient rise in liver enzyme and 7.2% had frank hepatitis.

Among the 4878 patients ever seen in chest clinic, 71.5% received >90% DOT in initial 2 months, while 58.4% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 33.0%, 79.4% and 87.6% respectively. Death rates at corresponding periods were 3.5%, 4.6% and 4.9% respectively.

Among the 436 patients never seen in chest clinic, 13.5% received >90% DOT in initial 2 months, while 9.4% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 8.5%, 13.1% and 13.8% respectively. Death rates at corresponding periods were 13.1%, 13.3% and 13.5% 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, 1765 were pretreatment smear +ve, 3378 were pretreatment culture +ve, and 19 were MDR-TB patients.

In the initial 2 months, over 65% of pretreatment smear +ve or culture +ve patients and 57.9% of MDR-TB received >90% DOT. The corresponding percentages were around 56-63% for all three groups of patients in subsequent 4 months.

Overall sputum smear conversion rate at 2 months were 87.4% for smear +ve patients and 66.7% for MDRTB patients. Culture conversion rate at 2 months were 88.8% for culture +ve patients and 50.0% for MDR-TB patients.

Treatment success rates for smear +ve patients at 6 months, 12 months and 24 months were 24.4%, 72.9% and 81.8% respectively. Those for culture +ve patients were 30.1%, 73.7% and 81.8% respectively. Those for MDR-TB patients were 5.3%, 5.3% and 57.9% respectively. 2 out of 19 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 27.3%, 73.0% and 81.9% respectively. The corresponding treatment success rates for retreatment pulmonary smear +ve patients were 6.9%, 72.1% and 81.0% respectively.

#### Annex 1 (e) – Treatment defaulters

There were 207 treatment defaulters at 24 months in the 2003 cohort. Majority (67.1%) were aged between 20 to 59, 32.4% worked full time, 5.3% part time, 22.7% retired, and 27.1% unemployed. 87.4% were new case, 8.2% were relapse and 4.3% were retreatment after default cases. 32.6% had pretreatment smear +ve and 16.6% had cavitory lesions on the chest radiograph. 57.5% of patients lost contact after default and 10.6% 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	111	48.3	755	52.0	428	28.9	525	24.4	1819	34.2
Male	119	51.7	697	48.0	1051	71.1	1628	75.6	3495	65.8
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Marital status

Single	222	96.5	842	58.0	178	12.0	145	6.7	1387	26.1
Married	4	1.7	540	37.2	1160	78.4	1750	81.3	3454	65.0
Separated	0	0.0	7	0.5	15	1.0	11	0.5	33	0.6
Divorce	0	0.0	24	1.7	59	4.0	21	1.0	104	2.0
Widowed	0	0.0	2	0.1	21	1.4	127	5.9	150	2.8
Not recorded	4	1.7	37	2.5	46	3.1	99	4.6	186	3.5
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Smoking status

Never	187	81.3	889	61.2	603	40.8	729	33.9	2408	45.3
Ex-smoker	16	7.0	158	10.9	323	21.8	940	43.7	1437	27.0
Current smoker	20	8.7	339	23.3	491	33.2	335	15.6	1185	22.3
Not recorded	7	3.0	66	4.5	62	4.2	149	6.9	284	5.3
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Institution-related

Yes	142	61.7	168	11.6	100	6.8	341	15.8	751	14.1
No	84	36.5	1250	86.1	1347	91.1	1744	81.0	4425	83.3
Not recorded	4	1.7	34	2.3	32	2.2	68	3.2	138	2.6
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Institution

Client	112	-	92	-	58	-	286	-	548	-
Staff	2	-	56	-	29	-	8	-	95	-

## Institution type

Old age home	1	-	7	-	21	-	300	-	329	-
School	132	-	61	-	11	-	8	-	212	-
Hospital	0	-	32	-	13	-	15	-	60	-
Handicapped	2	-	8	-	9	-	1	-	20	-
Prison	3	-	46	-	37	-	2	-	88	-
Others	2	-	5	-	7	-	0	-	14	-

## Living situation

Street-sleeper	3	1.3	4	0.3	11	0.7	6	0.3	24	0.5
Cubicle bed space	1	0.4	6	0.4	5	0.3	19	0.9	31	0.6
Institution	6	2.6	61	4.2	56	3.8	301	14.0	424	8.0
Work quarter	0	0.0	27	1.9	11	0.7	6	0.3	44	0.8
Alone (not above)	0	0.0	93	6.4	132	8.9	268	12.4	493	9.3
With friends	2	0.9	61	4.2	37	2.5	25	1.2	125	2.4
With family	216	93.9	1167	80.4	1191	80.5	1469	68.2	4043	76.1
Not recorded	2	0.9	33	2.3	36	2.4	59	2.7	130	2.4

## Residential status

Permanent resident	204	88.7	1168	80.4	1371	92.7	2061	95.7	4804	90.4
Chinese immigrant	22	9.6	80	5.5	29	2.0	22	1.0	153	2.9
Imported worker	0	0.0	113	7.8	30	2.0	2	0.1	145	2.7
Tourist - 2 way permit Chinese	0	0.0	27	1.9	1	0.1	1	0.0	29	0.5
Other tourist	0	0.0	6	0.4	3	0.2	4	0.2	13	0.2
Vietnamese	0	0.0	9	0.6	4	0.3	1	0.0	14	0.3
Illegal immigrants	1	0.4	19	1.3	6	0.4	2	0.1	28	0.5
Not recorded	3	1.3	30	2.1	35	2.4	60	2.8	128	2.4
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	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	170	73.9	943	64.9	692	46.8	324	15.0	2129	40.1
Mainland China	56	24.3	304	20.9	648	43.8	1653	76.8	2661	50.1
Others	2	0.9	186	12.8	101	6.8	100	4.6	389	7.3
Not recorded	2	0.9	19	1.3	38	2.6	76	3.5	135	2.5
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Ethnicity

Chinese	217	94.3	1232	84.8	1387	93.8	2077	96.5	4913	92.5
Other Asian	7	3.0	177	12.2	51	3.4	17	0.8	252	4.7
Caucasian	0	0.0	4	0.3	2	0.1	3	0.1	9	0.2
Others	1	0.4	8	0.6	6	0.4	5	0.2	20	0.4
Not recorded	5	2.2	31	2.1	33	2.2	51	2.4	120	2.3
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Previous BCG history

Yes	191	83.0	976	67.2	425	28.7	78	3.6	1670	31.4
No	13	5.7	110	7.6	351	23.7	1000	46.4	1474	27.7
Unknown	26	11.3	366	25.2	703	47.5	1075	49.9	2170	40.8
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## BCG scar

Yes	171	-	948	-	411	-	105	-	1635	-
No	55	-	437	-	987	-	1815	-	3294	-

## Evidence of previous BCG

BCG history +ve or scar +ve	196	85.2	1073	73.9	486	32.9	135	6.3	1890	35.6
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## Employment status

Full-time	19	8.3	943	64.9	691	46.7	111	5.2	1764	33.2
Part-time	4	1.7	50	3.4	84	5.7	27	1.3	165	3.1
Retired	1	0.4	2	0.1	92	6.2	1521	70.6	1616	30.4
Unemployed	34	14.8	243	16.7	394	26.6	124	5.8	795	15.0
Housewife	1	0.4	120	8.3	175	11.8	307	14.3	603	11.3
Student	167	72.6	58	4.0	0	0.0	2	0.1	227	4.3
Not recorded	4	1.7	36	2.5	43	2.9	61	2.8	144	2.7
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Occupation

Blue collar	13	5.7	388	26.7	516	34.9	112	5.2	1029	19.4
White collar	7	3.0	432	29.8	172	11.6	21	1.0	632	11.9
Medical	0	0.0	17	1.2	1	0.1	0	0.0	18	0.3
Nursing	0	0.0	21	1.4	3	0.2	1	0.0	25	0.5
Paramedical	0	0.0	6	0.4	7	0.5	1	0.0	14	0.3
Supporting health staff	0	0.0	2	0.1	5	0.3	0	0.0	7	0.1
Not applicable	171	74.3	480	33.1	680	46.0	1920	89.2	3251	61.2
Not recorded	39	17.0	106	7.3	95	6.4	98	4.6	338	6.4
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## First presentation

Private doctor	31	13.5	324	22.3	199	13.5	120	5.6	674	12.7
Private hospital	3	1.3	33	2.3	15	1.0	17	0.8	68	1.3
GOPC	9	3.9	46	3.2	81	5.5	82	3.8	218	4.1
Chest Clinic	48	20.9	207	14.3	268	18.1	365	17.0	888	16.7
Other DH Clinic	1	0.4	48	3.3	46	3.1	24	1.1	119	2.2
HA Clinic	6	2.6	44	3.0	50	3.4	47	2.2	147	2.8
HA Hospital	129	56.1	705	48.6	771	52.1	1456	67.6	3061	57.6
Mainland	0	0.0	22	1.5	23	1.6	15	0.7	60	1.1
Overseas	2	0.9	6	0.4	8	0.5	2	0.1	18	0.3
Not recorded	1	0.4	17	1.2	18	1.2	25	1.2	61	1.1
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	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	198	86.1	1259	86.7	1280	86.5	1903	88.4	4640	87.3
N	31	13.5	176	12.1	181	12.2	225	10.5	613	11.5
Not recorded	1	0.4	17	1.2	18	1.2	25	1.2	61	1.1
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

Chest symptoms	148	-	909	-	955	-	1481	-	3493	-
Systemic symptoms	22	-	194	-	198	-	302	-	716	-
Other site-specific symptoms	39	-	257	-	207	-	210	-	713	-

Reason for presentation

Symptom	193	83.9	1226	84.4	1234	83.4	1809	84.0	4462	84.0
Contact screening	20	8.7	41	2.8	33	2.2	29	1.3	123	2.3
Pre-employment	2	0.9	36	2.5	16	1.1	4	0.2	58	1.1
Pre-emigration	1	0.4	3	0.2	7	0.5	6	0.3	17	0.3
Other body check	9	3.9	92	6.3	89	6.0	91	4.2	281	5.3
Incidental to other illness	1	0.4	29	2.0	63	4.3	157	7.3	250	4.7
Others	0	0.0	3	0.2	7	0.5	5	0.2	15	0.3
Not recorded	4	1.7	22	1.5	30	2.0	52	2.4	108	2.0
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

Contact with TB patients

Yes	42	18.3	133	9.2	87	5.9	72	3.3	334	6.3
No	187	81.3	1299	89.5	1367	92.4	2030	94.3	4883	91.9
Not recorded	1	0.4	20	1.4	25	1.7	51	2.4	97	1.8
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

Contact type

Household	31	-	76	-	56	-	56	-	219	-
Work	2	-	16	-	13	-	2	-	33	-
Casual	5	-	16	-	6	-	3	-	30	-

Time of contact

Within 2 year	21	-	49	-	33	-	33	-	136	-
Over 2 year	9	-	43	-	31	-	18	-	101	-

Previous chemoprophylaxis

Yes	0	-	7	-	5	-	12	-	24	-
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Reason for chemoprophylaxis

Contact	0	-	0	-	0	-	0	-	0	-
Silicosis	0	-	0	-	1	-	1	-	2	-
HIV	0	-	2	-	0	-	0	-	2	-
Old scar on CXR	0	-	0	-	0	-	2	-	2	-
Others	0	-	1	-	2	-	4	-	7	-

Disease Classification

Pulmonary TB only	165	71.7	1026	70.7	1108	74.9	1716	79.7	4015	75.6
Extrapulmonary TB only	35	15.2	203	14.0	175	11.8	161	7.5	574	10.8
Both	30	13.0	223	15.4	196	13.3	276	12.8	725	13.6
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	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	19	8.3	146	10.1	148	10.0	236	11.0	549	10.3
Lymph node	32	13.9	203	14.0	121	8.2	83	3.9	439	8.3
Meninges	0	0.0	8	0.6	7	0.5	8	0.4	23	0.4
Miliary	3	1.3	10	0.7	7	0.5	17	0.8	37	0.7
Abdomen	4	1.7	10	0.7	19	1.3	18	0.8	51	1.0
Bone and joint (not spine)	0	0.0	4	0.3	11	0.7	14	0.7	29	0.5
Spine	1	0.4	7	0.5	6	0.4	11	0.5	25	0.5
Genito-urinary tract	1	0.4	14	1.0	13	0.9	21	1.0	49	0.9
Naso/oro-pharynx	0	0.0	7	0.5	8	0.5	0	0.0	15	0.3
Larynx	0	0.0	1	0.1	6	0.4	5	0.2	12	0.2
Pericardium	0	0.0	2	0.1	3	0.2	5	0.2	10	0.2
Skin	3	1.3	20	1.4	11	0.7	9	0.4	43	0.8
Other sites	4	1.7	15	1.0	20	1.4	24	1.1	63	1.2

Case category

New case	227	98.7	1373	94.6	1303	88.1	1739	80.8	4642	87.4
Relapse	3	1.3	63	4.3	163	11.0	392	18.2	621	11.7
Treatment after default	0	0.0	15	1.0	12	0.8	19	0.9	46	0.9
Failure of previous treatment	0	0.0	1	0.1	1	0.1	3	0.1	5	0.1
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	75	38.5	464	37.1	533	40.9	820	41.2	1892	39.9
Pretreatment culture +ve	132	67.7	812	65.0	888	68.1	1546	77.6	3378	71.3
Extent = 1	113	57.9	748	59.9	713	54.7	942	47.3	2516	53.1
Extent=1 & cavity=N	99	50.8	668	53.5	644	49.4	874	43.9	2285	48.2
Extent=1 & cavity=Y	14	7.2	80	6.4	69	5.3	68	3.4	231	4.9
Extent = 2	47	24.1	274	21.9	305	23.4	561	28.2	1187	25.0
Extent=2 & cavity=N	34	17.4	193	15.5	214	16.4	480	24.1	921	19.4
Extent=2 & cavity=Y	13	6.7	81	6.5	91	7.0	81	4.1	266	5.6
Extent=3	18	9.2	99	7.9	141	10.8	258	13.0	516	10.9
Extent=3 & cavity=N	12	6.2	49	3.9	74	5.7	182	9.1	317	6.7
Extent=3 & cavity=Y	6	3.1	50	4.0	67	5.1	76	3.8	199	4.2
Extent=not specified	17	8.7	128	10.2	145	11.1	231	11.6	521	11.0
Extent=ns & cavity=N	17	8.7	126	10.1	144	11.0	230	11.5	517	10.9
Extent=ns & cavity=Y	0	0.0	2	0.2	1	0.1	1	0.1	4	0.1
Cavity=N	162	83.1	1036	82.9	1076	82.5	1766	88.7	4040	85.2
Cavity=Y	33	16.9	213	17.1	228	17.5	226	11.3	700	14.8

Mode of diagnosis

Bacteriological	154	67.0	937	64.5	1023	69.2	1736	80.6	3850	72.5
Histological	18	7.8	164	11.3	141	9.5	132	6.1	455	8.6
Clinical-radiological	51	22.2	292	20.1	269	18.2	231	10.7	843	15.9
Clinical only	2	0.9	5	0.3	4	0.3	3	0.1	14	0.3
Not recorded	5	2.2	54	3.7	42	2.8	51	2.4	152	2.9
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

Histology

Typical (with caseation)	10	-	68	-	58	-	24	-	160	-
Granulomatous inflammation	25	-	137	-	147	-	160	-	469	-
Other	6	-	41	-	19	-	31	-	97	-
Ziehl-Neelsen staining										
Positive	24	-	128	-	115	-	114	-	381	-

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

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%

## Risk factors for TB

Yes	2	0.9	80	5.5	409	27.7	864	40.1	1355	25.5
Diabetes mellitus	1	0.4	24	1.7	233	15.8	447	20.8	705	13.3
Lung cancer	0	0.0	0	0.0	18	1.2	72	3.3	90	1.7
Other malignancies	0	0.0	9	0.6	38	2.6	106	4.9	153	2.9
On cytotoxic drugs	0	0.0	0	0.0	7	0.5	2	0.1	9	0.2
On steroid	0	0.0	5	0.3	12	0.8	13	0.6	30	0.6
Chronic renal failure	0	0.0	0	0.0	9	0.6	29	1.3	38	0.7
HIV	0	0.0	14	1.0	7	0.5	3	0.1	24	0.5
Silicosis	0	0.0	0	0.0	10	0.7	19	0.9	29	0.5
Alcoholism	0	0.0	8	0.6	47	3.2	38	1.8	93	1.8
Drug abuser	0	0.0	11	0.8	36	2.4	14	0.7	61	1.1
Gastrectomy	0	0.0	0	0.0	4	0.3	28	1.3	32	0.6
General debilitation	0	0.0	3	0.2	4	0.3	200	9.3	207	3.9
Others	0	0.0	9	0.6	19	1.3	30	1.4	58	1.1

## Factors affecting treatment choices

Yes	8	3.5	119	8.2	237	16.0	613	28.5	977	18.4
Hepatitis-B carrier	4	1.7	55	3.8	93	6.3	78	3.6	230	4.3
Chronic active hepatitis	0	0.0	3	0.2	10	0.7	10	0.5	23	0.4
Impaired renal function	0	0.0	0	0.0	11	0.7	71	3.3	82	1.5
Chronic renal failure	0	0.0	0	0.0	11	0.7	10	0.5	21	0.4
Impaired vision	2	0.9	16	1.1	57	3.9	298	13.8	373	7.0
Impaired hearing	0	0.0	3	0.2	7	0.5	51	2.4	61	1.1
Known drug reaction	0	0.0	5	0.3	2	0.1	5	0.2	12	0.2
Known drug resistance	1	0.4	13	0.9	8	0.5	15	0.7	37	0.7
Gout	0	0.0	2	0.1	10	0.7	51	2.4	63	1.2
Idiopathic thromb. purpura	0	0.0	0	0.0	1	0.1	5	0.2	6	0.1
Others	1	0.4	30	2.1	53	3.6	123	5.7	207	3.9

## 6-month short course treatment

Yes	97	42.2	522	36.0	385	26.0	272	12.6	1276	24.0
2HRZE+4HR	95	41.3	491	33.8	347	23.5	230	10.7	1163	21.9
2HRZS+4HR	1	0.4	16	1.1	20	1.4	21	1.0	58	1.1

## Other standard regimen based on HRZES

Yes	101	43.9	647	44.6	786	53.1	1085	50.4	2619	49.3
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## Treatment side effects

Yes	76	33.0	590	40.6	706	47.7	1123	52.2	2495	47.0
GI upset	40	17.4	267	18.4	267	18.1	371	17.2	945	17.8
Skin rash	15	6.5	181	12.5	237	16.0	368	17.1	801	15.1
Visual	6	2.6	28	1.9	57	3.9	116	5.4	207	3.9
Transient rise liver enzyme	4	1.7	73	5.0	109	7.4	148	6.9	334	6.3
Hepatitis	10	4.3	68	4.7	108	7.3	198	9.2	384	7.2
Vestibular	1	0.4	13	0.9	15	1.0	19	0.9	48	0.9
Arthropathy	2	0.9	30	2.1	44	3.0	92	4.3	168	3.2
Fever-chill	3	1.3	27	1.9	31	2.1	43	2.0	104	2.0
Dizziness	2	0.9	47	3.2	44	3.0	82	3.8	175	3.3
Thrombocytopenia	0	0.0	0	0.0	9	0.6	22	1.0	31	0.6
Leucopenia	0	0.0	4	0.3	5	0.3	4	0.2	13	0.2
Flush face	0	0.0	5	0.3	6	0.4	7	0.3	18	0.3
Others	8	3.5	54	3.7	63	4.3	111	5.2	236	4.4

## Consequence of side effects

Rx temporarily withheld	35	15.2	290	20.0	377	25.5	664	30.8	1366	25.7
Desensitiation or drug trial	16	7.0	178	12.3	224	15.1	408	19.0	826	15.5
Change in dosage/frequency	14	6.1	145	10.0	164	11.1	272	12.6	595	11.2
Change of drugs	24	10.4	182	12.5	279	18.9	609	28.3	1094	20.6

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%	153	66.5	958	66.0	1006	68.0	1432	66.5	3549	66.8
>75%	28	12.2	151	10.4	143	9.7	132	6.1	454	8.5
>50%	20	8.7	112	7.7	99	6.7	102	4.7	333	6.3
>25%	6	2.6	55	3.8	64	4.3	68	3.2	193	3.6
≤25%	9	3.9	47	3.2	46	3.1	77	3.6	179	3.4
Not recorded	14	6.1	129	8.9	121	8.2	342	15.9	606	11.4

Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)

>90%	113	49.1	723	49.8	822	55.6	1234	57.3	2892	54.4
>75%	35	15.2	173	11.9	172	11.6	133	6.2	513	9.7
>50%	22	9.6	142	9.8	114	7.7	102	4.7	380	7.2
>25%	22	9.6	122	8.4	95	6.4	84	3.9	323	6.1
≤25%	18	7.8	127	8.7	119	8.0	141	6.5	405	7.6
Not recorded	20	8.7	165	11.4	157	10.6	459	21.3	801	15.1

Under supervision by relatives (initial 2 months)

>90%	6	2.6	7	0.5	6	0.4	20	0.9	39	0.7
>75%	1	0.4	3	0.2	2	0.1	9	0.4	15	0.3
>50%	0	0.0	6	0.4	5	0.3	8	0.4	19	0.4
>25%	1	0.4	11	0.8	11	0.7	10	0.5	33	0.6
≤25%	156	67.8	1035	71.3	1033	69.8	1348	62.6	3572	67.2
Not recorded	66	28.7	390	26.9	422	28.5	758	35.2	1636	30.8

Under supervision by relatives (subsequent 4 months)

>90%	5	2.2	11	0.8	9	0.6	27	1.3	52	1.0
>75%	4	1.7	13	0.9	14	0.9	13	0.6	44	0.8
>50%	2	0.9	9	0.6	12	0.8	17	0.8	40	0.8
>25%	0	0.0	8	0.6	9	0.6	10	0.5	27	0.5
≤25%	147	63.9	996	68.6	988	66.8	1246	57.9	3377	63.5
Not recorded	72	31.3	415	28.6	447	30.2	840	39.0	1774	33.4

Supplied for unsupervised treatment (initial 2 months)

<5%	151	65.7	962	66.3	967	65.4	1421	66.0	3501	65.9
<10%	12	5.2	90	6.2	103	7.0	80	3.7	285	5.4
<15%	8	3.5	41	2.8	53	3.6	46	2.1	148	2.8
<25%	15	6.5	62	4.3	60	4.1	49	2.3	186	3.5
<50%	16	7.0	84	5.8	71	4.8	66	3.1	237	4.5
≥50%	8	3.5	56	3.9	66	4.5	66	3.1	196	3.7
Not recorded	20	8.7	157	10.8	159	10.8	425	19.7	761	14.3

Supplied for unsupervised treatment (subsequent 4 months)

<5%	124	53.9	771	53.1	817	55.2	1228	57.0	2940	55.3
<10%	20	8.7	87	6.0	107	7.2	90	4.2	304	5.7
<15%	11	4.8	45	3.1	58	3.9	58	2.7	172	3.2
<25%	17	7.4	87	6.0	86	5.8	48	2.2	238	4.5
<50%	10	4.3	103	7.1	85	5.7	68	3.2	266	5.0
≥50%	26	11.3	173	11.9	146	9.9	145	6.7	490	9.2
Not recorded	22	9.6	186	12.8	180	12.2	516	24.0	904	17.0

Defaulted (initial 2 months)

<5%	174	75.7	1125	77.5	1146	77.5	1571	73.0	4016	75.6
<10%	5	2.2	22	1.5	28	1.9	16	0.7	71	1.3
<15%	4	1.7	12	0.8	22	1.5	14	0.7	52	1.0
<25%	3	1.3	27	1.9	23	1.6	29	1.3	82	1.5
<50%	2	0.9	17	1.2	8	0.5	18	0.8	45	0.8
≥50%	4	1.7	16	1.1	17	1.1	14	0.7	51	1.0
Not recorded	38	16.5	233	16.0	235	15.9	491	22.8	997	18.8

Defaulted (subsequent 4 months)

<5%	154	67.0	1006	69.3	1106	74.8	1479	68.7	3745	70.5
<10%	11	4.8	60	4.1	39	2.6	32	1.5	142	2.7
<15%	9	3.9	37	2.5	19	1.3	13	0.6	78	1.5
<25%	5	2.2	38	2.6	25	1.7	14	0.7	82	1.5
<50%	4	1.7	30	2.1	18	1.2	15	0.7	67	1.3
≥50%	4	1.7	30	2.1	20	1.4	18	0.8	72	1.4
Not recorded	43	18.7	251	17.3	252	17.0	582	27.0	1128	21.2

## 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	116	50.4	610	42.0	468	31.6	453	21.0	1647	31.0
Still on treatment	92	40.0	654	45.0	848	57.3	1201	55.8	2795	52.6
Died	0	0.0	2	0.1	22	1.5	205	9.5	229	4.3
Transferred	7	3.0	76	5.2	34	2.3	37	1.7	154	2.9
Defaulted	4	1.7	54	3.7	48	3.2	53	2.5	159	3.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	11	4.8	56	3.9	59	4.0	204	9.5	330	6.2
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Among those cured/ treatment completed

Bacteriological conversion	60	51.7	330	54.1	219	46.8	306	67.5	915	55.6
Radiological improvement	101	87.1	534	87.5	376	80.3	342	75.5	1353	82.1
Other clinical improvement	26	22.4	130	21.3	102	21.8	89	19.6	347	21.1
No evidence of response	1	0.9	18	3.0	28	6.0	23	5.1	70	4.3

## Among those still on treatment

## Reasons for still on treatment:

Retreatment case	1	1.1	32	4.9	94	11.1	190	15.8	317	11.3
Extrapulmonary disease	30	32.6	259	39.6	200	23.6	173	14.4	662	23.7
Extensive disease	23	25.0	94	14.4	126	14.9	131	10.9	374	13.4
Interrupted treatment	20	21.7	166	25.4	214	25.2	383	31.9	783	28.0
Drug resistance	7	7.6	54	8.3	39	4.6	50	4.2	150	5.4
Poor response	9	9.8	47	7.2	57	6.7	54	4.5	167	6.0
Others	14	15.2	116	17.7	287	33.8	498	41.5	915	32.7

## Among those died - causes of death:

TB-related cause	0	-	0	0.0	2	9.1	12	5.9	14	6.1
Not TB-related	0	-	1	50.0	11	50.0	122	59.5	134	58.5
Unknown	0	-	1	50.0	9	40.9	67	32.7	77	33.6

## Among those transferred, new sources of care:

GP	0	0.0	12	15.8	3	8.8	2	5.4	17	11.0
Chest Clinic	1	14.3	1	1.3	1	2.9	6	16.2	9	5.8
Hospital	3	42.9	2	2.6	6	17.6	17	45.9	28	18.2
Outside HK	3	42.9	61	80.3	23	67.6	10	27.0	97	63.0
Not recorded	0	0.0	0	0.0	1	2.9	2	5.4	3	1.9

## Among those defaulted

Never found	1	25.0	43	79.6	33	68.8	30	56.6	107	67.3
Retreated after default	0	0.0	3	5.6	1	2.1	3	5.7	7	4.4
Treatment stopped by doctor	2	50.0	6	11.1	6	12.5	17	32.1	31	19.5
Not recorded	1	25.0	2	3.7	8	16.7	3	5.7	14	8.8

## 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	194	84.3	1144	78.8	1187	80.3	1403	65.2	3928	73.9
Still on treatment	14	6.1	94	6.5	115	7.8	201	9.3	424	8.0
Died	0	0.0	7	0.5	28	1.9	247	11.5	282	5.3
Transferred	11	4.8	78	5.4	36	2.4	35	1.6	160	3.0
Defaulted	7	3.0	76	5.2	58	3.9	61	2.8	202	3.8
Failure	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0
Not recorded	4	1.7	53	3.7	55	3.7	205	9.5	317	6.0
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Among those cured/ treatment completed

Bacteriological conversion	109	56.2	653	57.1	688	58.0	979	69.8	2429	61.8
Radiological improvement	159	82.0	952	83.2	944	79.5	1102	78.5	3157	80.4
Other clinical improvement	68	35.1	411	35.9	371	31.3	355	25.3	1205	30.7
No evidence of response	4	2.1	28	2.4	44	3.7	33	2.4	109	2.8
After treatment completed:										
No relapse	165	85.1	970	84.8	1037	87.4	1228	87.5	3400	86.6
Loss to follow up	16	8.2	113	9.9	80	6.7	53	3.8	262	6.7
Died	0	0.0	0	0.0	5	0.4	21	1.5	26	0.7
<i>TB-related</i>	0		0		0		0		0	
<i>Not TB-related</i>	0		0		5		16		21	
<i>Unknown</i>	0		0		0		5		5	
Relapse	2	1.0	3	0.3	2	0.2	3	0.2	10	0.3
<i>Bacteriological</i>	2		2		2		3		9	
<i>Histological</i>	0		0		0		0		0	
<i>Clinico-radiological</i>	0		1		0		0		1	
Not recorded	11	5.7	58	5.1	63	5.3	98	7.0	230	5.9

## Among those still on treatment

## Reasons for still on treatment:

Retreatment case	0	0.0	5	5.3	5	4.3	9	4.5	19	4.5
Extrapulmonary disease	6	42.9	23	24.5	27	23.5	31	15.4	87	20.5
Extensive disease	2	14.3	8	8.5	12	10.4	17	8.5	39	9.2
Interrupted treatment	6	42.9	34	36.2	57	49.6	99	49.3	196	46.2
Drug resistance	4	28.6	27	28.7	21	18.3	29	14.4	81	19.1
Poor response	1	7.1	10	10.6	4	3.5	7	3.5	22	5.2
Others	3	21.4	30	31.9	47	40.9	92	45.8	172	40.6

## Among those died - causes of death:

TB-related cause	0	-	1	14.3	3	10.7	14	5.7	18	6.4
Not TB-related	0	-	4	57.1	16	57.1	153	61.9	173	61.3
Unknown	0	-	2	28.6	9	32.1	80	32.4	91	32.3

## Among those transferred, new sources of care:

GP	2	18.2	14	17.9	1	2.8	2	5.7	19	11.9
Chest Clinic	1	9.1	1	1.3	2	5.6	5	14.3	9	5.6
Hospital	4	36.4	2	2.6	6	16.7	19	54.3	31	19.4
Outside HK	3	27.3	61	78.2	25	69.4	7	20.0	96	60.0
Not recorded	1	9.1	0	0.0	2	5.6	2	5.7	5	3.1

## Among those defaulted

Never found	5	71.4	55	72.4	33	56.9	33	54.1	126	62.4
Retreated after default	0	0.0	4	5.3	5	8.6	3	4.9	12	5.9
Treatment stopped by doctor	1	14.3	10	13.2	11	19.0	12	19.7	34	16.8
Not recorded	1	14.3	7	9.2	9	15.5	13	21.3	30	14.9

## 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	207	90.0	1237	85.2	1294	87.5	1596	74.1	4334	81.6
Still on treatment	0	0.0	4	0.3	2	0.1	4	0.2	10	0.2
Died	0	0.0	7	0.5	30	2.0	259	12.0	296	5.6
Transferred	10	4.3	73	5.0	34	2.3	29	1.3	146	2.7
Defaulted	9	3.9	77	5.3	62	4.2	59	2.7	207	3.9
Failure	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0
Not recorded	4	1.7	54	3.7	57	3.9	205	9.5	320	6.0
Total	230	100.0	1452	100.0	1479	100.0	2153	100.0	5314	100.0

## Among those cured/ treatment completed

Bacteriological conversion	118	57.0	725	58.6	788	60.9	1161	72.7	2792	64.4
Radiological improvement	171	82.6	1039	84.0	1064	82.2	1331	83.4	3605	83.2
Other clinical improvement	87	42.0	566	45.8	530	41.0	569	35.7	1752	40.4
No evidence of response	2	1.0	31	2.5	51	3.9	40	2.5	124	2.9
After treatment completed:										
No relapse	150	72.5	945	76.4	1068	82.5	1287	80.6	3450	79.6
Loss to follow up	45	21.7	233	18.8	156	12.1	150	9.4	584	13.5
Died	0	0.0	4	0.3	13	1.0	89	5.6	106	2.4
<i>TB-related</i>	0		2		0		1		3	
<i>Not TB-related</i>	0		2		11		62		75	
<i>Unknown</i>	0		0		2		26		28	
Relapse	2	1.0	11	0.9	8	0.6	9	0.6	30	0.7
<i>Bacteriological</i>	1		5		3		4		13	
<i>Histological</i>	1		3		2		2		8	
<i>Clinico-radiological</i>	0		3		3		3		9	
Not recorded	10	4.8	44	3.6	49	3.8	61	3.8	164	3.8

## Among those still on treatment

## Reasons for still on treatment:

Retreatment case	0	-	0	-	1	-	0	-	1	10.0
Extrapulmonary disease	0	-	0	-	0	-	0	-	0	0.0
Extensive disease	0	-	0	-	0	-	0	-	0	0.0
Interrupted treatment	0	-	1	-	0	-	2	-	3	30.0
Drug resistance	0	-	3	-	1	-	2	-	6	60.0
Poor response	0	-	0	-	0	-	0	-	0	0.0
Others	0	-	2	-	1	-	3	-	6	60.0

## Among those died - causes of death:

TB-related cause	0	-	1	14.3	4	13.3	14	5.4	19	6.4
Not TB-related	0	-	4	57.1	16	53.3	165	63.7	185	62.5
Unknown	0	-	2	28.6	10	33.3	76	29.3	88	29.7

## Among those transferred, new sources of care:

GP	1	11.1	8	11.0	1	2.9	2	6.9	12	8.2
Chest Clinic	1	11.1	1	1.4	1	2.9	4	13.8	7	4.8
Hospital	4	44.4	1	1.4	5	14.7	12	41.4	22	15.1
Outside HK	3	33.3	61	83.6	26	76.5	7	24.1	97	66.4
Not recorded	1	11.1	2	2.7	1	2.9	4	13.8	8	5.5

## Among those defaulted

Never found	6	-	51	66.2	33	53.2	29	49.2	119	57.5
Retreated after default	0	-	9	11.7	7	11.3	6	10.2	22	10.6
Treatment stopped by doctor	2	-	14	18.2	12	19.4	13	22.0	41	19.8
Not recorded	1	-	3	3.9	10	16.1	11	18.6	25	12.1



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	107	49.1	725	52.6	417	29.8	463	24.6	1712	35.1
Male	111	50.9	654	47.4	983	70.2	1418	75.4	3166	64.9
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

First presentation

Private doctor	30	13.8	319	23.1	196	14.0	116	6.2	661	13.6
Private hospital	3	1.4	31	2.2	15	1.1	12	0.6	61	1.3
GOPC	8	3.7	46	3.3	81	5.8	81	4.3	216	4.4
Chest Clinic	47	21.6	203	14.7	255	18.2	351	18.7	856	17.5
Other DH Clinic	1	0.5	28	2.0	25	1.8	21	1.1	75	1.5
HA Clinic	5	2.3	40	2.9	47	3.4	43	2.3	135	2.8
HA Hospital	121	55.5	676	49.0	737	52.6	1222	65.0	2756	56.5
Mainland	0	0.0	19	1.4	21	1.5	12	0.6	52	1.1
Overseas	2	0.9	6	0.4	8	0.6	2	0.1	18	0.4
Not recorded	1	0.5	11	0.8	15	1.1	21	1.1	48	1.0
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

Symptomatic on presentation

Y	188	86.2	1206	87.5	1228	87.7	1656	88.0	4278	87.7
N	29	13.3	162	11.7	157	11.2	203	10.8	551	11.3
Not recorded	1	0.5	11	0.8	15	1.1	22	1.2	49	1.0
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

Chest symptoms	138	-	872	-	914	-	1310	-	3234	-
Systemic symptoms	20	-	186	-	188	-	260	-	654	-
Other site-specific symptoms	38	-	250	-	202	-	190	-	680	-

Reason for presentation

Symptom	183	83.9	1176	85.3	1183	84.5	1576	83.8	4118	84.4
Contact screening	19	8.7	41	3.0	33	2.4	26	1.4	119	2.4
Pre-employment	2	0.9	35	2.5	15	1.1	4	0.2	56	1.1
Pre-emigration	1	0.5	2	0.1	7	0.5	6	0.3	16	0.3
Other body check	9	4.1	80	5.8	71	5.1	87	4.6	247	5.1
Incidental to other illness	0	0.0	27	2.0	59	4.2	137	7.3	223	4.6
Others	0	0.0	2	0.1	5	0.4	4	0.2	11	0.2
Not recorded	4	1.8	16	1.2	27	1.9	41	2.2	88	1.8
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

Disease Classification

Pulmonary TB only	157	72.0	973	70.6	1041	74.4	1492	79.3	3663	75.1
Extrapulmonary TB only	33	15.1	197	14.3	170	12.1	150	8.0	550	11.3
Both	28	12.8	209	15.2	189	13.5	239	12.7	665	13.6
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

6-month short course treatment

Yes	92	42.2	512	37.1	373	26.6	256	13.6	1233	25.3
2HRZE+4HR	90	41.3	483	35.0	336	24.0	222	11.8	1131	23.2
2HRZS+4HR	1	0.5	16	1.2	20	1.4	19	1.0	56	1.1

Other standard regimen based on HRZES

Yes	100	45.9	638	46.3	775	55.4	1067	56.7	2580	52.9
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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%	152	69.7	944	68.5	991	70.8	1403	74.6	3490	71.5
>75%	27	12.4	151	10.9	142	10.1	132	7.0	452	9.3
>50%	20	9.2	112	8.1	99	7.1	102	5.4	333	6.8
>25%	6	2.8	55	4.0	64	4.6	68	3.6	193	4.0
≤25%	8	3.7	46	3.3	44	3.1	73	3.9	171	3.5
Not recorded	5	2.3	71	5.1	60	4.3	103	5.5	239	4.9

Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)

>90%	111	50.9	709	51.4	807	57.6	1224	65.1	2851	58.4
>75%	35	16.1	173	12.5	172	12.3	133	7.1	513	10.5
>50%	22	10.1	142	10.3	113	8.1	101	5.4	378	7.7
>25%	22	10.1	122	8.8	95	6.8	84	4.5	323	6.6
≤25%	18	8.3	126	9.1	117	8.4	139	7.4	400	8.2
Not recorded	10	4.6	107	7.8	96	6.9	200	10.6	413	8.5

Under supervision by relatives (initial 2 months)

>90%	3	1.4	7	0.5	5	0.4	18	1.0	33	0.7
>75%	1	0.5	3	0.2	2	0.1	8	0.4	14	0.3
>50%	0	0.0	6	0.4	5	0.4	8	0.4	19	0.4
>25%	1	0.5	11	0.8	11	0.8	10	0.5	33	0.7
≤25%	156	71.6	1034	75.0	1032	73.7	1346	71.6	3568	73.1
Not recorded	57	26.1	318	23.1	345	24.6	491	26.1	1211	24.8

Under supervision by relatives (subsequent 4 months)

>90%	3	1.4	11	0.8	8	0.6	26	1.4	48	1.0
>75%	4	1.8	13	0.9	14	1.0	12	0.6	43	0.9
>50%	2	0.9	9	0.7	12	0.9	17	0.9	40	0.8
>25%	0	0.0	8	0.6	9	0.6	10	0.5	27	0.6
≤25%	147	67.4	995	72.2	987	70.5	1246	66.2	3375	69.2
Not recorded	62	28.4	343	24.9	370	26.4	570	30.3	1345	27.6

Supplied for unsupervised treatment (initial 2 months)

<5%	151	69.3	961	69.7	965	68.9	1416	75.3	3493	71.6
<10%	12	5.5	89	6.5	103	7.4	79	4.2	283	5.8
<15%	8	3.7	41	3.0	52	3.7	46	2.4	147	3.0
<25%	14	6.4	62	4.5	60	4.3	49	2.6	185	3.8
<50%	16	7.3	83	6.0	70	5.0	66	3.5	235	4.8
≥50%	7	3.2	52	3.8	64	4.6	64	3.4	187	3.8
Not recorded	10	4.6	91	6.6	86	6.1	161	8.6	348	7.1

Supplied for unsupervised treatment (subsequent 4 months)

<5%	124	56.9	769	55.8	815	58.2	1226	65.2	2934	60.1
<10%	19	8.7	87	6.3	107	7.6	89	4.7	302	6.2
<15%	11	5.0	45	3.3	58	4.1	58	3.1	172	3.5
<25%	17	7.8	87	6.3	86	6.1	48	2.6	238	4.9
<50%	10	4.6	102	7.4	84	6.0	68	3.6	264	5.4
≥50%	25	11.5	169	12.3	143	10.2	143	7.6	480	9.8
Not recorded	12	5.5	120	8.7	107	7.6	249	13.2	488	10.0

Defaulted (initial 2 months)

<5%	171	78.4	1123	81.4	1143	81.6	1565	83.2	4002	82.0
<10%	5	2.3	22	1.6	28	2.0	16	0.9	71	1.5
<15%	4	1.8	12	0.9	22	1.6	14	0.7	52	1.1
<25%	3	1.4	27	2.0	23	1.6	29	1.5	82	1.7
<50%	2	0.9	17	1.2	8	0.6	18	1.0	45	0.9
≥50%	4	1.8	16	1.2	17	1.2	14	0.7	51	1.0
Not recorded	29	13.3	162	11.7	159	11.4	225	12.0	575	11.8

Defaulted (subsequent 4 months)

<5%	152	69.7	1004	72.8	1103	78.8	1476	78.5	3735	76.6
<10%	11	5.0	60	4.4	39	2.8	32	1.7	142	2.9
<15%	9	4.1	37	2.7	19	1.4	13	0.7	78	1.6
<25%	5	2.3	38	2.8	25	1.8	14	0.7	82	1.7
<50%	4	1.8	30	2.2	18	1.3	15	0.8	67	1.4
≥50%	4	1.8	30	2.2	20	1.4	18	1.0	72	1.5
Not recorded	33	15.1	180	13.1	176	12.6	313	16.6	702	14.4

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	110	50.5	598	43.4	456	32.6	446	23.7	1610	33.0
Still on treatment	92	42.2	644	46.7	836	59.7	1193	63.4	2765	56.7
Died	0	0.0	0	0.0	19	1.4	153	8.1	172	3.5
Transferred	7	3.2	74	5.4	34	2.4	23	1.2	138	2.8
Defaulted	4	1.8	54	3.9	46	3.3	53	2.8	157	3.2
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	5	2.3	9	0.7	9	0.6	13	0.7	36	0.7
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

Outcome at 12 months

Cured/ treatment completed	187	85.8	1127	81.7	1165	83.2	1392	74.0	3871	79.4
Still on treatment	14	6.4	89	6.5	113	8.1	200	10.6	416	8.5
Died	0	0.0	5	0.4	25	1.8	194	10.3	224	4.6
Transferred	10	4.6	76	5.5	36	2.6	22	1.2	144	3.0
Defaulted	7	3.2	76	5.5	56	4.0	60	3.2	199	4.1
Failure	0	0.0	0	0.0	0	0.0	1	0.1	1	0.0
Not recorded	0	0.0	6	0.4	5	0.4	12	0.6	23	0.5
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	100.0

Outcome at 24 months

Cured/ treatment completed	200	91.7	1218	88.3	1272	90.9	1584	84.2	4274	87.6
Still on treatment	0	0.0	4	0.3	2	0.1	4	0.2	10	0.2
Died	0	0.0	5	0.4	27	1.9	205	10.9	237	4.9
Transferred	9	4.1	71	5.1	34	2.4	17	0.9	131	2.7
Defaulted	9	4.1	76	5.5	60	4.3	58	3.1	203	4.2
Failure	0	0.0	0	0.0	0	0.0	1	0.1	1	0.0
Not recorded	0	0.0	5	0.4	5	0.4	12	0.6	22	0.5
Total	218	100.0	1379	100.0	1400	100.0	1881	100.0	4878	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	4	33.3	30	41.1	11	13.9	62	22.8	107	24.5
Male	8	66.7	43	58.9	68	86.1	210	77.2	329	75.5
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

First presentation

Private doctor	1	8.3	5	6.8	3	3.8	4	1.5	13	3.0
Private hospital	0	0.0	2	2.7	0	0.0	5	1.8	7	1.6
GOPC	1	8.3	0	0.0	0	0.0	1	0.4	2	0.5
Chest Clinic	1	8.3	4	5.5	13	16.5	14	5.1	32	7.3
Other DH Clinic	0	0.0	20	27.4	21	26.6	3	1.1	44	10.1
HA Clinic	1	8.3	4	5.5	3	3.8	4	1.5	12	2.8
HA Hospital	8	66.7	29	39.7	34	43.0	234	86.0	305	70.0
Mainland	0	0.0	3	4.1	2	2.5	3	1.1	8	1.8
Overseas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	0	0.0	6	8.2	3	3.8	4	1.5	13	3.0
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

Symptomatic on presentation

Y	10	83.3	53	72.6	52	65.8	247	90.8	362	83.0
N	2	16.7	14	19.2	24	30.4	22	8.1	62	14.2
Not recorded	0	0.0	6	8.2	3	3.8	3	1.1	12	2.8
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

Chest symptoms	10	-	37	-	41	-	171	-	259	-
Systemic symptoms	2	-	8	-	10	-	42	-	62	-
Other site-specific symptoms	1	-	7	-	5	-	20	-	33	-

Reason for presentation

Symptom	10	83.3	50	68.5	51	64.6	233	85.7	344	78.9
Contact screening	1	8.3	0	0.0	0	0.0	3	1.1	4	0.9
Pre-employment	0	0.0	1	1.4	1	1.3	0	0.0	2	0.5
Pre-emigration	0	0.0	1	1.4	0	0.0	0	0.0	1	0.2
Other body check	0	0.0	12	16.4	18	22.8	4	1.5	34	7.8
Incidental to other illness	1	8.3	2	2.7	4	5.1	20	7.4	27	6.2
Others	0	0.0	1	1.4	2	2.5	1	0.4	4	0.9
Not recorded	0	0.0	6	8.2	3	3.8	11	4.0	20	4.6
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

Disease Classification

Pulmonary TB only	8	66.7	53	72.6	67	84.8	224	82.4	352	80.7
Extrapulmonary TB only	2	16.7	6	8.2	5	6.3	11	4.0	24	5.5
Both	2	16.7	14	19.2	7	8.9	37	13.6	60	13.8
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

6-month short course treatment

Yes	5	41.7	10	13.7	12	15.2	16	5.9	43	9.9
2HRZE+4HR	5	41.7	8	11.0	11	13.9	8	2.9	32	7.3
2HRZS+4HR	0	0.0	0	0.0	0	0.0	2	0.7	2	0.5

Other standard regimen based on HRZES

Yes	1	8.3	9	12.3	11	13.9	18	6.6	39	8.9
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## Annex 1 (b) - (iii) NS (cases never seen at chest clinics) - 02

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%

## Treatment supervision

## Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)

>90%	1	8.3	14	19.2	15	19.0	29	10.7	59	13.5
>75%	1	8.3	0	0.0	1	1.3	0	0.0	2	0.5
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	1	8.3	1	1.4	2	2.5	4	1.5	8	1.8
Not recorded	9	75.0	58	79.5	61	77.2	239	87.9	367	84.2

## Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)

>90%	2	16.7	14	19.2	15	19.0	10	3.7	41	9.4
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	1	1.3	1	0.4	2	0.5
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	0	0.0	1	1.4	2	2.5	2	0.7	5	1.1
Not recorded	10	83.3	58	79.5	61	77.2	259	95.2	388	89.0

## Under supervision by relatives (initial 2 months)

>90%	3	25.0	0	0.0	1	1.3	2	0.7	6	1.4
>75%	0	0.0	0	0.0	0	0.0	1	0.4	1	0.2
>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	1	1.4	1	1.3	2	0.7	4	0.9
Not recorded	9	75.0	72	98.6	77	97.5	267	98.2	425	97.5

## Under supervision by relatives (subsequent 4 months)

>90%	2	16.7	0	0.0	1	1.3	1	0.4	4	0.9
>75%	0	0.0	0	0.0	0	0.0	1	0.4	1	0.2
>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	1	1.4	1	1.3	0	0.0	2	0.5
Not recorded	10	83.3	72	98.6	77	97.5	270	99.3	429	98.4

## Supplied for unsupervised treatment (initial 2 months)

<5%	0	0.0	1	1.4	2	2.5	5	1.8	8	1.8
<10%	0	0.0	1	1.4	0	0.0	1	0.4	2	0.5
<15%	0	0.0	0	0.0	1	1.3	0	0.0	1	0.2
<25%	1	8.3	0	0.0	0	0.0	0	0.0	1	0.2
<50%	0	0.0	1	1.4	1	1.3	0	0.0	2	0.5
≥50%	1	8.3	4	5.5	2	2.5	2	0.7	9	2.1
Not recorded	10	83.3	66	90.4	73	92.4	264	97.1	413	94.7

## Supplied for unsupervised treatment (subsequent 4 months)

<5%	0	0.0	2	2.7	2	2.5	2	0.7	6	1.4
<10%	1	8.3	0	0.0	0	0.0	1	0.4	2	0.5
<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	1	1.4	1	1.3	0	0.0	2	0.5
≥50%	1	8.3	4	5.5	3	3.8	2	0.7	10	2.3
Not recorded	10	83.3	66	90.4	73	92.4	267	98.2	416	95.4

## Defaulted (initial 2 months)

<5%	3	25.0	2	2.7	3	3.8	6	2.2	14	3.2
<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	9	75.0	71	97.3	76	96.2	266	97.8	422	96.8

## Defaulted (subsequent 4 months)

<5%	2	16.7	2	2.7	3	3.8	3	1.1	10	2.3
<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	10	83.3	71	97.3	76	96.2	269	98.9	426	97.7

## 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	6	50.0	12	16.4	12	15.2	7	2.6	37	8.5
Still on treatment	0	0.0	10	13.7	12	15.2	8	2.9	30	6.9
Died	0	0.0	2	2.7	3	3.8	52	19.1	57	13.1
Transferred	0	0.0	2	2.7	0	0.0	14	5.1	16	3.7
Defaulted	0	0.0	0	0.0	2	2.5	0	0.0	2	0.5
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	6	50.0	47	64.4	50	63.3	191	70.2	294	67.4
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

## Outcome at 12 months

Cured/ treatment completed	7	58.3	17	23.3	22	27.8	11	4.0	57	13.1
Still on treatment	0	0.0	5	6.8	2	2.5	1	0.4	8	1.8
Died	0	0.0	2	2.7	3	3.8	53	19.5	58	13.3
Transferred	1	8.3	2	2.7	0	0.0	13	4.8	16	3.7
Defaulted	0	0.0	0	0.0	2	2.5	1	0.4	3	0.7
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	4	33.3	47	64.4	50	63.3	193	71.0	294	67.4
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	100.0

## Outcome at 24 months

Cured/ treatment completed	7	58.3	19	26.0	22	27.8	12	4.4	60	13.8
Still on treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Died	0	0.0	2	2.7	3	3.8	54	19.9	59	13.5
Transferred	1	8.3	2	2.7	0	0.0	12	4.4	15	3.4
Defaulted	0	0.0	1	1.4	2	2.5	1	0.4	4	0.9
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	4	33.3	49	67.1	52	65.8	193	71.0	298	68.3
Total	12	100.0	73	100.0	79	100.0	272	100.0	436	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	1621	91.8	3078	91.1	19	100.0
No	144	8.2	300	8.9	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Age group

0 to 19	74	4.2	132	3.9	1	5.3
Female	37		65		1	
Male	37		67		0	
20 to 39	445	25.2	812	24.0	8	42.1
Female	233		414		6	
Male	212		398		2	
40 to 59	498	28.2	888	26.3	3	15.8
Female	122		206		3	
Male	376		682		0	
60+	748	42.4	1546	45.8	7	36.8
Female	148		328		1	
Male	600		1218		6	
Total	1765	100.0	3378	100.0	19	100.0
Female	540	30.6	1013	30.0	11	57.9
Male	1225	69.4	2365	70.0	8	42.1

Marital status

Single	450	25.5	816	24.2	3	15.8
Married	1170	66.3	2258	66.8	16	84.2
Separated	6	0.3	19	0.6	0	0.0
Divorce	42	2.4	64	1.9	0	0.0
Widowed	49	2.8	97	2.9	0	0.0
Not recorded	48	2.7	124	3.7	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Smoking status

Never	703	39.8	1348	39.9	9	47.4
Ex-smoker	541	30.7	1041	30.8	3	15.8
Current smoker	436	24.7	807	23.9	7	36.8
Not recorded	85	4.8	182	5.4	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Institution-related

Yes	190	10.8	434	12.8	0	0.0
No	1540	87.3	2856	84.5	19	100.0
Not recorded	35	2.0	88	2.6	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Institution

Client	143	-	330	-	0	-
Staff	19	-	39	-	0	-

Institution type

Old age home	76	-	206	-	0	-
School	65	-	114	-	0	-
Hospital	13	-	30	-	0	-
Handicapped	2	-	10	-	0	-
Prison	20	-	49	-	0	-
Others	5	-	7	-	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	12	0.7	17	0.5	0	0.0
Cubicle bed space	9	0.5	17	0.5	0	0.0
Institution	102	5.8	260	7.7	0	0.0
Work quarter	17	1.0	24	0.7	0	0.0
Alone (not above)	188	10.7	327	9.7	1	5.3
With friends	53	3.0	93	2.8	0	0.0
With family	1355	76.8	2560	75.8	18	94.7
Not recorded	29	1.6	80	2.4	0	0.0

Residential status

Permanent resident	1616	91.6	3089	91.4	14	73.7
Chinese immigrant	42	2.4	81	2.4	2	10.5
Imported worker	50	2.8	73	2.2	0	0.0
Tourist - 2 way permit Chinese	11	0.6	17	0.5	2	10.5
Other tourist	4	0.2	9	0.3	1	5.3
Vietnamese	4	0.2	8	0.2	0	0.0
Illegal immigrants	11	0.6	15	0.4	0	0.0
Not recorded	27	1.5	86	2.5	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Place of birth

Hong Kong	682	38.6	1260	37.3	5	26.3
Mainland China	919	52.1	1801	53.3	13	68.4
Others	128	7.3	228	6.7	1	5.3
Not recorded	36	2.0	89	2.6	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Ethnicity

Chinese	1636	92.7	3146	93.1	18	94.7
Other Asian	91	5.2	139	4.1	1	5.3
Caucasian	1	0.1	4	0.1	0	0.0
Others	7	0.4	12	0.4	0	0.0
Not recorded	30	1.7	77	2.3	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

Previous BCG history

Yes	501	28.4	935	27.7	4	21.1
No	490	27.8	990	29.3	7	36.8
Unknown	774	43.9	1453	43.0	8	42.1
Total	1765	100.0	3378	100.0	19	100.0

BCG scar

Yes	501	-	922	-	5	-
No	1141	-	2192	-	13	-

Employment status

Full-time	524	29.7	998	29.5	5	26.3
Part-time	60	3.4	110	3.3	1	5.3
Retired	608	34.4	1205	35.7	4	21.1
Unemployed	299	16.9	509	15.1	3	15.8
Housewife	168	9.5	342	10.1	6	31.6
Student	71	4.0	126	3.7	0	0.0
Not recorded	35	2.0	88	2.6	0	0.0
Total	1765	100.0	3378	100.0	19	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	338	19.2	631	18.7	6	31.6
White collar	159	9.0	325	9.6	1	5.3
Medical	5	0.3	9	0.3	0	0.0
Nursing	2	0.1	9	0.3	0	0.0
Paramedical	3	0.2	6	0.2	0	0.0
Supporting health staff	2	0.1	4	0.1	0	0.0
Not applicable	1156	65.5	2200	65.1	11	57.9
Not recorded	100	5.7	194	5.7	1	5.3
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

First presentation

Private doctor	207	11.7	387	11.5	3	15.8
Private hospital	21	1.2	35	1.0	0	0.0
GOPC	84	4.8	145	4.3	0	0.0
Chest Clinic	255	14.4	557	16.5	7	36.8
Other DH Clinic	19	1.1	54	1.6	0	0.0
HA Clinic	35	2.0	70	2.1	0	0.0
HA Hospital	1113	63.1	2069	61.2	7	36.8
Mainland	17	1.0	27	0.8	2	10.5
Overseas	2	0.1	3	0.1	0	0.0
Not recorded	12	0.7	31	0.9	0	0.0
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

Symptomatic on presentation

Y	1660	94.1	3036	89.9	18	94.7
N	93	5.3	311	9.2	1	5.3
Not recorded	12	0.7	31	0.9	0	0.0
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

Chest symptoms	1423	-	2563	-	16	-
Systemic symptoms	309	-	488	-	2	-
Other site-specific symptoms	71	-	180	-	1	-

Reason for presentation

Symptom	1610	91.2	2910	86.1	18	94.7
Contact screening	12	0.7	55	1.6	1	5.3
Pre-employment	4	0.2	19	0.6	0	0.0
Pre-emigration	2	0.1	10	0.3	0	0.0
Other body check	31	1.8	132	3.9	0	0.0
Incidental to other illness	78	4.4	180	5.3	0	0.0
Others	0	0.0	9	0.3	0	0.0
Not recorded	28	1.6	63	1.9	0	0.0
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

## 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	68	3.9	186	5.5	1	5.3
No	1672	94.7	3130	92.7	18	94.7
Not recorded	25	1.4	62	1.8	0	0.0
Total	1765	100.0	3378	100.0	19	100.0

## Contact type

Household	48	-	128	-	0	-
Work	6	-	16	-	1	-
Casual	9	-	16	-	0	-

## Time of contact

Within 2 year	32	-	79	-	1	-
Over 2 year	23	-	59	-	0	-

## Previous chemoprophylaxis

Yes	7	-	17	-	1	-
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## Reason for chemoprophylaxis

Contact	0	-	0	-	0	-
Silicosis	0	-	0	-	0	-
HIV	2	-	2	-	0	-
Old scar on CXR	0	-	1	-	0	-
Others	2	-	5	-	1	-

## Disease Classification

Pulmonary TB only	1624	92.0	2986	88.4	18	94.7
Both pulm & extrapulm	141	8.0	392	11.6	1	5.3
Total	1765	100.0	3378	100.0	19	100.0

## Case category

New case	1518	86.0	2922	86.5	10	52.6
Relapse	222	12.6	419	12.4	6	31.6
Treatment after default	23	1.3	32	0.9	2	10.5
Failure of previous treatment	2	0.1	5	0.1	1	5.3
Total	1765	100.0	3378	100.0	19	100.0

## Disease characteristics (pulmonary cases)

Extent = 1	669	37.9	1628	48.2	9	47.4
Extent=1 & cavity=N	536	30.4	1447	42.8	5	26.3
Extent=1 & cavity=Y	133	7.5	181	5.4	4	21.1
Extent = 2	645	36.5	1005	29.8	6	31.6
Extent=2 & cavity=N	436	24.7	763	22.6	5	26.3
Extent=2 & cavity=Y	209	11.8	242	7.2	1	5.3
Extent=3	370	21.0	471	13.9	3	15.8
Extent=3 & cavity=N	197	11.2	279	8.3	1	5.3
Extent=3 & cavity=Y	173	9.8	192	5.7	2	10.5
Extent=not specified	81	4.6	274	8.1	1	5.3
Extent=ns & cavity=N	80	4.5	270	8.0	1	5.3
Extent=ns & cavity=Y	1	0.1	4	0.1	0	0.0
Cavity=N	1249	70.8	2759	81.7	12	63.2
Cavity=Y	516	29.2	619	18.3	7	36.8

## 6-month short course treatment

Yes	312	17.7	749	22.2	0	0.0
2HRZE+4HR	288	16.3	681	20.2	0	0.0
2HRZS+4HR	9	0.5	32	0.9	0	0.0

## Other standard regimen based on HRZES

Yes	956	54.2	1690	50.0	3	15.8
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## 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%	1223	69.3	2283	67.6	11	57.9
>75%	151	8.6	302	8.9	2	10.5
>50%	105	5.9	194	5.7	2	10.5
>25%	56	3.2	116	3.4	0	0.0
≤25%	45	2.5	109	3.2	0	0.0
Not recorded	185	10.5	374	11.1	4	21.1

## Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)

>90%	1024	58.0	1893	56.0	12	63.2
>75%	156	8.8	312	9.2	1	5.3
>50%	108	6.1	224	6.6	1	5.3
>25%	111	6.3	210	6.2	1	5.3
≤25%	124	7.0	248	7.3	1	5.3
Not recorded	242	13.7	491	14.5	3	15.8

## Under supervision by relatives (initial 2 months)

>90%	10	0.6	24	0.7	0	0.0
>75%	6	0.3	11	0.3	0	0.0
>50%	6	0.3	12	0.4	0	0.0
>25%	6	0.3	19	0.6	0	0.0
≤25%	1181	66.9	2246	66.5	13	68.4
Not recorded	556	31.5	1066	31.6	6	31.6

## Under supervision by relatives (subsequent 4 months)

>90%	18	1.0	34	1.0	0	0.0
>75%	14	0.8	27	0.8	0	0.0
>50%	13	0.7	30	0.9	0	0.0
>25%	10	0.6	21	0.6	0	0.0
≤25%	1114	63.1	2121	62.8	13	68.4
Not recorded	596	33.8	1145	33.9	6	31.6

## Supplied for unsupervised treatment (initial 2 months)

<5%	1195	67.7	2245	66.5	11	57.9
<10%	99	5.6	181	5.4	2	10.5
<15%	38	2.2	88	2.6	0	0.0
<25%	71	4.0	124	3.7	0	0.0
<50%	83	4.7	140	4.1	1	5.3
≥50%	41	2.3	113	3.3	1	5.3
Not recorded	238	13.5	487	14.4	4	21.1

## Supplied for unsupervised treatment (subsequent 4 months)

<5%	1031	58.4	1923	56.9	13	68.4
<10%	103	5.8	190	5.6	0	0.0
<15%	54	3.1	104	3.1	0	0.0
<25%	71	4.0	144	4.3	1	5.3
<50%	74	4.2	153	4.5	1	5.3
≥50%	157	8.9	299	8.9	1	5.3
Not recorded	275	15.6	565	16.7	3	15.8

## Defaulted (initial 2 months)

<5%	1350	76.5	2544	75.3	13	68.4
<10%	20	1.1	45	1.3	0	0.0
<15%	19	1.1	40	1.2	0	0.0
<25%	19	1.1	54	1.6	0	0.0
<50%	13	0.7	30	0.9	1	5.3
≥50%	21	1.2	34	1.0	1	5.3
Not recorded	323	18.3	631	18.7	4	21.1

## Defaulted (subsequent 4 months)

<5%	1272	72.1	2386	70.6	14	73.7
<10%	47	2.7	96	2.8	1	5.3
<15%	27	1.5	54	1.6	1	5.3
<25%	27	1.5	64	1.9	0	0.0
<50%	15	0.8	38	1.1	0	0.0
≥50%	22	1.2	44	1.3	0	0.0
Not recorded	355	20.1	696	20.6	3	15.8

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	431	24.4	1016	30.1	1	5.3
Still on treatment	1064	60.3	1828	54.1	18	94.7
Died	78	4.4	147	4.4	0	0.0
Transferred	44	2.5	78	2.3	0	0.0
Defaulted	37	2.1	81	2.4	0	0.0
Failure	0	0.0	0	0.0	0	0.0
Not recorded	111	6.3	228	6.7	0	0.0
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

Outcome at 12 months

Cured/ treatment completed	1286	72.9	2491	73.7	1	5.3
Still on treatment	170	9.6	291	8.6	17	89.5
Died	99	5.6	188	5.6	0	0.0
Transferred	46	2.6	81	2.4	0	0.0
Defaulted	57	3.2	106	3.1	0	0.0
Failure	0	0.0	1	0.0	1	5.3
Not recorded	107	6.1	220	6.5	0	0.0
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

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	1444	81.8	2763	81.8	11	57.9
Still on treatment	7	0.4	9	0.3	4	21.1
Died	102	5.8	197	5.8	0	0.0
Transferred	44	2.5	74	2.2	0	0.0
Defaulted	59	3.3	112	3.3	2	10.5
Failure	0	0.0	1	0.0	1	5.3
Not recorded	109	6.2	222	6.6	1	5.3
<b>Total</b>	<b>1765</b>	<b>100.0</b>	<b>3378</b>	<b>100.0</b>	<b>19</b>	<b>100.0</b>

Among those cured/ treatment completed

Bacteriological conversion	1397	96.7	2566	92.9	9	81.8
Radiological improvement	1393	96.5	2550	92.3	8	72.7
Other clinical improvement	421	29.2	872	31.6	3	27.3
No evidence of response	6	0.4	12	0.4	0	0.0

After treatment completed:

No relapse	1150	79.6	2185	79.1	9	81.8
Loss to follow up	190	13.2	371	13.4	0	0.0
Died	52	3.6	89	3.2	1	9.1
<i>TB-related</i>	1		3		0	
<i>Not TB-related</i>	39		65		1	
<i>Unknown</i>	12		21		0	
Relapse	10	0.7	19	0.7	0	0.0
<i>Bacteriological</i>	4		10		0	
<i>Histological</i>	4		5		0	
<i>Clinico-radiological</i>	2		4		0	
Not recorded	42	2.9	99	3.6	1	9.1

Among those still on treatment

Reasons for still on treatment:

Retreatment case	1	-	1	-	0	-
Extrapulmonary disease	0	-	0	-	0	-
Extensive disease	0	-	0	-	0	-
Interrupted treatment	2	-	3	-	1	-
Drug resistance	4	-	6	-	4	-
Poor response	0	-	0	-	0	-
Others	4	-	5	-	1	-

Among those died - causes of death:

TB-related cause	10	9.8	14	7.1	0	-
Not TB-related	63	61.8	124	62.9	0	-
Unknown	29	28.4	59	29.9	0	-

Among those transferred, new sources of care:

GP	4	9.1	6	8.1	0	0.0
Chest Clinic	2	4.5	5	6.8	0	0.0
Hospital	10	22.7	13	17.6	0	0.0
Outside HK	24	54.5	44	59.5	0	0.0
Not recorded	4	9.1	6	8.1	0	0.0

Among those defaulted

Never found	34	57.6	62	55.4	1	50.0
Retreated after default	8	13.6	18	16.1	0	0.0
Treatment stopped by doctor	12	20.3	20	17.9	1	50.0
Not recorded	5	8.5	12	10.7	0	0.0

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

Group (Pulmonary cases)	PreRx smear +ve		PreRx culture +ve		MDR-TB	
	N	%	N	%	N	%

Drug susceptibility pattern

Streptomycin - R	44	3.1	223	8.0	16	84.2
Streptomycin - S	1361	96.9	2558	92.0	3	15.8

Isoniazid - R	87	5.8	142	5.1	19	100.0
Isoniazid - S	1418	94.2	2641	94.9	0	0.0

Rifampicin - R	17	1.1	26	0.9	19	100.0
Rifampicin - S	1489	98.9	2758	99.1	0	0.0

Ethambutol - R	12	0.8	18	0.6	10	52.6
Ethambutol - S	1493	99.2	2765	99.4	9	47.4

Pyrazinamide - R	13	24.1	19	24.1	8	47.1
Pyrazinamide - S	41	75.9	60	75.9	9	52.9

Ofloxacin - R	6	9.7	7	7.2	5	31.3
Ofloxacin - S	56	90.3	90	92.8	11	68.8

Smear conversion rates

1. Smear at 2 month = N (a)	1006				8	
2. Smear at 2 month = P (b)	145				4	
2. Sm 2m (P); Sm 3m (N) (c)	84				1	
2. Sm 2m (P); Sm 3m (P) (d)	34				1	
2. Sm 2m (P); Sm 3m (U) (e)	27				2	
3. Smear at 2 month = U (f)	614				7	
3. Sm 2m (U); Sm 3m (N) (g)	239				1	
3. Sm 2m (U); Sm 3m (P) (h)	16				0	
3. Sm 2m (U); Sm 3m (U) (i)	359				6	

Overall percentage of smear conversion at 2m = (a)/ [(a)+(b)]

87.4		-		66.7	
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Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]

96.4		-		90.9	
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Culture conversion rates

1. Culture at 2 month = N (a)			1709		6	
2. Culture at 2 month = P (b)			215		6	
2. Cu 2m (P); Cu 3m (N) (c)			123		1	
2. Cu 2m (P); Cu 3m (P) (d)			26		3	
2. Cu 2m (P); Cu 3m (U) (e)			66		2	
3. Culture at 2 month = U (f)			1454		7	
3. Cu 2m (U); Cu 3m (N) (g)			464		1	
3. Cu 2m (U); Cu 3m (P) (h)			16		0	
3. Cu 2m (U); Cu 3m (U) (i)			974		6	

Overall percentage of culture conversion at 2m = (a)/ [(a)+(b)]

-		88.8		50.0	
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Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]

-		98.2		72.7	
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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	1395	91.9	226	91.5
No	123	8.1	21	8.5
Total	1518	100.0	247	100.0

Age group

0 to 19	73	4.8	1	0.4
Female	36		1	
Male	37		0	
20 to 39	420	27.7	25	10.1
Female	218		15	
Male	202		10	
40 to 59	438	28.9	60	24.3
Female	115		7	
Male	323		53	
60+	587	38.7	161	65.2
Female	128		20	
Male	459		141	
Total	1518	100.0	247	100.0
Female	497	32.7	43	17.4
Male	1021	67.3	204	82.6

Disease Classification

Pulmonary TB only	1392	91.7	232	93.9
Both pulmon and extrapulm	126	8.3	15	6.1
Total	1518	100.0	247	100.0

6-month short course treatment

Yes	304	20.0	8	3.2
2HRZE+4HR	281	18.5	7	2.8
2HRZS+4HR	9	0.6	0	0.0

Other standard regimen based on HRZES

Yes	798	52.6	158	64.0
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Outcome at 6 months

Cured/ treatment completed	414	27.3	17	6.9
Still on treatment	871	57.4	193	78.1
Died	66	4.3	12	4.9
Transferred	41	2.7	3	1.2
Defaulted	31	2.0	6	2.4
Failure	0	0.0	0	0.0
Not recorded	95	6.3	16	6.5
Total	1518	100.0	247	100.0

Outcome at 12 months

Cured/ treatment completed	1108	73.0	178	72.1
Still on treatment	143	9.4	27	10.9
Died	83	5.5	16	6.5
Transferred	42	2.8	4	1.6
Defaulted	51	3.4	6	2.4
Failure	0	0.0	0	0.0
Not recorded	91	6.0	16	6.5
Total	1518	100.0	247	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	1244	81.9	200	81.0
Still on treatment	3	0.2	4	1.6
Died	86	5.7	16	6.5
Transferred	41	2.7	3	1.2
Defaulted	52	3.4	7	2.8
Failure	0	0.0	0	0.0
Not recorded	92	6.1	17	6.9
<b>Total</b>	<b>1518</b>	<b>100.0</b>	<b>247</b>	<b>100.0</b>

Among those cured/ treatment completed

Bacteriological conversion	1208	97.1	189	94.5
Radiological improvement	1204	96.8	189	94.5
Other clinical improvement	375	30.1	46	23.0
No evidence of response	6	0.5	0	0.0

After treatment completed:

No relapse	998	80.2	152	76.0
Loss to follow up	167	13.4	23	11.5
Died	36	2.9	16	8.0
<i>TB-related</i>	0		1	
<i>Not TB-related</i>	27		12	
<i>Unknown</i>	9		3	
Relapse	10	0.8	0	0.0
<i>Bacteriological</i>	4		0	
<i>Histological</i>	4		0	
<i>Clinico-radiological</i>	2		0	
Not recorded	33	2.7	9	4.5

Among those still on treatment

Reasons for still on treatment:

Retreatment case	1	-	0	-
Extrapulmonary disease	0	-	0	-
Extensive disease	0	-	0	-
Interrupted treatment	0	-	2	-
Drug resistance	1	-	3	-
Poor response	0	-	0	-
Others	2	-	2	-

Among those died - causes of death:

TB-related cause	10	11.6	0	0.0
Not TB-related	51	59.3	12	75.0
Unknown	25	29.1	4	25.0

Among those transferred, new sources of care:

GP	3	7.3	1	33.3
Chest Clinic	2	4.9	0	0.0
Hospital	8	19.5	2	66.7
Outside HK	24	58.5	0	0.0
Not recorded	4	9.8	0	0.0

Among those defaulted

Never found	32	61.5	2	28.6
Retreated after default	7	13.5	1	14.3
Treatment stopped by doctor	9	17.3	3	42.9
Not recorded	4	7.7	1	14.3



Annex 1 (e) - Treatment defaulters - 01

Ever seen at chest clinics	N	%
Yes	203	98.1
No	4	1.9
Total	207	100.0

Age group

0 to 19	9	4.3
Female	5	
Male	4	
20 to 39	77	37.2
Female	31	
Male	46	
40 to 59	62	30.0
Female	12	
Male	50	
60+	59	28.5
Female	7	
Male	52	
Total	207	100.0
Female	55	26.6
Male	152	73.4

Marital status

Single	69	33.3
Married	107	51.7
Separated	5	2.4
Divorce	13	6.3
Widowed	7	3.4
Not recorded	6	2.9
Total	207	100.0

Smoking status

Never	66	31.9
Ex-smoker	45	21.7
Current smoker	90	43.5
Not recorded	6	2.9
Total	207	100.0

Institution-related

Yes	14	6.8
No	188	90.8
Not recorded	5	2.4
Total	207	100.0

Institution

Client	9	-
Staff	2	-

Institution type

Old age home	3	-
School	5	-
Hospital	0	-
Handicapped	0	-
Prison	5	-
Others	1	-

Annex 1 (e) - Treatment defaulters - 02

Living situation	N	%
Street-sleeper	6	2.9
Cubicle bed space	0	0.0
Institution	7	3.4
Work quarter	3	1.4
Alone (not above)	34	16.4
With friends	10	4.8
With family	143	69.1
Not recorded	4	1.9

Residential status

Permanent resident	182	87.9
Chinese immigrant	6	2.9
Imported worker	8	3.9
Tourist - 2 way permit Chinese	4	1.9
Other tourist	1	0.5
Vietnamese	1	0.5
Illegal immigrants	0	0.0
Not recorded	5	2.4
Total	207	100.0

Place of birth

Hong Kong	90	43.5
Mainland China	95	45.9
Others	17	8.2
Not recorded	5	2.4
Total	207	100.0

Ethnicity

Chinese	187	90.3
Other Asian	14	6.8
Caucasian	0	0.0
Others	1	0.5
Not recorded	5	2.4
Total	207	100.0

Employment status

Full-time	67	32.4
Part-time	11	5.3
Retired	47	22.7
Unemployed	56	27.1
Housewife	15	7.2
Student	5	2.4
Not recorded	6	2.9
Total	207	100.0

Occupation

Blue collar	47	22.7
White collar	19	9.2
Medical	0	0.0
Nursing	1	0.5
Paramedical	0	0.0
Supporting health staff	0	0.0
Not applicable	129	62.3
Not recorded	11	5.3
Total	207	100.0

Annex 1 (e) - Treatment defaulters - 03

First presentation	N	%
Private doctor	24	11.6
Private hospital	0	0.0
GOPC	3	1.4
Chest Clinic	39	18.8
Other DH Clinic	6	2.9
HA Clinic	4	1.9
HA Hospital	124	59.9
Mainland	2	1.0
Overseas	1	0.5
Not recorded	4	1.9
Total	207	100.0

Symptomatic on presentation

Y	167	80.7
N	36	17.4
Not recorded	4	1.9
Total	207	100.0

Chest symptoms	122	-
Systemic symptoms	31	-
Other site-specific symptoms	26	-

Reason for presentation

Symptom	161	77.8
Contact screening	6	2.9
Pre-employment	5	2.4
Pre-emigration	0	0.0
Other body check	18	8.7
Incidental to other illness	10	4.8
Others	1	0.5
Not recorded	6	2.9
Total	207	100.0

Contact with TB patients

Yes	12	5.8
No	189	91.3
Not recorded	6	2.9
Total	207	100.0

Contact type

Household	10	-
Work	1	-
Casual	1	-

Time of contact

Within 2 year	5	-
Over 2 year	4	-

Annex 1 (e) - Treatment defaulters - 04

Previous chemoprophylaxis	N	%
Yes	0	-

Reason for chemoprophylaxis

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

Disease Classification

Pulmonary TB only	155	74.9
Extrapulmonary TB only	26	12.6
Both	26	12.6
Total	207	100.0

Case category

New case	181	87.4
Relapse	17	8.2
Treatment after default	9	4.3
Failure of previous treatment	0	0.0
Total	207	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	59	32.6
Pretreatment culture +ve	112	61.9
Extent = 1	102	56.4
Extent=1 & cavity=N	89	49.2
Extent=1 & cavity=Y	13	7.2
Extent = 2	43	23.8
Extent=2 & cavity=N	30	16.6
Extent=2 & cavity=Y	13	7.2
Extent=3	15	8.3
Extent=3 & cavity=N	12	6.6
Extent=3 & cavity=Y	3	1.7
Extent=not specified	21	11.6
Extent=ns & cavity=N	20	11.0
Extent=ns & cavity=Y	1	0.6
Cavity=N	151	83.4
Cavity=Y	30	16.6

6-month short course treatment

Yes	20	9.7
2HRZE+4HR	19	9.2
2HRZS+4HR	0	0.0

Other standard regimen based on HRZES

Yes	87	42.0
-----	----	------

Among those defaulted

Never found	119	57.5
Retreated after default	22	10.6
Treatment stopped by doctor	41	19.8
Not recorded	25	12.1

Annex 1 (e) - Treatment defaulters - 05

Treatment supervision	N	%
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)		
>90%	70	33.8
>75%	20	9.7
>50%	28	13.5
>25%	24	11.6
≤25%	17	8.2
Not recorded	48	23.2
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)		
>90%	24	11.6
>75%	17	8.2
>50%	18	8.7
>25%	16	7.7
≤25%	43	20.8
Not recorded	89	43.0
Under supervision by relatives (initial 2 months)		
>90%	0	0.0
>75%	0	0.0
>50%	2	1.0
>25%	0	0.0
≤25%	109	52.7
Not recorded	96	46.4
Under supervision by relatives (subsequent 4 months)		
>90%	0	0.0
>75%	0	0.0
>50%	1	0.5
>25%	2	1.0
≤25%	79	38.2
Not recorded	125	60.4
Supplied for unsupervised treatment (initial 2 months)		
<5%	119	57.5
<10%	7	3.4
<15%	3	1.4
<25%	10	4.8
<50%	11	5.3
≥50%	2	1.0
Not recorded	55	26.6
Supplied for unsupervised treatment (subsequent 4 months)		
<5%	76	36.7
<10%	7	3.4
<15%	9	4.3
<25%	10	4.8
<50%	7	3.4
≥50%	6	2.9
Not recorded	92	44.4
Defaulted (initial 2 months)		
<5%	82	39.6
<10%	8	3.9
<15%	9	4.3
<25%	13	6.3
<50%	19	9.2
≥50%	19	9.2
Not recorded	57	27.5
Defaulted (subsequent 4 months)		
<5%	32	15.5
<10%	7	3.4
<15%	6	2.9
<25%	10	4.8
<50%	18	8.7
≥50%	46	22.2
Not recorded	88	42.5

Annex 1 (f) Sources completing Programme Forms

Sources completing Programme Forms	PFA	PFB1	PFB2	PFC	PFD
Chest Clinics	3583	4860	4866	4863	4832
Hospital Authority	1554	127	105	82	76
Private Practitioners/ Private Hospitals	1	0	0	0	0
Correctional Services and Others	103	30	30	15	1
Not Recorded	73	297	313	354	405
Total	5314	5314	5314	5314	5314

Breakdown for Hospital Authority:

Alice Ho Miu Ling Nethersole Hospital	0	0	0	0	0
Caritas Medical Centre	0	0	0	0	0
Castle Peak Hospital	6	6	6	5	3
Duchess of Kent Children Hospital	0	0	0	0	0
Fung Yiu King Hospital	0	0	0	0	0
Grantham Hospital	233	16	16	13	13
Haven of Hope Hospital	101	12	13	9	8
Kowloon Hospital	203	27	19	16	16
Kwong Wah Hospital	62	1	2	1	0
North District Hospital	69	0	0	0	0
Nam Long Hospital	0	0	0	0	0
Our Lady of Maryknoll Hospital	12	1	1	1	1
Pamela Youde Nethersole Eastern Hospital	4	0	0	0	0
Pok Oi Hospital	4	0	0	0	0
Prince of Wales Hospital	74	3	3	1	1
Princess Margaret Hospital	81	2	0	0	0
Queen Elizabeth Hospital	80	6	6	5	4
Queen Mary Hospital	19	5	2	1	1
Ruttonjee Hospital	191	19	18	13	11
Shatin Hospital	0	0	0	0	0
Tai Po Hospital	3	1	1	1	1
Tseung Kwan O Hosital	46	3	3	4	3
Tuen Mun Hospital	112	2	1	0	0
Tung Wah Eastern Hospital	0	0	0	0	0
Tung Wah Hospital	3	0	0	0	0
United Christian Hospital	100	14	7	7	7
Wong Tai Sin Hospital	151	9	7	5	7
Wong Chuk Hang Hospital	0	0	0	0	0
Yan Chai Hospital	0	0	0	0	0
Total	1554	127	105	82	76

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: <sub>1</sub>single/ <sub>2</sub>married/ <sub>3</sub>separated/ <sub>4</sub>divorce/ <sub>5</sub>widowed Smoking status: <sub>1</sub>never/ <sub>2</sub>ex-smoker/ <sub>3</sub>current smokersInstitution-related: N / Y : <sub>1</sub>Client / <sub>2</sub>Staff Type: <sub>1</sub>Old age home/ <sub>2</sub>School/ <sub>3</sub>Hospital/ <sub>4</sub>Handicapped/ <sub>5</sub>Prison/ <sub>6</sub>Others

Name of institution: \_\_\_\_\_

Living situation: <sub>1</sub>street-sleeper/ <sub>2</sub>cubicle bed space/ <sub>3</sub>institution/ <sub>4</sub>work quarter/ <sub>5</sub>alone (but not 1. to 4.)/ <sub>6</sub>with friends/ <sub>7</sub>with familyResident status: <sub>1</sub>PermanentResident/ <sub>2</sub>ChineseNewImmigrant(inHK<7yr)/ <sub>3</sub>ImportedWorker/ <sub>4</sub>Tourist-2wayPermitChinese/ <sub>5</sub>OtherTourist/ <sub>6</sub>Vietnamese/ <sub>7</sub>IllegalImmigrantsPlace of birth: <sub>1</sub>Hong Kong / <sub>2</sub>Mainland/ <sub>3</sub>Others \_\_\_\_\_Ethnicity: <sub>1</sub>Chinese/ <sub>2</sub>Other Asian/ <sub>3</sub>Caucasian/ <sub>4</sub>Other \_\_\_\_\_

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

Employment status (including self-employment) at DOS: <sub>1</sub>Full-time/ <sub>2</sub>Part-time/ <sub>3</sub>Retired/ <sub>4</sub>Unemployed/ <sub>5</sub>Housewife/ <sub>6</sub>StudentOccupation (current or last): <sub>1</sub>Blue collar/ <sub>2</sub>White collar/ <sub>3</sub>Medical/ <sub>4</sub>Nursing/ <sub>5</sub>Paramedical/ <sub>6</sub>Supporting health staff/ <sub>7</sub>Not applicable

Job title: \_\_\_\_\_

**Part (B) Information on this episode of TB:**First presentation to: <sub>1</sub> Private doctor / <sub>2</sub>Private Hospital / <sub>3</sub>GOPC / <sub>4</sub>Chest Clinic / <sub>5</sub>Other DH Clinic / <sub>6</sub> HA Clinic / <sub>7</sub> HA Hospital / <sub>8</sub> Mainland / <sub>9</sub>OverseasSymptomatic on presentation: N / Y : <sub>1</sub>Chest symptoms / <sub>2</sub>Systemic Symptoms / <sub>3</sub>Other site-specific symptomsReason for presentation: <sub>1</sub> Symptom / <sub>2</sub>Contact Screening / <sub>3</sub> Pre-employment / <sub>4</sub>Pre-emigration/ <sub>5</sub>Other body check / <sub>6</sub> Incidental to other illness / <sub>7</sub> Others: \_\_\_\_\_Contact with TB patients: N / Y : <sub>1</sub>Household / <sub>2</sub>Work / <sub>3</sub>Casual  
<sub>1</sub> within 2 year / <sub>2</sub> over 2 yearPrevious chemoprophylaxis: N / Y : reason: <sub>1</sub> Contact / <sub>2</sub> Silicosis / <sub>3</sub> HIV / <sub>4</sub> Old scar on CXR / <sub>5</sub> Others \_\_\_\_\_

Drugs &amp; 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.
  5. Others, specify: \_\_\_\_\_
- Date of last treatment (mm/yyyy): \_\_/\_\_\_\_ Duration of last treatment: \_\_ months

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

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

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

Completed by: \_\_\_\_\_ (name) Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Institution: <sub>1</sub>Chest Clinic/ <sub>2</sub>Chest Hospital/ <sub>3</sub>General Hospital/ <sub>4</sub>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:** <sub>1</sub> Bacteriological/ <sub>2</sub> Histological/ <sub>3</sub> Clinical-radiological/ <sub>4</sub> 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: <sub>1</sub> gastric aspirate/ <sub>2</sub> pleural fluid/ <sub>3</sub> bronchial washing/ <sub>4</sub> urine/ <sub>5</sub> 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) \_\_\_\_\_: <sub>1</sub> Typical (with caseation) / <sub>2</sub> Granulomatous inflammation / <sub>3</sub> other  
Ziehl-Neelsen 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     | 9. Alcoholism   |
| 2. Lung cancer           | 10. Drug abuser   |
| 3. Other malignancies    | 11. Gastrectomy   |
| 4. On cytotoxic drugs    | 12. General debilitation (e.g., due to old age, immobility, stroke, etc.) |
| 5. On steroid            | 13. Other(1), specify _____   |
| 6. Chronic renal failure | 14. Other(2), specify _____   |
| 7. HIV                   | 15. Other(3), specify _____   |
| 8. Silicosis             |   |

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

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

**Part (H) Other co-morbidities:** N / Y: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_**Part (I) Treatment regimen:**6-month short course treatment: N / Y: <sub>1</sub> [ 2HRZE+4HR ] / <sub>2</sub> [ 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): <sub>1</sub> Isoniazid (H) / <sub>2</sub> Rifampicin (R) / <sub>3</sub> Ethambutol (E) / <sub>4</sub> Streptomycin (S) / <sub>5</sub> Pyrazinamide (Z) / <sub>6</sub> Ofloxacin / <sub>7</sub> Levofloxacin / <sub>8</sub> Ethionamide / <sub>9</sub> Prothionamide / <sub>10</sub> Kanamycin / <sub>11</sub> Cycloserine / <sub>12</sub> PAS /<sub>12</sub> Other(1) \_\_\_\_\_ / <sub>13</sub> Other(2) \_\_\_\_\_ / <sub>14</sub> Other (3) \_\_\_\_\_

Completed by: \_\_\_\_\_ (name) Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Institution: <sub>1</sub> Chest Clinic/ <sub>2</sub> Chest Hospital/ <sub>3</sub> General Hospital/ <sub>4</sub> 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)

<sub>1</sub> GI upset/ <sub>2</sub> skin rash/ <sub>3</sub> visual/ <sub>4</sub> transient rise of liver enzyme/ <sub>5</sub> hepatitis/ <sub>6</sub> vestibular/ <sub>7</sub> arthropathy/ <sub>8</sub> fever-chill/ <sub>9</sub> dizziness/ <sub>10</sub> thrombocytopenia/  
<sub>11</sub> leucopenia/ <sub>12</sub> flush face/ <sub>13</sub> other(1) \_\_\_\_\_ / <sub>14</sub> other(2) \_\_\_\_\_ / <sub>15</sub> 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 supervision 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: <sub>1</sub> retreatment/ <sub>2</sub> extrapulm./ <sub>3</sub> extensive/ <sub>4</sub> interrupted treatment/ <sub>5</sub> drug resistance/ <sub>6</sub> poor response/  
<sub>7</sub> others, specify: \_\_\_\_\_

- Died  Cause: <sub>1</sub> TB-related/ <sub>2</sub> Not TB-related/ <sub>3</sub> Unknown

Date of death (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

(3) Transferred  to: <sub>1</sub> GP/ <sub>2</sub> Chest Clinic/ <sub>3</sub> Hospital/ <sub>4</sub> Outside HK

Details: \_\_\_\_\_

Last treatment date (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

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

- Never found
- Retreated after default
- Treatment stopped by doctor

Last visit date (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Date treatment re-started (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

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: <sub>1</sub> Chest Clinic/ <sub>2</sub> Chest Hospital/ <sub>3</sub> General Hospital/ <sub>4</sub> 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: <sub>1</sub> gastric aspirate/ <sub>2</sub> pleural fluid/ <sub>3</sub> bronchial washing/ <sub>4</sub> urine/ <sub>5</sub> 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
- Died  Cause: <sub>1</sub>TB-related/ <sub>2</sub>Not TB-related/ <sub>3</sub>Unknown
- Relapse
- <sub>1</sub>Bacteriological / <sub>2</sub>Histological / <sub>3</sub>Clinical-radiological (choose 1 item, priority from left to right)
- Last visit date (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- Date of death (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- Date relapse (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- (2) Treatment incomplete (including death while on treatment)
- Still on treatment, reason: <sub>1</sub>retreatment/ <sub>2</sub>extrapulm./ <sub>3</sub>extensive/ <sub>4</sub>interrupted treatment/ <sub>5</sub>drug resistance/ <sub>6</sub>poor response/  
<sub>7</sub>others, specify: \_\_\_\_\_
  - Died  Cause: <sub>1</sub>TB-related/ <sub>2</sub>Not TB-related/ <sub>3</sub>Unknown
- Date of death (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- (3) Transferred  to: <sub>1</sub>GP/ <sub>2</sub>Chest Clinic/ <sub>3</sub>Hospital/ <sub>4</sub>Outside HK
- Details: \_\_\_\_\_
- Last treatment date (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- (4) Defaulted (defaulted treatment for a continuous period > 2m)
- Never found
  - Retreated after default
  - Treatment stopped by doctor
- Last visit date (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- Date treatment re-started (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- 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: <sub>1</sub>Chest Clinic/ <sub>2</sub>Chest Hospital/ <sub>3</sub>General Hospital/ <sub>4</sub>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: <sub>1</sub>TB-related/ <sub>2</sub>Not TB-related/ <sub>3</sub>Unknown Date of death (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- Relapse  Date relapse (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- <sub>1</sub>Bacteriological / <sub>2</sub>Histological / <sub>3</sub>Clinical-radiological / <sub>4</sub>Clinical only (choose 1 item, priority from left to right)
- (2) Treatment incomplete (including death while on treatment)
- Still on treatment, reason: <sub>1</sub>retreatment/ <sub>2</sub>extrapulm./ <sub>3</sub>extensive/ <sub>4</sub>interrupted treatment/ <sub>5</sub>drug resistance/ <sub>6</sub>poor response/ <sub>7</sub>others, specify: \_\_\_\_\_
  - Died  Cause: <sub>1</sub>TB-related/ <sub>2</sub>Not TB-related/ <sub>3</sub>Unknown Date of death (mm/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_
- (3) Transferred  to: <sub>1</sub>GP/ <sub>2</sub>Chest Clinic/ <sub>3</sub>Hospital/ <sub>4</sub>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: <sub>1</sub>Chest Clinic/ <sub>2</sub>Chest Hospital/ <sub>3</sub>General Hospital/ <sub>4</sub>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	2002	2003	2004	2005	2006
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	43	66	27	14	8
	≤2 year	30	15	19	11	4
	≤3 year	13	15	13	11	10
	≤4 year	20	16	11	7	8
	≤5 year	26	24	9	9	10
	≤6 year	30	22	11	13	7
	≤7 year	24	19	20	12	11
	Total	186	177	110	77	58
Overall notified TB cases		6602	6024	6226	6160	5766

The above table shows the number of all notified TB cases in Hong Kong from 2002 to 2006 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 2002 to 2006 are 97.9, 89.5, 91.8, 90.4 and 84.1 respectively.

From Annex 2 (b), the overall estimated rates (per 100,000) among the new immigrants from 2002 to 2006 are 49.1, 47.7, 30.7, 21.5 and 16.2 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 (2002-2006)

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

	2002	2002	2002	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	15	13	28	12	12	24	4	12	16	3	6	9	6	4	10
20-39	16	77	93	23	77	100	8	56	64	4	38	42	5	25	30
40-59	12	34	46	8	21	29	8	12	20	5	14	19	4	10	14
60+	9	10	19	12	12	24	5	5	10	3	4	7	2	2	4
Total	52	134	186	55	122	177	25	85	110	15	62	77	17	41	58

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

	2002	2002	2002	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	17.8	16.0	16.9	15.4	15.8	15.6	5.3	16.3	10.8	4.4	9.0	6.7	9.0	6.2	7.6
20-39	65.3	64.5	64.7	96.8	59.5	65.3	34.9	42.5	41.4	16.0	26.0	24.5	19.0	17.1	17.4
40-59	148.8	73.0	84.2	96.3	51.7	59.3	94.2	36.8	48.7	50.4	47.6	48.3	31.5	34.4	33.5
60+	326.8	83.8	129.3	447.4	97.4	159.9	198.3	42.8	70.3	121.4	40.9	57.1	79.6	21.9	34.4
Total	43.6	51.7	49.1	48.8	47.2	47.7	22.9	34.1	30.7	14.2	24.6	21.5	15.7	16.5	16.2

**Annex 2 (c)**

**TB Notification and Rates (All Cases) By Age & Sex (2002-2006)**

All TB cases by age and sex

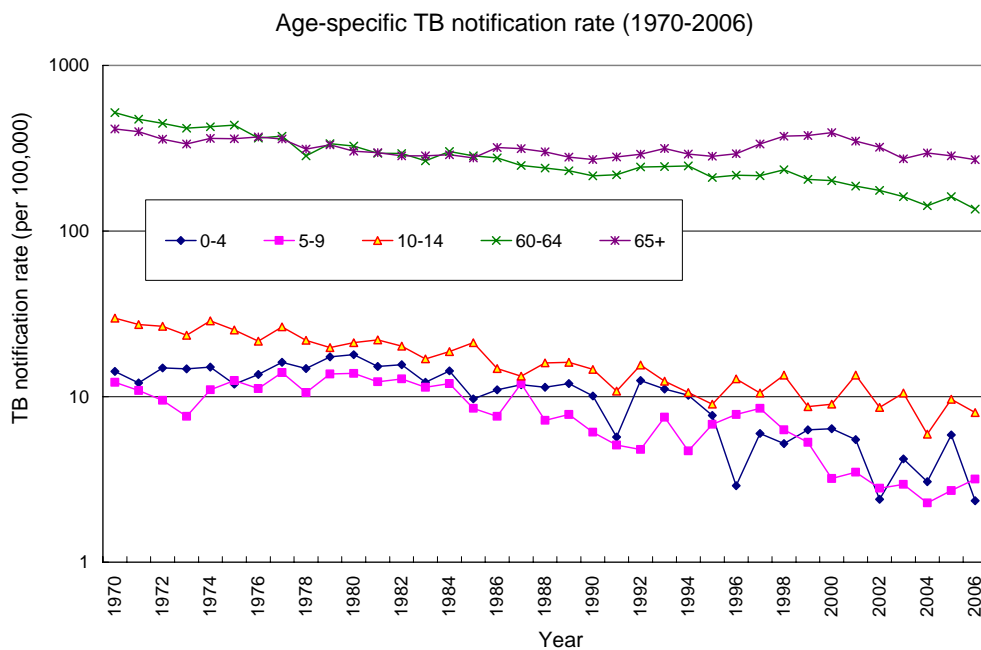
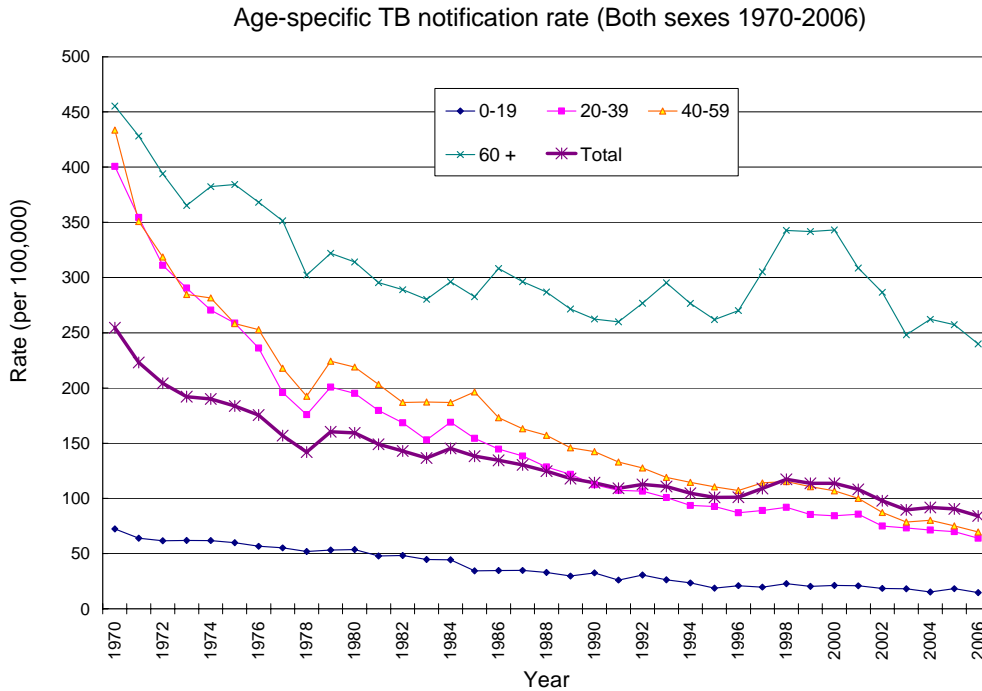
	2002	2002	2002	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	139	140	279	139	126	265	96	124	220	137	118	255	106	97	203
20-39	778	883	1661	744	832	1576	696	823	1519	690	782	1472	616	728	1344
40-59	1215	528	1743	1150	484	1634	1208	527	1735	1105	575	1680	1077	513	1590
60+	2157	762	2919	1895	654	2549	1988	764	2752	2041	712	2753	1960	669	2629
Total	4289	2313	6602	3928	2096	6024	3988	2238	6226	3973	2187	6160	3759	2007	5766

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

	2002	2002	2002	2003	2003	2003	2004	2004	2004	2005	2005	2005	2006	2006	2006
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	17.9	19.1	18.5	18.4	17.6	18.0	13.0	17.7	15.3	19.1	17.2	18.2	15.0	14.5	14.8
20-39	76.9	73.3	75.0	75.9	70.9	73.2	72.2	70.6	71.3	73.0	67.4	69.9	65.8	62.4	63.9
40-59	121.3	53.0	87.2	111.4	46.2	78.6	113.7	47.9	80.2	101.4	50.2	75.2	97.3	43.6	69.6
60+	442.5	143.5	286.6	385.6	122.1	248.2	396.3	139.4	262.1	400.3	127.2	257.3	376.3	116.3	239.9
Total	130.8	66.8	97.9	120.5	60.4	89.5	122.1	63.6	91.8	121.7	61.6	90.4	115.0	56.0	84.1

### Annex 3

### Trend of age-specific TB notification rates (1970-2006)



- 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 44 cases with TB-HIV co-infection were reported from various sources to the TB-HIV Registry in 2006. Thirty-three (75.0%) were under the care of both TB & Chest Service (TB&CS) and Special Preventive Programme (SPP), Public Health Services Branch, Department of Health (DH). Most of the remaining cases attended dual follow up at chest clinics and one of the hospitals under Hospital Authority (HA).

Table 1 shows the total number of TB-HIV cases reported to the TB-HIV Registry for the years 1985-2006.

Table 2 shows the data on TB as primary AIDS-defining illness in the Hong Kong HIV/AIDS reporting system for the years 1985-2006. Out of a total of 73 AIDS cases newly diagnosed in 2006, 26 (35.6%) had TB as a primary AIDS-defining illness, compared to 27 (37.0%) for *Pneumocystis carinii* pneumonia (PCP). In other words, TB was just second to PCP as the most common primary AIDS-defining illness in Hong Kong for 2006. The high burden of latent TB infection in Hong Kong and the increasing proportion of TB patients offered HIV antibody test at chest clinics could have been contributory factors. DH will continue to monitor the trend and pattern of AIDS-defining illnesses in newly diagnosed AIDS patient locally.

Table 3 shows the distribution of ADI criteria among 183 cases reported from chest clinics and SPP for the years 1996-2006 with TB as the primary AIDS-defining illness. In Hong Kong, both pulmonary TB with a CD4 count below 200/ $\mu$ l and extra-pulmonary TB are included in the AIDS case definition. The relative proportion of the two forms of TB as primary AIDS-defining illness has remained rather static in the past few years.

The pre-treatment drug sensitivity pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2006 is shown in Table 4. Although the rate of MDR-TB among the reported TB-HIV cases (3/223 or 1.34%) is currently low, and there is no XDR-TB cases detected so far, drug resistance in the context of HIV should be carefully monitored.

Table 5 shows the characteristics of 33 patients reported from chest clinics and SPP in 2006. The characteristics of these patients are similar to that of the 2005 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. CD4 count is generally low at time of TB diagnosis. TB-HIV co-infected patients with pulmonary involvement tend to have more extensive disease and a positive bacteriology, and extra-pulmonary involvement is common.



Annex 4 (b) <sup>3</sup>

TB-HIV Registry <sup>3</sup>

**Table 1: Total number of TB-HIV cases reported to TB-HIV Registry, 1985-2006\***

	Pre-1994	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Number of TB-HIV cases	24	11	14	25	23	23	31	31	35	21	27	33	42	44	384

\* include cases reported from chest clinics and other DH clinics, HA hospitals, SPP and private sectors

**Table 2: TB as AIDS defining illness in the Hong Kong HIV/AIDS reporting system, 1985 - 2006\***

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Mycobacterium tuberculosis infection	0	--	0	0	1	2	3	1	2	4	8	21	17	18	13	19	17	9	15	13	25	26	214
Total number of reported AIDS cases	3	--	6	7	17	13	14	14	19	37	45	70	64	63	61	67	60	53	56	49	64	73	855
TB as AIDS defining illness	0.00%		0.00%	0.00%	5.90%	15.40%	21.40%	7.10%	10.50%	10.80%	17.80%	30.00%	26.60%	28.60%	21.30%	28.40%	28.30%	17.00%	26.80%	26.50%	39.1%#	35.60%	25.00%

\* An expanded case definition was adopted in 1995 to include pulmonary TB cases with a CD4 count below 200/μl.

# TB surpassed Pneumocystis carinni pneumonia (PCP) as the most common AIDS defining illness

**Table 3: TB as AIDS defining illness criteria for 183 cases reported from chest clinics and SPP, 1996-2006\***

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
TB as AIDS defining illness												
Yes	8	5	9	13	5	9	13	6	12	23	26	129
Extra-pulmonary TB	1	2	6	7	2	3	4	1	5	9	8	48
Pulmonary TB with CD4 count below 200/μl	7	3	3	6	3	6	9	5	7	14	18	81
Total	9	7	12	17	10	16	15	11	23	30	33	183

\*Among 321 cases reported to the TB-HIV Registry from 1996 to 2006, 183 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 183 cases.

**Table 4: Pre-treatment drug sensitivity pattern among culture positive (sputum or other specimens) TB-HIV cases from TB-HIV Registry, 1996 -2006\***

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Susceptible to SHRE	7	5	13	16	13	23	11	18	20	29	32	187
Resistant to at least any one drug of SHRE												
Any resistance ** (non-MDR/XDR)	1	1	1	4	2	5	3	3***	6	5	3	34
MDR	0	0	0	1	0	0	1	0(+1)***	0	0	0	2(+1)***
XDR	0	0	0	0	0	0	0	0	0	0	0	0
Total number of culture positive cases	8	6	14	21	15	28	15	21	26	34	35	223

\* Among 335 cases reported to HIV Registry from 1996 to 2006, 223 had a positive culture (sputum or other specimens). The table is compiled basing on data of these 223 cases.

\*\* Any pattern of drug resistance except MDR (i.e. resistance to at least both H and R) and XDR (i.e. resistance to any fluoroquinolones, and at least one of the injectable second-line drugs, in addition to MDR)

\*\*\* One of these three patients had extremely poor adherence, developed acquired resistance during anti-TB treatment and became MDR

(Footnote: Some of the figures in the tables for the previous years have been slightly revised to include 14 cases from SPP not included in TB-HIV Registry before.)

Annex 4 (c) <sup>3</sup>

TB-HIV Registry <sup>3</sup>

**Table 5: Characteristics of 33 TB cases reported from chest clinics and SPP in 2006\***

	Number	Proportion
Age distribution		
0 to 19	0	0.00%
20 to 39	14	42.40%
40 to 59	14	42.40%
60+	5	15.20%
Sex distribution		
Male	32	97.00%
Female	1	3.00%
Ethnicity		
Chinese	25	75.80%
Asians, non-Chinese	7	21.20%
Caucasians	0	0.00%
Others	1	3%
Case category		
New case	29	87.90%
Relapse	4	12.10%
Treatment after default	0	0.00%
Failure of previous treatment	0	0%
TB as primary AIDS defining illness		
Yes	26	78.80%
No	7	21.20%
HIV stage		
A1	0	0.00%
A2	1	3.00%
A3	3	9.10%
B1	0	0%
B2	1	3.00%
B3	0	0.00%
C1	0	0%
C2	3	9.10%
C3	22	66.70%
missing	3	9.10%
CD4 count at time of co-infection (median, range)	111 (12-356)/ $\mu$ l	
Viral load at time of co-infection (median, range)	190000 (400-730000) copies/ml	
Anti-retroviral therapy at time of co-infection		
Yes	3	9.10%
No	30	90.90%
Presence of extra-pulmonary TB		
Yes	24	72.70%
No	9	27.30%
Extent of Respiratory TB**		
Minimal	13	48.10%
Moderate	5	18.50%
Extensive	9	33.30%
Bacteriological status (pre-treatment)		
Smear + culture +	18	54.50%
Smear - culture +	9	27.30%
Smear - culture -	4	12.10%
Incomplete	2	6.10%
Drug resistance pattern (pre-treatment)***		
Susceptible to SHRE		
Resistant to at least any one drug of SHRE	24	88.90%
Any resistance (non-MDR)	3	11.10%
MDR	0	0%
XDR	0	0%

\* Among 44 cases reported to HIV Registry in 2006, 33 were managed at chest clinics and/or SPP. The table is compiled basing on data of these 33 cases.

\*\*27 out of the 33 cases had lung parenchymal lesion on CXR

\*\*\*27 out of the 33 cases had a positive sputum or other specimen culture

## Annex 5

### HBsAg Seroprevalence Survey Among TB Patients Seen at Chest Clinics (2006)

In a sample survey conducted by the TB & Chest Service of the Department of Health in 2006 (2-month period from 1.3.2006 to 31.5.2006), the overall HBsAg seropositive rate among TB patients seen at chest clinics was 9.79%.

Sex/Age group	HBsAg status			HBsAg seropositive rate (%) <sup>*</sup>	Total
	Positive	Negative	Unknown		
Male					
0-19	2	20	2	9.09	24
20-39	13	135	7	8.78	155
40-59	49	224	7	17.95	280
≥60	33	345	11	8.73	389
Female					
0-19	0	25	4	0.00	29
20-39	8	158	6	4.82	172
40-59	8	121	2	6.20	131
≥60	11	115	2	8.73	128
Total	124	1143	41	9.79	1308

<sup>\*</sup> *HBsAg seropositivity rate = number of HBsAg positive patients/ (number of HBsAg positive patients + number of HBsAg negative patients)*

### HBsAg Seroprevalence Survey 2005-2006

Sex/Age group	HBsAg seropositive rate (%)	
	2005	2006
Male		
0-19	8.33	9.09
20-39	7.59	8.78
40-59	19.72	17.95
≥60	8.13	8.73
Female		
0-19	0.00	0.00
20-39	5.62	4.82
40-59	9.68	6.20
≥60	8.33	8.73
Total	10.09	9.79

## Annex 6

### Crude and Standardised Death Rate and Notification Rate 1981 - 2006 (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	88.7
2002	4.0	2.4	97.9	79.0
2003	4.1	2.5	89.5	72.6
2004	4.2	2.4	91.8	71.5
2005	4.0	2.2	90.4	70.5
2006	4.3	2.4	84.1	63.3

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

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

Part 4

SUPPLEMENT

## Part 4 – Supplement: Contents

### Supplement

- 1 Notification forms
  - (a) DH1A(s)(Rev.99) (for notification of TB to Department of Health)
  - (b) LD483(Rev.11.6.1999) (for notification of occupational TB and other notifiable occupational diseases to Labour Department)

**FORM 1**

**QUARANTINE AND PREVENTION OF DISEASE ORDINANCE**

**(Cap. 141)**

**TUBERCULOSIS NOTIFICATION**

**Particulars of Infected Person**

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

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

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

Telephone Number: \_\_\_\_\_ (Signature)

<p>(Please DELETE whichever is not applicable)</p> <p>"I will arrange for examination of contacts myself."</p> <p>"Please arrange for examination of contacts to be done by the Government Chest Service."</p> <p>Further Remarks:</p>
--

# OCCUPATIONAL SAFETY AND HEALTH ORDINANCE

## NOTIFICATION OF OCCUPATIONAL DISEASES

To : Commissioner for Labour

### PARTICULARS OF PATIENT

Name: \_\_\_\_\_ HKID/Passport no.: \_\_\_\_\_

Male/Female\*      Date of birth: \_\_\_ / \_\_\_ / \_\_\_      Occupation: \_\_\_\_\_

Home address: \_\_\_\_\_

Telephone no. (Home) \_\_\_\_\_ (Office) \_\_\_\_\_ (Pager/Mobile) \_\_\_\_\_

Name and address of employer: \_\_\_\_\_

Telephone no. of employer: \_\_\_\_\_

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

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

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

Diagnosis: Confirm/Suspect\*      Date of onset of illness: \_\_\_ / \_\_\_ / \_\_\_

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

Other relevant information: \_\_\_\_\_

Name of notifying medical practitioner: \_\_\_\_\_

Address of notifying medical practitioner: \_\_\_\_\_

Telephone no. of notifying medical practitioner: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

*\*Delete whichever is inapplicable*

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

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



Please  
affix  
stamp

**Occupational Health Service**

Labour Department  
15/F, Harbour Building  
38, Pier Road  
Central  
Hong Kong